1	BEFORE THE PUBLIC SERVICE COMMISSION
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4	TRANSCRIPT OF PROCEEDINGS
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7	Jefferson City, Missouri
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11	In the Matter of Missouri-American )Case No. WR-2003-0500 Water Company's Tariff to Revise Water)Tariff Nos. and Sewer Rate Schedules. ) YW-2003-2012 ) YW-2003-2013 ) YW-2003-2014 ) YW-2003-2015
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16	BEFORE:
17	KEVIN A. THOMPSON, Presiding DEPUTY CHIEF REGULATORY LAW JUDGE.
18	CONNIE MURRAY, BRYAN FORBIS,
19	ROBERT CLAYTON, COMMISSIONERS.
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22	REPORTED BY: TRACY L. THORPE, CSR, CCR ASSOCIATED COURT REPORTERS
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1 JUDGE THOMPSON: Let's go on the record. 2 Questions from the Bench, Commissioner Clayton. 3 JOHN SPANOS testified as follows: QUESTIONS BY COMMISSIONER CLAYTON: 4 5 Morning, Mr. Spanos. Ο. 6 Α. Morning. A number of questions were asked yesterday. 7 Q. 8 And just to give you a little background, I'm the newest 9 member of the Commission and probably enter these discussions with the least bit of information relating to 10 depreciation, so I need a little extra help. 11 12 There are four issues relating to depreciation 13 and what I wanted to do was to just briefly go through each 14 of those and talk about what the position of the company is versus what the position of the Staff is. Are you in a 15 16 position to be able to do that on each of those four issues? 17 Are you able to organize it in that manner? 18 Α. I believe I can do that, yes. 19 Q. Okay. The first issue is what are appropriate 20 depreciation rates to be applied to the company's depreciable plant? So in terms of dollars, can you give me 21 an idea of what the company's position is or a brief idea of 22 23 what the company's position is? 24 Α. Well, there's a few issues that are involved 25 in that. We have the Missouri-American district piece, 1719

1 which is what I discussed a little bit yesterday, which was 2 the primary focus of my study. That -- the difference between my numbers and the company -- or Staff's numbers, 3 excuse me, are the \$1.7 million. 4 5 Ο. That's the total difference? 6 Α. That's the total difference in depreciation expense between Staff and the company. 7 8 Q. And just to make sure that we're talking 9 apples to apples, I'm referring to Issue No. 17 on the 10 issues list agreed to by the parties. Are you familiar with Issue No. 17? 11 12 Α. I do not have that, so --MR. ENGLAND: Your Honor, I don't think he has 13 14 that. I'm not sure he's familiar with the issues list. COMMISSIONER CLAYTON: Well, that's why I want 15 16 to make sure. I'm going to be through these issue by issue 17 and if he's not familiar with the four separate issues that 18 are listed, then maybe we ought to stop. 19 MR. ENGLAND: Well, as we prepared and -- as 20 we were preparing our position statement, we got input from 21 Mr. Spanos to make sure we were accurately stating our 22 position. So I think he's familiar with the position, he's 23 just not familiar with the document. So if we have a 24 minute, I'll try to get him a copy. 25 COMMISSIONER CLAYTON: That's all right. Ιf 1720 ASSOCIATED COURT REPORTERS

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1 he knows what I'm talking about, then that's how I need to 2 organize my notes as we go through this. 3 BY COMMISSIONER CLAYTON: 4 So there's a difference between the company Q. 5 and Staff of \$1.7 million? 6 Α. For just the Missouri-American districts. And that's --7 Q. 8 Α. That includes Joplin --Mexico, Platte County? 9 Q. -- St. Joe --10 Α. And it does not include Jefferson City? 11 Q. 12 Does not include Jefferson City and it does Α. 13 not include St. Louis County district. Okay. So there's a difference of 14 Q. \$1.7 million. Thank you. 15 16 Can you tell me what the company's number 17 is -- if the difference is 1.7 million, what is the 18 company's position versus what Staff's position is? 19 Company's position for those seven districts Α. 20 is 6.2 million annual expense and Staff's position is 4.5 --21 4.5? Ο. -- million. 22 Α. 23 Q. And that's just the smaller districts --24 Α. That's correct. 25 Ο. -- or the Joplin, Mexico, Platte County? 1721 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 Okay. Is there a difference on the St. Louis 2 County and Jefferson City districts? 3 Α. Yes. There's a bigger difference on St. Louis County. I don't have the exact numbers in front of me. 4 5 Maybe I can get that report. That number is -- I'll go 6 through the rough numbers and maybe when my attorney can 7 bring me --8 Q. An approximation. 9 Α. We're about 6.5 in depreciation expense for 10 St. Louis County, another 4.8 on the reserve variance. 6.5 is the difference for -- on depreciation. Then there's 11 12 a reserve variance that's about 4.8. And then the 13 difference for the Jefferson City piece is approximately \$70,000. 14 I really don't want the differences. I don't 15 Ο. care about. I mean, I can do the math. 16 17 Α. Okay. I'd like to know the positions of --18 Q. 19 Α. I'm sorry. 20 -- the company so I can compare. I get lost Ο. 21 in all the discussion of theory and everything. I need hard numbers --22 23 Α. Okay. 24 Q. -- so I can track things. 25 So on the Missouri-American Water districts, 1722 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 the smaller districts, the company's position is 6.2 million 2 in depreciation while the Staff position is 4.5 million? 3 Α. That's correct. Q. For St. Louis County, the company's position 4 5 is 6.5 million and Staff's position --6 Α. Sorry. I was giving you the difference there. Staff's position for St. Louis County is approximately 9.9. 7 8 Q. Okay. 9 And the company's is approximately 16.5. Α. 16.5. 10 Ο. JUDGE THOMPSON: Is that expense? 11 THE WITNESS: That's expense, yes. 12 BY COMMISSIONER CLAYTON: 13 Okay. And for Jefferson City then would be 14 Ο. the last part. 15 The company's position is 409,000. Staff's 16 Α. 17 position is 336,000. 336? 18 Q. 19 Α. Yes. 20 Okay. So then we take the difference in each Ο. 21 of those three issues there and that's where you come out for the difference? 22 23 Α. There's one other small component there and 24 that is -- I shouldn't say small component, but there's 25 another component which is the reserve variance that's built 1723 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 into the St. Louis County rates. And that's 4.8 million. 2 There's no number. It's just 4.8 is what's part of the depreciation expense. 3 4 Q. That's part of the 16.5 or is that in 5 addition? That's in addition to. 6 Α. 7 Okay. And what's Staff's position on reserve Q. 8 variance? 9 Well, in the St. Louis County case, the '95 Α. 10 reserve variance, which is a portion of that 4.8, everybody agreed upon. In the '99 case, there was an opposition to 11 12 that. I believe it was determined that the amount that was 13 in the reserve variance was to be included in depreciation expense. I don't know that Staff necessarily agreed with 14 that. But the '95 number, which is 3.9 of the 4.8, was 15 16 agreed upon by both sides. 17 So Staff on the reserve variance is going to Q. be at least 3.9 --18 19 That's correct. Α. 20 -- and we're not sure exactly what it is? Ο. 21 Α. Right. And I'll verify that later on. 22 Q. 23 Α. Okay. Thank you. 24 Q. Okay. Issue No. 18, the issue is, in 25 establishing depreciation rates for the company, what is the 1724 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO

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1 appropriate way to account for cost of removal, net of 2 salvage? Could you just briefly identify the company's 3 position?

A. Yes. The company's position is to estimate the anticipated cost of removal and gross salvage amounts based on historical information and expectations for the future, include that in the depreciation rate so that the overall cost of service of the asset is recovered equitably over time.

10 Q. Is a present value taken of that figure for --11 if you're estimating what the cost is a number of years out, 12 do you discount it for present value?

13 A. No.

14 Q. You take a present value of what you think it 15 will be in the future?

A. You anticipate the -- or estimate the cost of what it will be in the future based on the cost of the retirements that you will expect in the future and estimate in that fashion. So both items are projected together so there's no present value built into that.

21 Q. So is it in today's dollars?

22 A. It's in today's dollars.

23 Q. It's in today's dollars.

24 Okay. And what's the Staff's position?

25 A. Staff's position is to not include in

1 depreciation expense anything related to cost of removal or 2 gross salvage and just expense it when the actual occurrence 3 happens, which its objective is to make sure that dollars that are actually incurred are recovered. There's just no 4 5 equity in who recovers those costs over time. 6 Ο. Okay. It's an expensing of at the time of any particular time of plant removal --7 8 Α. That's correct. Q. -- correct? 9 10 Do you know how this compares with the issue relating to the St. Joe plant retirement? 11 12 Well, the St. Joe plant retirement did not Α. 13 have any -- well, there was expectation of accruals to be 14 built into that number. However, it was prematurely retired so at the point in time that it was retired, that lump of 15 16 money that was not incurred -- or excuse me, accrued in its 17 cost was then incurred above what had been accrued. And now there's a -- an amount that is arguably whether -- how to --18 19 how to recover that. 20 Had the ratepayers over time been paying for Ο. the cost of removal, as you suggest, as we look forward on 21 22 the St. Joe plant? 23 Α. They were accruing some costs. They didn't 24 incur all of them. 25 Ο. There wasn't a recoupment of all of this --1726 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 Α. That's correct. 2 Q. -- but they had been paying as they go along? 3 Okay. Did you participate in Missouri-American's rate case of 2000? 4 5 The one related to St. Louis County assets? Α. 6 Ο. Well, any assets in the year 2000. I mean, this isn't your first time in Missouri testifying? 7 8 Α. I was a support person in the 2000 case. I was not the lead depreciation person at that time. 9 10 And the company's position on this way to Q. account for the cost of removal net of salvage is the same 11 as what has been done in past rate cases? 12 13 Α. That's correct. Okay. And it is the position of the company 14 Q. that Staff has changed its methodology? 15 I think that's a correct statement. 16 Α. 17 Okay. Issue No. 19 is, what are the Q. 18 appropriate asset lives to be used in prescribing 19 depreciation rates for the company? Could you identify the 20 company's position on that issue? 21 Yes. And as -- my determination is to take in Α. consideration a handful of information. First, I've looked 22 23 at the Missouri-American district's data, combined analysis 24 for all seven districts, analyzed the historical 25 indications.

1 Included as part of that overall analysis, 2 what other water utilities are using for the same type of 3 assets, any plans of management to have programs in place to either retire or repair assets, what growth issues are 4 5 involved that would cause for -- needs for affecting the 6 lives of assets. So I put those -- all those factors combined to determine my lives for the Missouri-American 7 8 districts.

9 For St. Louis County and Jefferson City, I did 10 not feel a need to change those estimates because of the 11 fact that there was a case done three years ago that we were comfortable with the lives. And the company normally comes 12 13 in every five or six years to do their depreciation studies 14 and review the service lives, so I didn't feel it was appropriate to go through and revise those estimates. 15 16 So from -- in this particular issue, I only 17 focused on the historical indications of the Missouri-American districts combined. 18 19 How does that differ from Staff's position? Q. 20 Staff has reviewed all the data for the Α. 21 St. Louis County district and come up with new estimates for St. Louis County revising the ones that were done in 2000 22 23 and then applying their knowledge of those assets to the 24 Missouri-American district's assets and coming up with 25 depreciation expense in that regard.

1 Ο. Is there a disagreement on the 2 Missouri-American districts? 3 Α. Yes. There -- there was a disagreement as to the quality of the data for the Missouri-American districts. 4 5 So Staff decided to use the St. Louis County assets as its primary way of determining service lives for the 6 Missouri-American districts. 7 8 I felt the data for the Missouri-American 9 districts, which is the same data that's been used in past 10 studies and added onto it since the last study, was a quality analysis as long as you were able to combine it. 11 12 Because there wasn't enough data on a district-by-district 13 basis to do separate studies. Okay. Issue No. 20, should the Commission 14 Q. allow the existing reserve deficiency amortization to 15 continue for the St. Louis district? What is the position 16 17 of the company on that issue? 18 Α. The position of the company is, yes, they 19 should. It was -- they were approved in the last case, that 20 is part of the, you know, stipulation in that case that it 21 is a necessity for the company to have that money to become whole in their recovery of assets. 22 23 Q. Could you explain to me what reserve 24 deficiency amortization means? 25 Α. Sure. The -- a comparison in the reserve 1729 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO

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has -- there's a theoretical reserve number, which means the survivor curve and the net salvage components are used to develop a theoretical reserve number. And then there is the actual book reserve number, which is the actual accumulated depreciation that the company incurs each year and cost removal and salvage that it incurs each year.

7 Obviously it's not going to be a perfect match 8 as to what you theoretically think it should be versus what 9 actually occurred. So you're looking at that difference at 10 a point in time.

In this -- for St. Louis County, you're at a 11 12 point in time in '95, you're at a point in time in '99 that 13 you reviewed this variance. And you determine how much by 14 account the two numbers are off and then you determine a 15 period of time, five years, ten years, to recover that 16 amount and either add to the -- the accumulated depreciation 17 or subtract from depending on whether you have 18 over-recovered or under-recovered theoretically. 19

19 Q. How often is that done, that comparison? Is
20 it done --

A. It's done each time you do a study. It's not
done annually in this particular case, but it's done each
time you do a study given this particular methodology.
What I've proposed in Missouri-American kind
of avoids this true-up process and does it over the

1 remaining life of the assets, which keeps it a lot smoother. 2 In this particular St. Louis County district, the process 3 was to do it -- each time you do a study, you check the two numbers and then you true-up those numbers over a period of 4 5 time, five, ten years depending on -- in this particular 6 case I believe both of them were ten years. Is there a dollar figure on this issue, this 7 Q. 8 reserve deficiency amortization? Is there a dollar difference or is this purely a method? 9 No. There's a dollar difference. Obviously 10 Α. in the St. Louis County case there's \$4.8 million annually 11 12 that the company is adding to their depreciation expense. 13 Staff feels those numbers -- the theoretical side are not 14 appropriate so they're excluding that in their recovery estimation. 15 16 Ο. So the company wants to add \$4.8 million to 17 catch up that depreciation? Is it kind of a true-up over 18 every once in a while you catch up? 19 They want to continue doing that because Α. 20 they're presently doing as what was approved in the past, so 21 they're trying to continue to do that. There's a -- in '95 they had three years left, in the '99 they have six years 22 23 left of recovery. 24 There's -- that 4.8 is broken down in -- as I 25 mentioned, the '95 case there's 3.9 annually and in the '99 1731 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO

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1 case, there's about 900,000 annually. So in the '95 case 2 you have three more years left to go and then the '99 case 3 you have about six more years, seven more years to go. So is the 4.8 accumulated or an annual amount? 4 Q. 5 It's an annual amount. Α. 6 0. And what would be the Staff position in dollars? Zero? 7 8 Α. Bas-- yeah, zero. And the reason for it is 9 they have different life estimations so they don't feel 10 there is a difference. COMMISSIONER CLAYTON: Okay. Thank you very 11 12 much. 13 THE WITNESS: Thank you. JUDGE THOMPSON: Further questions from the 14 Bench? Commissioner Murray? 15 QUESTIONS BY COMMISSIONER MURRAY: 16 17 Good morning. Q. 18 Α. Morning. 19 Mr. Spanos, in your JJS-1 at page 226, toward Q. 20 the bottom of the page there's a paragraph there, Amortization accounting as proposed for certain general 21 plant accounts which represent 3 percent of depreciable 22 23 property. Future gross salvage and removal cost for these 24 accounts will be recorded as revenue and expense 25 prospectively and as much as there will be no depreciation 1732 ASSOCIATED COURT REPORTERS

573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO 1 reserve entries related to salvage, the estimate of net 2 salvage for account subject to amortization is 0 percent. 3 Why are those accounts treated differently? In those accounts a common practice across the 4 Α. 5 industry is that you have large number of assets, many 6 chairs, furniture, many ladders and tools and things of that nature that are small dollar items but there are a lot of 7 8 them to keep track of.

9 So what's been determined was instead of 10 worrying about dispersion rates for those assets, let's set 11 up an amortization period that is a reasonable estimate of 12 life expectancy for those assets.

13 So for situations such as office furniture and 14 equipment, 20 years is a reasonable estimation of time to 15 recover those dollars. So instead of worrying about whether 16 dollars get retired each year, you just -- when an asset 17 is -- has lived for 20 years, it becomes -- it's retired off 18 the books.

So given that type of methodology, the amount of cost removal and salvage, which is normally very close to zero because of the fact these assets don't cost a lot to remove and there isn't much salvage value for them, any of the dollars that would normally hit the accumulated depreciation would not go into that because you're having a much more standard methodology of retirement.

1 And that is the common practice or rules of 2 the amortization process. So those dollars would -- would 3 not address the -- or hit the cost removal and salvage areas of the reserve account. 4 5 And is this the way that type of asset has Ο. 6 been treated in the past? It was treated that way in Missouri-American 7 Α. 8 districts and it was proposed in the St. Louis County districts. So that these assets have been in place for 9 10 Missouri-American districts, which is what I focused in this 11 particular study, since the '95 case. 12 Okay. And if there is any intergenerational Q. 13 inequity there, it would be diminimous. Is that your --That's correct. I don't believe that there 14 Α. will be intergenerational issues, one, because the dollars 15 16 are so small; and two, because of the fact that we're 17 feeling comfortable that the estimate -- amortization period 18 of those assets are pretty sound estimates based on the type 19 of asset you have. There's not as much wide dispersion in 20 those assets. 21 Ο. Okay. On page 230 you talk about amortization periods, and I wondered -- and I'm sure it's in here in 22 23 testimony somewhere, but is there disagreement as to the 24 amortization period of those assets? 25 Α. Yeah. The Staff has not proposed to use this 1734

1 methodology in their estimation. So I guess in a sense 2 there's disagreement in that they treat general plant as 3 though it is just like all other assets and they go through dispersion of these assets where my estimation of this 4 5 methodology uses more the standard depreciation process of 6 retirement at the end of the amortization period. So they don't agree with the amortization 7 8 process at all, I believe. They have lives that are different than my amortization periods. 9 10 Okay. And your report states that the periods Ο. 11 used in the report were based on judgment which incorporated the consideration of the period during which the assets will 12 13 render most of their service, amortization period and 14 service lives used by other utilities and the service live estimates previously used for the asset under depreciation 15 16 accounting. 17 So are these fairly -- if one were to compare 18 the service lives used by other utilities and those that 19 have been used by Missouri-American for these assets in the 20 past, would that be pretty consistent? Very consistent. I think the biggest 21 Α. 22 difference is most utilities for computer hardware and 23 computer software have a shorter amortization period than 24 what we have proposed here because they have a practice of 25 changing out their computers a little bit more regularly

1 than Missouri-American does. That's the biggest difference 2 that I see here. Otherwise, all of the amortization periods 3 here are consistent with other utilities and what they do 4 across the country.

5 Q. Okay. Now, looking at computer hardware and 6 software, I think some people might consider them dinosaurs 7 at eight and ten years old.

8 Α. I would say that's true. And a lot of it 9 depends on what they do with the assets. Many times you 10 have a computer that is sitting on one person's desk, they 11 need an upgrade so that computer gets moved to another 12 person's desk that isn't as demanding of that computer. So 13 that's why it lasts a little bit longer in this particular 14 case. Where in some companies, everybody's changing out their computers a little more standardized because of the 15 16 equal use.

17 So for Missouri-American there is a reason for 18 having longer amortization periods for their assets. And 19 they're also assets such as servers and things that are 20 bigger assets that might stay a little bit longer than five 21 years, which is a more standard estimation of computer 22 assets.

Q. All right. Is there anything in your study or
your testimony that would allow us to compare the results
over time of the company's position, which is to continue

with the treatment of cost of removal net of salvage as it has been treated in the past -- to compare that with the Staff's proposal, which is to change directions and start treating those assets in a different manner? Is there anything that would allow us to follow through year-by-year to the retirement of those assets and see how amounts would be recovered?

A. Well, the best thing that I can -- there's no true comparison in my study. The best thing that I can do to help support the estimates that I have that's produced in my net salvage percents would be what's listed in net salvage statistics section, which starts on 3-121 through 3-134.

14 In those instances I have shown what the 15 retirements have been over the last 15 years, what the cost 16 of removal amounts have been, what the gross salvage amounts 17 have been and -- and the net of those two numbers. 18 So if we go to the first account on that 19 3-121, we see the summation of the retirements for two 20 structure accounts, see about 966,000 that's been retired 21 over 15 years, a cost of removal of 207,000, a gross salvage 22 of 0 producing an estimation of net salvage of minus 21, 23 compared to what I have estimated as minus 15. So I'm a 24 little bit conservative --

25

Q. I'm sorry. Where do you see your estimate?

1 Α. On page 3-4, which is the summary of my 2 analysis, Accounts 304.2 and 304.3, which is the second and 3 third lines. If you go across to column 3, you see net salvage. 4 5 You're on page --Ο. 6 Α. Page 3-4. The second and third line would be 304.2 and 304.3, which is power and pumping structures and 7 8 water treatment structures. And then we go across that line to column 3, which is net salvage. And my estimate is minus 9 15. 10 So historically we've seen an average about 11 12 minus 20. I'm recommending a minus 15 estimation given the 13 fact that I'm being a little conservative from historical estimations based on what I anticipate happening for these 14 assets in the future. 15 16 Ο. All right. But how does that minus 15 compare 17 to that minus 207,000? I don't think I'm hearing --The 207,000 that's listed there is the cost of 18 Α. 19 removal that's been actually incurred over the last 15 years 20 for the \$966,000 worth of retirements for these two 21 accounts. 22 Q. And what does your minus 15 -- what does that 23 compare to here? 24 Α. That would -- my judgment was to say instead 25 of the minus 21 percent that we saw historically, minus 15 1738 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 would be a better representation of what is expected for the 2 net salvage accrual asset -- or excuse me, net salvage 3 accrual amount that should be included in depreciation expense on a go-forward basis. 4 5 Ο. I finally found the percent column. Thank 6 vou. Α. Okay. Sorry. 7 8 And Staff's position would be that should be zero, it should only be incurred -- it should only be 9 recorded when incurred. 10 Right. But then is there anything in here 11 Ο. 12 that shows -- okay. Under your methodology here, we're looking at past numbers. Correct? And where would there be 13 14 a projection? Α. There's no projections that are a part of my 15 16 study. Mine are historically. And the numbers that are 17 used in this -- the depreciation rates of my 3.4 and 3.518 summary schedule is what I recommend that the company should 19 start booking in their depreciation expense for the future. 20 So this -- these numbers are as of December 31st, 2002, but they are to be used on a go-forward 21 22 basis until they do their next study and they review the 23 analysis to see whether these estimates were appropriate or 24 whether there were changes in the estimates for that -- for 25 purposes of management decisions or different practices that

1 cause for a reason to change the net salvage component. 2 Okay. And some of the percentages have turned Q. 3 out to be greater and some I guess have turned out to be less than what you estimated; is that right? 4 5 That's correct. The historical estimates Α. 6 might be different than what I propose. So in the case of the example I gave, historical estimation of minus 21, I've 7 8 proposed minus 15. So there are differences from the 9 historical indications and what I'm proposing to go forward. 10 And you may have already explained this and I Ο. 11 just might not have been listening, but why did you propose minus 15 instead of minus 21? 12 In my estimation, based on some of the issues 13 Α. 14 that would cause for cost of removal that have been affected 15 in the past versus what will happen in the future, I felt 16 that minus 15 would be a better representation of future 17 estimations of cost removal and gross salvages. 18 It's a slight trend downward based on the last 19 five years, so I felt that would be a reason to go to minus 20 15. Industry standards say minus 15 is a better estimation 21 of water treatment plants and water booster stations. So 22 those are issues I brought into the historical information 23 to give me an estimation I felt most appropriate to go 24 forward. 25 Ο. And when you say industry standards say minus

1 15 is appropriate, is that industry standards for 2 calculating cost of removal?

3 Α. The net salvage component is a part of depreciation expense pretty much across the country. So 4 5 many reports similar to this or approvals of reports similar 6 to this or adjustments of these studies are public documents once they're filed. So you can go through and see what 7 8 others in the industry are doing. And if you get a consensus, I consider that to be an industry standard. 9 10 Where an industry norm might be a better term in that water treatment plants and power and pumping 11 12 structures across the country have a range of minus 10 to 13 minus 20. I see many of them around the minus 15 range, so 14 I consider that to be an industry norm. And based on the information I saw here, I took both of those things into 15 16 consideration and decided minus 15 would be the best way to 17 go forward. 18 Q. And is it accurate to say that the industry 19 norm is to treat cost of removal net of salvage as the 20 company is proposing and as it has been treated in the past by Missouri-American Water? 21 22 Α. Yes. I think almost every state incorporates

23 a component of their depreciation rate as a net salvage 24 accrual. The only state based on a state order that has 25 consistently not done that is Pennsylvania. All other

states have the net salvage component as part of their
 depreciation expense.

3 There are a few states that have had cases 4 where they have not incorporated the net salvage component. 5 And normally the reason for that is because of a lack of 6 quality data to support any estimate at all. The company 7 usually was too small or not big enough to incorporate a 8 quality analysis. And judgment was considered not to be as 9 supportive and they've gone to the expense route.

10 Q. And depending on the utility, its size and 11 other variables, I would assume that the intergenerational 12 inequities would be different based upon some of those 13 variables. Would they not be less for some of those smaller 14 companies or is that a conclusion you can't draw?

A. I wouldn't say that -- I mean, obviously the magnitude would be different, but for that particular company you have less customers so you still have an intergenerational difference whether they are part of the depreciation rate or not.

So I think you still have the same issues whether you include it or not on a small company or a large company. But if you can't support your estimation of net salvage in any way or you have not been recording it on an appropriate basis to support that, one approach has been to expense it normally because the company was not able to

1 support their analysis, and that was proposed.

2 And your support is based upon historical data Q. 3 from 1987, tracking the retirement of the various assets and tracking the net salvage that has been accrued and comparing 4 5 the cost of removal percentage -- the actual cost of removal 6 percentage to what has been accrued over time; is that right? 7 8 Α. Part of the development is to focus on what historically has happened for cost of removal and gross 9 10 salvage. A combination of those two numbers is the net salvage, and that is recorded as a percentage of retired 11 12 assets, plant retired. 13 So I develop a percentage based on historical 14 information and what I feel to be a reasonable estimation based on some of the other things I've discussed. From 15 16 that, you compare your level of theoretically where you 17 should be versus where you actually have recovered. 18 Now, there's no proper way to see how much 19 exactly was recovered versus how much exactly was estimated, 20 but what you're able to do is compare your rate base number 21 to -- or excuse me, your book reserve number to where you 22 theoretically should be to see whether it's reasonable. 23 If you are reasonable, you move on and recover 24 the difference over the remaining life of the assets. If --25 or in some cases you have a true-up of that difference. And

1 if you are pretty close, then you feel your estimation is a 2 quality estimate of where you have been in the past. 3 Q. Okay. And Commissioner Clayton asked you a question earlier about whether there was a -- I don't 4 5 remember exactly how he phrased it, but I believe the gist of it was whether the cost of removal is in present dollars 6 or future dollars. And I believe you said present dollars? 7 8 Α. That is -- the estimation of net salvage is in present dollars. 9 10 Which means that if you put -- I want to make Ο. sure I understand what that means. If you put an asset into 11 service today, then you estimate its cost of removal in 12 13 50 years will be X dollars, are you saying in 50 years it will be X number of today's dollars? 14 15 Α. My estimation is given the information I know 16 today, I am estimating that future cost of removal will be a 17 percent of the plant retired, which is dollars that were 18 re-- or put into service many years ago. So I've estimated 19 what my future expectation would be of that cost of removal. 20 It does not take into consideration all the factors of inflation. So in that regard, that's why I feel 21 my estimates of these assets based on the average age of the 22 23 retirements is conservative, but I do feel that it sets up a present value of those -- of the cost of removal in today --24 25 at today's point in time.

Q. Okay. So the percentage is based on the
 original cost?

A. It's based on the assets retired and recoveredbased on the original cost today.

5 Q. So is there some amount that the company just 6 generally does not recover because it's obviously -- it 7 would obviously be more in future dollars?

8 Α. The obvious goal -- the company will recover all of its investment. The obvious goal is to continually 9 10 do these studies to better estimate what the current or in -- you know, in five years from now when the company 11 12 comes back and does this type of study, they will look at 13 the cost of removal and gross salvage estimates that have occurred not only from '87 to 2002, but also through 2007 14 and determine whether inflation has been built into those 15 16 new estimates. And they will know that future recovery 17 might be 20 percent instead of the 15 percent that I've estimated. 18

19 So that's the adjustments that they will make 20 each time you do a study. And you catch this when you do 21 this every five years. You re-look at the estimate and 22 decide whether your estimate was appropriate based on the 23 new knowledge that you have.

24 Q. Okay. And that is why -- I would assume that 25 the percentages over time would tend to increase?

A. They -- based on the fact that cost of removal is a labor issue and labor will go up at a faster rate than the salvage value, you would see these numbers become more negative over time.

5 The other issue that we know here is the fact 6 that we are retiring assets earlier than the average right now, so we're going to expect future retirements to be later 7 8 than the average. So there will be a longer disconnect 9 between when the asset was put into service and when it's retired. So there will be more inflation in the labor costs 10 that would cause that number to become more negative. 11 12 So something currently estimated at minus Q. 13 10 percent would be likely to be a higher negative 14 percentage? 15 Α. I would anticipate that happening as long as 16 the average age of the retirements are less than average 17 today. And those adjustments in the calculations 18 Q. 19 would be made how frequently? 20 I believe the standard is -- for this company Α. is to go every five years or so. Five or six years is 21 their -- what they've continually done. So you'll 22 23 continually look at those things every -- every five years. 24 Q. And are these calculations adjusted only 25 during a rate case?

1 Α. Yes. Well, unless there's a special 2 circumstance that they need to make an adjustment and 3 obviously they'd have to ask for permission to do that. But 4 I don't believe they've had any situations such as that, at 5 least since the last cases. 6 Ο. I think I had one more here somewhere. No, that must not have been a question for you. 7 8 COMMISSIONER MURRAY: Thank you very much. 9 THE WITNESS: Thank you. 10 JUDGE THOMPSON: Commissioner Clayton? FURTHER QUESTIONS BY COMMISSIONER CLAYTON: 11 12 Q. Just to follow up on that present value 13 discussion, how do your figures take into consideration the 14 company receiving part of the cost of removal over a great amount of time? Do you have an interest calculation where 15 16 the -- where since the company receives the money earlier or 17 some of the -- you know, a portion of the money earlier, where there would be a value in terms of interest? Is there 18 19 an interest component to that evaluation? 20 No. There's not an interest component. Α. It's --21 22 Q. How come? 23 Α. It's a cost of doing business. And there are 24 factors that are outside of depreciation that might be built 25 in, but as far as the depreciation's concerned, the 1747

company's responsibility is to offer quality service. And the overall value of this service that they provide is the full cost of their investment, service value which includes having assets in service that operate the way they are required and the future cost of removal that will be incurred.

So in my estimation of book depreciation, the 7 8 process is to -- each has an equal responsibility. The 9 ratepayers get benefit of the asset, the company is required 10 to serve them, they get the full cost of their deprec-- full 11 cost of their asset through depreciation over time. And 12 it's the only way to smooth that process out of retirement. 13 Well, I'm confused. I'm only talking about Ο. 14 the cost of removal component of that depreciation. And when we're talking about -- when I was asking about the 15

present value, in your discussion with Commissioner Murray, there was discussion that, well, you estimate what it would cost to remove that plant somewhere into the future.

And I guess the question that I'm asking is, since you are receiving compensation from the ratepayers for that cost of removal from, say, today forward, do your calculations include an amount of interest that the company would actually receive on that prepayment on the cost of removal? And is your -- there's no interest calculated into that, but shouldn't there be? And I didn't understand your

1 answer, if you answered.

2	A. In my opinion, there there should not be
3	built in through depreciation rates a value of interest
4	because the fact that I have a conservative estimate of the
5	cost of removal. So, in my opinion, there's no interest
6	built in and I don't believe for depreciation purposes that
7	there should be. Because I believe that's full full
8	value of the service that's that's in for that
9	customer or that group of customers.
10	COMMISSIONER CLAYTON: Okay. Thanks.
11	COMMISSIONER MURRAY: One more follow-up.
12	JUDGE THOMPSON: Commissioner Murray?
13	FURTHER QUESTIONS BY COMMISSIONER MURRAY:
14	Q. In that this is the methodology that is used
15	in almost every state, is the standard to include any kind
16	of an interest component or not?
17	A. I've never seen any interest component as
18	built in in the fashion that's being requested here. I
19	haven't seen it in book depreciation in any way.
20	Q. Okay. And the calculation of depreciation,
21	including the net salvage, is designed to recover the
22	service value of the asset over the life of the asset; is
23	that correct?
24	A. That's correct.
25	Q. And the service value of the asset is based
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1 upon original cost, whatever it's going to cost to remove it 2 net of salvage and what else? 3 Α. Those are the factors that you -- that's the -- the enumerator, so to speak. So you want to recover 4 5 the cost of the plant invested and cost of removal and gross 6 salvage. Those things netted together produce the amount 7 that you want to recover and you divide that over the 8 service life of the assets to have a smooth recovery 9 process. 10 And the original cost is an investment that Q. the company makes up front; is that right? 11 That's correct. 12 Α. And the cost of removal is an investment that 13 Ο. 14 the company makes upon retirement? That's correct. 15 Α. 16 Ο. And in terms of return of and return on, how 17 are those assets treated? 18 Α. I'm not sure of the question. 19 Q. Is the company earning a return -- first of 20 all, the company is earning a return of those assets through the treatment that we're talking about here. Correct? 21 That's correct. 22 Α. 23 Q. Is the company also earning a return on? 24 Α. I would believe so, but that's really not my 25 area that I should --1750

1 Ο. Okay. 2 Α. -- probably answer exactly the numbers. 3 COMMISSIONER MURRAY: I think that's all I have. Thank you. 4 5 Thank you, Judge. OUESTIONS BY JUDGE THOMPSON: 6 7 Mr. Spanos, good morning. Q. 8 Α. Morning. 9 I'm going to take you back through all this Q. 10 stuff in an elementary way to make sure that I understand it. 11 12 Now, you've got the issue list in front of 13 you. Right? 14 Yes, I do. Α. 15 So Issue No. 17 has to do with rates, right, Ο. 16 depreciation rates? 17 Α. (Witness nodded head.) Now, does that apply only to the old seven 18 Q. Missouri-American districts or does that apply to all the 19 current nine districts? 20 21 Well, I believe the issue that is discussed in Α. 17 applies to all nine districts. My study that I did here 22 related to the seven original districts. And my situation 23 24 is to keep the St. Louis and Jefferson City districts as 25 they are. So --

1 Ο. Right. 2 Α. -- no change. 3 Q. In your study you're proposing a new treatment, or an updated treatment perhaps would be the best 4 5 way to put it, for the seven historical Missouri-American 6 districts and you are accepting the existing treatment of the St. Louis district and the Jefferson City district for 7 8 the purposes of this case. Right? 9 Α. Yes. 10 Okay. Now, what exactly is the dispute that Ο. Issue 17 represents? What is it that the company wants and 11 12 then what is it that Staff wants? 13 Α. Well, in the manner that you develop a 14 depreciation rate, you need to determine our reasonable service life --15 16 Q. Right. 17 -- you need to determine a dispersion rate, Α. 18 you need to determine whether there is the life span 19 procedure or not the life span procedure and you need to 20 determine the net salvage component. 21 Obviously you have a way of doing that. One is to study the data of the assets that you have involved, 22 23 or there are other methods of doing that such as studying 24 other assets or using just judgment. 25 I have gone through and incorporated my 1752 ASSOCIATED COURT REPORTERS

1 judgment on the -- and my inclusion of the historical data 2 and brought in what others in the industry are doing to 3 determine service lives that I feel appropriate for these specific assets and also incorporate management's plans for 4 5 these assets. 6 In addition to that, I've determined that part of the recovery of these assets should be a net salvage 7 8 component. And I've determined --9 Q. Isn't that Issue 18? 10 Α. It is, but it is -- the Issue 17 relates to --11 Q. Okay. 12 -- the whole aspect. So I've come through and Α. 13 determined that based on just the Missouri-American 14 districts and kept the other two alone. The difference that Staff has come up with is 15 16 they've excluded the net salvage component and they've 17 analyzed the updated St. Louis County district data and 18 produced estimates for that -- that data and applied those, 19 to the best of their ability, to the seven original 20 districts and Jefferson City to come up with estimates that they feel appropriate. So there's a difference in the 21 methodologies, for one, that produce depreciation rates. 22 23 Q. Okay. So is Issue 17 a separate issue or is 24 it really kind of an overview of all the depreciation 25 issues?

1 Α. In my mind as what I know from Issue 17, 2 that's kind of an overall issue and the others are subsets 3 of 17. 4 Okay. That's exactly what I needed to know. Q. 5 So in that case, it would be pointless to say, well, what's Issue 17 worth? Instead I need to ask you what 6 18, 19 and 20 are worth. Right? Because all of them taken 7 8 together really gives us 17. Is that an accurate way of 9 saying that? I think that is a relatively close 10 Α. approximation, yes. 11 12 Okay. Well, let's go on to Issue 18. Now, I Q. 13 understand this is, simply placed, whether or not cost of 14 removal net of salvage should be included in depreciation rates on an ongoing basis or whether, as Staff suggested, 15 16 cost of removal should be simply expensed when it happens. 17 Right? 18 Α. That's correct. 19 Okay. Now, what does the company -- what is Q. 20 the company's figures for this Issue No. 18? And is there a rate base component and a revenue component or is it all 21 revenue? 22 23 Α. Well, there's definitely a rate base 24 component. 25 Ο. Okay. 1754

1 Α. In the fact that if you've not been incurring 2 depreciation expense due to a net salvage accrual, your 3 accumulated depreciation would be less and your rate base 4 would be higher. 5 Ο. Okay. 6 Α. Okay. 7 So what are the figures that Issue 18 is Q. 8 worth? In other words, what does the company want in 9 revenues on an annual basis for cost of removal net of 10 salvage? MR. ENGLAND: Your Honor, I'm not sure we have 11 12 that information broken down that specifically. BY JUDGE THOMPSON: 13 14 Q. Okay. I was only able to make that adjustment for 15 Α. 16 the seven Missouri-American districts which I brought up 17 yesterday --18 Q. Okay. 19 -- which is obviously the smaller piece, but I Α. will --20 21 Maybe I'm asking the question the wrong way. Ο. Now, let me go over the figures you gave Commissioner 22 23 Clayton and I'll ask you questions about them to make sure 24 that I understand them appropriately. I'm the one that has 25 to write the order, so I've got to understand how the pieces 1755 ASSOCIATED COURT REPORTERS

1 fit together whichever way the Commissioners decide to go 2 with it. 3 So at one point you told Commissioner Clayton that for the seven historical districts, excluding St. Louis 4 5 and Jefferson City, that Missouri-American would like 6 approximately 6.2 million in annual depreciation expense and Staff's figure is 4.5 million in annual depreciation 7 8 expense; is that correct? 9 That is correct. Α. 10 Ο. And that's only for the seven historical districts. And that's where the dispute lies -- part of 11 this dispute? 12 13 Α. (Witness nodded head.) 14 So what are the figures then -- what is the Q. figure of depreciation expense on an annual basis for 15 16 St. Louis County and Jefferson City that's evidently not in 17 dispute? 18 Α. Well, I have not broken those numbers down and 19 I cannot quantify the difference because, in my opinion, 20 there is a dispute because of the fact that they are handling things differently on -- on that side. The reason 21 why it's not a dispute in this particular instance for me is 22 23 because I did not study the St. Louis County side. 24 Ο. I understand. You later told Commissioner 25 Clayton with respect to the St. Louis district that company 1756 ASSOCIATED COURT REPORTERS

1 would like to see 16.5 million in annual expense and Staff's 2 figure's 9.9 million. Okay? That for Jefferson City it's 3 409,000 versus Staff's figure of 336,000. 4 Let's say -- because I want to make sure I 5 understand this. All right? Let's say the Commission decides the company way. Would we add 6.2 million plus 6 7 16.5 million plus 409,000? 8 Α. That would be the annual depreciation expense for --9 10 The entire company? Q. 11 Α. That's right. 12 Q. If these issues are all decided the company 13 way? That's correct. 14 Α. And if, on the other hand, the Commission 15 Ο. 16 decides them all the Staff way, we would add 4.5 million 17 plus 9.9 million plus 336,000; is that right --That is correct. 18 Α. 19 Q. -- if they decide them the Staff way? 20 Okay. I'm grasping this now. And those 21 figures encompass, include and reflect the disputes over rates, asset lives, method of depreciation to be used, all 22 23 of those things, all of the nuts and bolts of the calculation. Right? 24 25 Α. That's correct. 1757 ASSOCIATED COURT REPORTERS

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1 Ο. Okay. Now, there is a separate issue 2 separately stated having to do with a 4.8 million figure, 3 which is I believe an annual figure, representing the amortization of a reserve variance for the St. Louis 4 5 district; is that right? That's correct. 6 Α. 7 Okay. Now, if I understand what that means --Q. 8 and help me with this -- every time you do a study and you 9 predict out, you then compare this to the booked value and 10 there may very well be a difference, right, between accumulated depreciation on the books and what's called the 11 12 theoretical figure that the study says should be there; is 13 that right? That is correct. 14 Α. Okay. And if the study says that there should 15 Ο. be more in the reserve than, in fact, there is, then you 16 17 have a reserve deficiency; is that right? That's correct. 18 Α. 19 Ο. Such as we have here. 20 And so this reserve deficiency amortization is 21 a way of collecting from the ratepayers the additional necessary depreciation expense to bring the reserve up to 22 the theoretical level? 23 24 Α. That is correct. 25 Ο. Okay. 1758 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 Α. And that's determined over a set period of 2 time. 3 Q. Okay. And in this case what was the period of 4 time? 5 Ten years. Α. Ten years. Okay. What was the total of the 6 Ο. 7 reserve deficiency, if you know? I guess it would be 8 48 million, right, if we're collecting 4.8? 9 Α. Yes. There was -- the '95 case had about 39 million and change and the '99 case or 2000 case had a --10 an additional 9 million or so. 11 12 Okay. Okay. And added together they give us Q. that roughly 48 million deficiency being collected over 13 10 years, 4.8 million. All right. 14 15 The first one is recovered from '95. Α. Starting at two different times? 16 Ο. 17 Α. That's right. I understand. But for the purposes of this 18 Q. case, it's a 4.8 million annual figure? 19 20 Α. That's correct. 21 All right. And Staff is proposing that that Ο. be reduced to 3.9 million; is that right? 22 23 Α. No. According to Staff, they feel that that 24 should be ended because of the fact that, in their mind, 25 that difference had some future accrual or net salvage 1759 ASSOCIATED COURT REPORTERS

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1 accrual built into the rate and they feel that's not 2 appropriate. So in their mind all the remaining dollars 3 should not be recovered. In other words, it's zero? 4 Q. 5 That's right. From now on. Α. 6 Ο. And that's based on two previous cases --That's correct. 7 Α. 8 Q. -- that allowed it. And Staff says zero --That's correct. 9 Α. 10 -- is that right? Q. JUDGE THOMPSON: Okay. I'd like counsel to 11 12 look at the legal issue of whether or not that constitutes a 13 collateral attack on a final Commission order or not. Okay? MR. SCHWARZ: I think not. Collateral attack 14 is an attack on a judgment in a matter not contemplated by 15 16 law. Clearly a subsequent rate case -- when we're setting 17 rates on an ongoing prospective basis in this case in a 18 proceeding that's designed specifically to consider those 19 rates, subsequent rate cases cannot be considered a 20 collateral attack because otherwise we'd still be using the 1913 rates. 21 22 JUDGE THOMPSON: Okay. Okay. 23 MR. ENGLAND: While I may not argue it as 24 ferociously as --25 JUDGE THOMPSON: I don't really want you guys 1760 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 to argue it now. I'd like to see it briefed.

2 MR. ENGLAND: No, but I tend to agree with 3 Tim. I think the Commission can from case to case re-establish depreciation rates and amortization periods or 4 5 disallow them, for that matter, if the evidence suggests. JUDGE THOMPSON: Okay. If that's what learned 6 counsel feels, I'm certainly not going to tell them it ain't 7 8 so. But I'd still likes to see some discussion of it in the briefs because in 1995 if the Commission decided that there 9 10 were, for points of discussion, let's just say a \$40 million reserve deficiency that ought to be recovered over the next 11 10 years and now 8 years later can we ask this Commission to 12 13 change that decision? I realize that obviously rates can change or 14 we would never have another rate case. As Tim said, we'd 15 16 still be using 1913 rates. But this is not rates. This is 17 one component. This is a decision to permit recovery of a 18 certain amount of money for a certain particular reason that 19 was adjudicated in 1995 and 1998 and now you're asking that 20 the Commission adjudicate it again. And that is the part that I'm wondering whether that's a violation of 386.550 and 21 I'd like to see counsel brief that. Okay? 22 BY JUDGE THOMPSON: 23 24 Q. Now, let's talk about this cost of removal net 25 of salvage. And the difference on that is incorporated in 1761 ASSOCIATED COURT REPORTERS

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1 these figures we've just gone over. Correct? 2 Α. That's correct. 3 Q. And so if I were to say, Point to the specific figures, you couldn't do it. Right? It's kind of rolled 4 5 into these figures we've looked at for the seven historical 6 districts, St. Louis County and Jefferson City. Right? 7 For the seven original Missouri-American Α. 8 districts, I was able to -- because I've done the 9 calculation --10 Ο. Because you did the calculation. Okay. -- I was able to determine that between the 11 Α. 6.2 that I'm proposing and the 4.5 that Staff's proposing, 12 approximately 725,000 of that number, that difference, is 13 14 related to the net salvage component. Great. I appreciate that. Thank you. 15 Ο. 16 Now, it's very useful to talk about this in 17 comparison to the old St. Joe plant issue which we heard 18 about yesterday. Normally plant goes into service and out 19 of service on an ongoing basis; isn't that right? 20 Α. That is correct. 21 There's new plant added every year, there's Ο. plant retired every year; is that correct? 22 23 Α. That is correct. 24 Ο. And depreciation, in fact, is a way of 25 calculating that on an average basis; isn't that correct? 1762 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 So that you don't have to track the life of every office 2 chair? 3 Α. That's correct. Okay. Instead, you calculate an average life 4 Q. 5 of office chairs and you just multiply that times the number 6 of office chairs and you let the company have that, right, 7 incrementally over the expected life of those office chairs? 8 Α. That's correct. 9 And if one office chair breaks 5 years early Q. and if another office chair remains in use for 100 years, it 10 doesn't really matter. Right? 11 12 That's right. Α. 13 Ο. Okay. Because we're doing an average thing 14 here. Now, by building cost of removal net of 15 16 salvage into this you're also doing an average thing. 17 Right? That's correct. 18 Α. 19 When we look at the old St. Joseph plant, Q. 20 that's kind of turning depreciation on its head because we're looking at a specific item rather than an average. 21 Right? 22 23 Α. That's correct. 24 Q. We're actually concerned about what happened 25 to this piece of asset in this year. Right? 1763 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO

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1 Α. (Witness nodded head.) 2 Q. Okay. I have to have you give audible answers or the record doesn't pick it up. 3 4 Α. Yes. That is correct. Sorry. 5 So with respect to the old St. Joe plant, the Ο. 6 company was collecting an estimated cost of removal net of salvage over however many years that plant was in existence 7 8 and it turns out historically that it didn't, in fact, equal 9 what it cost to remove it; isn't that right? 10 Α. That is correct. So that the company was left short by somewhat 11 Ο. 12 over \$300,000? 13 Α. That is correct. Now, Staff is here proposing that cost of 14 Q. removal net of salvage should always be treated as an 15 16 expense when it happens. Right? 17 Α. That's correct. And the old St. Joseph plant issue shows that 18 Q. 19 perhaps that's not a very reliable way for the company to 20 recover that money, isn't it? 21 In my opinion, it's not a reliable way and not Α. fair to all the ratepayers. 22 23 Q. Okay. Normally the company is content -- if 24 you do the cost of removal net of salvage built into the 25 depreciation rate so that they're getting a little something 1764

1 extra every year to cover that, normally the company is 2 content with whatever that is and does not come to the 3 Commission with specific pieces of property saying, Wait a 4 minute, we didn't quite get enough money on this one, do 5 they? That's right. It's usually offset by other 6 Α. 7 assets. 8 Q. So, again, the St. Joseph plant thing is a 9 bizarre and unusual circumstance. Right? Correct. 10 Α. Of course, it's kind of unusual to retire an 11 Q. 12 entire water plant? 13 Α. Well, that does happen. I mean, in that particular account --14 15 But not every year? Ο. 16 Α. That's right. 17 Only every hundred years? Q. I think something a little shorter than a 18 Α. hundred, but yes, that's --19 20 Q. Okay. 21 Α. -- correct. So it's an unusual circumstance? 22 Q. 23 Α. Correct. 24 Q. See, here's the thing. Depreciation is built 25 on an annual basis. Right? 1765 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 Α. Yes. 2 Q. Everything is in annual increments? 3 Α. That's correct. But rate cases are not annual? 4 Q. 5 Α. Right. 6 Ο. They are every two to three years --Correct. 7 Α. 8 Q. -- right? 9 So if the Commission went with Staff's way of 10 doing cost of removal net of salvage, what would they do? Would the company, in other words, roll their cost of 11 12 removal -- their historical cost of removal between rate 13 cases into Account 186 and then bring that to the Commission 14 for recovery at the next rate case? Well, it would be an expense item so it would 15 Α. 16 be something that is part of their annual expenses each 17 year, or in this case for that particular year. But if recovery that's proposed is historical 18 Q. 19 recovery of actual costs, then they're not going to get it 20 until they can bring it to the Commission and get it built 21 into rates; isn't that right? 22 Α. Correct, yes. 23 Q. Unless you assume it's going to be an ongoing 24 even amount every year? 25 Α. Right. 1766 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO

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1 Ο. In which case it's not really different than 2 building it into depreciation in the first place, is it? 3 Α. In my mind, that's the same thing. Except that it might be higher? 4 Q. 5 It's possible. But obviously, in my opinion, Α. 6 you make those adjustments each time you do a study. 7 Okay. What happens if you switch from a Q. 8 regime where it's been included in depreciation, as here, to 9 a regime where it's going to be collected after the fact, as 10 Staff is proposing? Do you have a period where you don't put anything in rates because you're saying company has been 11 12 pre-collecting what they shouldn't get until after it 13 happens? 14 Α. I'm not sure what the company's going to do. To me, that's the only option that you have is you have this 15 16 period of time where you make a drastic change and you need 17 to request it after the fact. I've not been involved in a situation where this -- there's been a change to see what 18 19 the company's decision is because it is rare that this type 20 of procedure is in place. 21 Where you switch from one way of doing it to Ο. another? 22 23 Α. That's right. 24 Q. In fact, that's an unusual occurrence? 25 Α. That's correct. 1767 ASSOCIATED COURT REPORTERS

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1 Ο. And would you agree with me it's difficult to 2 predict exactly what the ramifications for the company, on 3 one hand, and for the ratepayers, on the other, might be? 4 Α. It's very difficult to predict. 5 Ο. Someone might wind up with the short end of that stick? 6 Someone definitely will. 7 Α. 8 Q. Okay. 9 I know that this occurred in Pennsylvania back Α. in the '60s. And I wasn't doing depreciation at that point 10 to know the ramifications, but there was major rate base 11 12 write-offs is all that I know about what happened. Okay. Your testimony has been extremely 13 Ο. 14 helpful and I thank you for it. JUDGE THOMPSON: I think we're now ready for 15 16 recross based on questions from the Bench. And that I 17 believe is Ms. O'Neill. MS. O'NEILL: No questions, your Honor. 18 JUDGE THOMPSON: Mr. Schwarz? Or would you 19 20 prefer to take a break now and come back? 21 MR. SCHWARZ: Taking a break would be nice. JUDGE THOMPSON: Why don't we take five 22 23 minutes now and come back. 24 (A recess was taken.) 25 JUDGE THOMPSON: You may inquire, Mr. Schwarz. 1768 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 MR. SCHWARZ: Thank you, sir. 2 RECROSS-EXAMINATION BY MR. SCHWARZ: 3 Q. In response to a question from Commissioner Clayton, you indicated that the Staff had changed its 4 5 position between the last case and this case. But isn't it 6 true that in the last St. Louis County Water rate case, Staff took the same position on cost of removal and net 7 8 salvage that it's taking in this case? 9 Their position was the same. Α. 10 Ο. Yes. My response to that was the -- on the reserve 11 Α. 12 variance, which is what they changed their opinion on. 13 Ο. Do you know if any other utility company in 14 Missouri has reserve deficiency amortization, or as you refer to it, a reserve variance amortization? 15 16 Α. There are other utilities that have reserve 17 variance in Missouri that are part of their depreciation 18 expense because many do not use the remaining life concept. 19 The remaining life concept has that reserve variance built 20 in the depreciation rate and that's what I'm proposing for 21 the Missouri-American districts so you don't have to have these continual reserve variances over short periods of 22 23 time. 24 Q. Well, my question was, are there any other 25 utilities in Missouri that specifically have a specific 1769 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

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amortization of a reserve deficiency?

2 Α. As I answered in the lead part of my question, 3 yes. Which utilities? 4 Q. 5 To be specific, I'll have to look them up. I Α. don't have all of them -- or I don't have the set ones that 6 7 I know what the reserve variance is as part of their 8 difference. 9 Q. I didn't ask what the reserve variance was. I 10 just said which ones have a reserve variance. I don't need any -- just tell me the companies. 11 I'd prefer to look that answer up, because I'm 12 Α. 13 not positive of what's there. So the answer is you don't know? 14 Q. I don't know. 15 Α. That will do. 16 Ο. 17 Can you tell me the difference between inflation and interest? 18 19 Inflation, in my mind, is the cost indexing of Α. 20 the value of something today versus future years. So each

year a cost of living or cost to do the same business is 21

more. So, in my mind, that's inflation. 22

23 Q. A change in the general price level?

24 Α. That's correct.

25 Ο. And what's interest?

1 Α. Interest is a rate that is -- that you get for 2 that asset or that property. 3 Q. And Commissioner Clayton asked you a question, how do you account for receiving the money for cost of 4 5 removal early. And I think your answer to that question was it's a cost of doing business. Do you recall that? 6 Α. Yes. 7 8 Ο. And then he asked, does the company pay interest on it? And your response was, no, because the 9 10 estimate is conservative. Do you remember that? I remember the discussion. I said in my mind, 11 Α. 12 the company is not -- part of their estimate is not interest 13 based. But aren't both of those answers incorrect in 14 Ο. the entire scheme of the depreciation process? 15 I don't believe so. 16 Α. 17 Isn't it true that under the approach that Q. 18 you're proposing where cost of removal is a component of the 19 depreciation rate, that those accruals are booked to the 20 reserve for depreciation? 21 It is booked to the reserve, which means rate Α. base is reduced, which on the other end of the business, 22 23 they're recovering -- or getting less for their lower rate 24 base number so there's an offset. 25 Ο. The use of those accruals comp-- as a charge 1771 ASSOCIATED COURT REPORTERS

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1 against the rate base compensates the ratepayers for 2 providing that money before it's actually needed to be spent 3 by the company; isn't that correct? 4 Α. Yes. 5 Ο. And that is the concept of interest, is it 6 not? 7 Α. That -- I guess in the way that you are 8 presenting it, that's an interest-related issue. 9 Yesterday there was a discussion between Q. 10 yourself and Commissioner Murray about \$100 worth of plant that was placed in 1970 and removed from service today with 11 12 a cost of removal of \$50. Do you recall that? 13 Α. Yes. The price of gasoline in 1970, for instance, 14 Q. might have been about 30 cents a gallon. Can you accept 15 16 that as a hyp--17 Α. Sure. Would you accept that about a \$1.40, at least 18 Q. where we live, would be a price for a gallon of gasoline 19 20 today? Α. 21 Seems reasonable. So that that change in price of gasoline might 22 Q. 23 be considered to reflect the effect of inflation, would 24 you -- at least in part? 25 Α. Yes. That's --1772 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO

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1 Ο. Significant part? 2 Α. I think that's -- there are other factors, but 3 I'd say inflation's a big part of that. 4 Q. Okay. So that because of inflation, the \$50 5 that I pay today to remove the \$100 worth of property that 6 was placed in 1970, those dollars are cheaper than the \$100 that was used to place that property. Correct? 7 8 Α. I'm not sure what you mean by "cheaper." In what regard? 9 10 Ο. They're inflated. The value of those dollars has been affected by the action of inflation over the years. 11 12 Α. Yes. And turning to Exhibit 123, pages 12 through 13 Ο. 14, the estimated salvage costs in future years will reflect 14 that same kind of inflation effect, will they not? 15 16 Α. In this particular example the estimate of net 17 salvage was not changed, so there was no expectation that there would be any change. It would sit constant for the 18 19 entire estimate to take that component out of the estimation 20 and -- and present these numbers without it being built in. 21 I'd ask for a yes or no answer to that Ο. 22 question, please. 23 JUDGE THOMPSON: Read back the question, 24 please. 25 THE COURT REPORTER: "Question: And turning 1773 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO

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1 to Exhibit 123, pages 12 through 14, the estimated salvage 2 costs in future years will reflect that same kind of 3 inflation effect, will they not?" 4 JUDGE THOMPSON: The witness is instructed to 5 answer yes or no, if he can. THE WITNESS: It is intended that inflation 6 will be part, yes, of this -- of this data, but it's not in 7 8 here. But that's explained in the detail of the schedule. 9 BY MR. SCHWARZ: 10 Ο. Is that yes or no? 11 JUDGE THOMPSON: I heard him say yes. 12 MR. SCHWARZ: It was part of a sentence. It's 13 not -- it's not responsive, sir -- Judge, to the question that I asked in the -- for instance -- well, let me inquire 14 further. 15 BY MR. SCHWARZ: 16 17 Look at the year 2050 on that table. Q. 18 Α. I see that. 19 Q. And the estimated net salvage costs are \$169,742. Correct? 20 21 That's correct. Α. Will those \$169,742 in 2050 buy the same level 22 Q. 23 of goods or services that they would buy today? 24 Α. No. 25 Ο. Okay. And that's, again, largely due to 1774 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 inflation. Correct?

2 Α. That's -- that's a component, yes. 3 Q. So that while Staff's method of collecting net salvage as it's actually incurred in the future takes into 4 5 account the effects of -- well, strike that. The effects of inflation will reduce the 6 intergenerational inequity of postponing collections from 7 8 future -- future customers. Correct? 9 I don't agree with that, because I don't --Α. 10 when you're talking about intergenerational equities, you're talking about people -- the customers that are in service 11 12 when the assets are being retired. 13 They will not be the same -- necessarily be 14 the same customers that were in service 50 or 60 years ago. So that number that is presented there is a factor of the 15 dollars that were retired. That's not going to be equitable 16 17 to every customer from year 1 through year 50 or 70 of those 18 assets. 19 That's an interesting answer, but not an Q. 20 answer to the question that I asked. The payment made in 2050 -- under Staff's methodology let's assume that -- and, 21 again, I hold my nose and close my eyes -- that your 22 estimate of \$169,742 for the year 2050 is accurate. Are you 23 24 with me? 25 Α. Yes.

1 0. Okay. Under Staff's method of expensing these 2 items as you go, ratepayers in 2050 would pay \$169,742; is 3 that correct? Α. If the \$678,000 was retired, yes, it's my 4 5 judgment today assuming no change. 6 Ο. I take that to be a yes. And my next question is, they will be paying 7 8 in dollars valued at the price level in 2050; is that 9 correct? 10 Α. That is correct. And you expect those dollars in 2050 would be 11 Q. 12 worth less than the dollars today. Correct? 13 Α. Yes. So that to the extent that Staff's method 14 Q. collects in term -- or requires payment in terms of 2050 15 16 dollars, that takes into account the effects of inflation 17 between now and then. Correct? 18 Α. Assuming nothing else is changed, that is 19 correct. 20 There has been some discussion of the -- I Ο. 21 think the average age at retirement, say, in the mains accounts is 24 years; is that correct? 22 23 Α. That is correct. 24 Q. How did you do -- well, let me ask you this. 25 Does that mean that the front page of Exhibit 123 where you 1776 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

have a 90-year average service life is incorrect? That
 90 should actually be a 24 --

3 A. No.

4 Q. -- R?

5 A. The 90 represents the average service life of 6 the account based on all the survivors that were exposed to 7 retirement.

8 Over the past 20 years, which is what I was 9 referring to, the retirements that have occurred -- and you 10 can look at the retirement column on page 2 of your exhibit 11 or 3-69 of mine. Those retirements that have occurred --12 the subset of those retirements that have occurred over the 13 last 20 years has been 24.1 years at the age of that 14 retirement.

So as an example, on average, the retirements in 2002 were put into service in 1978. That's an example of an average age of retirement being 24 years. Q. How did you calculate that 24 years?

19 A. I take the age of every retirement that's 20 occurred, weight that -- you won't see that on this 21 particular schedule. That was done mathematically based on 22 the retirements that could be done through the audit program

23 that we have in place.

Q. But give me -- run me through what the
calculation does given the data on -- well, let me ask you

1 this. Is it the --

2 Α. It's a subset of the data. 3 Q. -- '56 to 2002 experience band or the '78 to 2002 experience band? 4 5 It is a subset of both bands. It is not Α. 6 represented specifically in this presentation because of the fact that in this presentation you have all retirements from 7 8 1956 through 2002 and the age of those retirements. So here 9 you have all the data. 10 When I spoke of the 24-year life of the 11 average age -- excuse me, the average age of those 12 retirements that has occurred since 1978, the age of the 13 retirements that have occurred during that time period 14 related to those assets has been 24 years. The only way to see that is to run our audit 15 16 program. And each year you will see the age -- the average 17 age of the retirements during each year. You cannot see that specifically on page 3-69 through 3-76 of my schedule. 18 19 Because these culminate all the retirements that are -- have 20 been in place. A running of my audit program will present 21 those numbers. Well, with respect to the figures on 3-69, 22 Ο. 23 what figures in there would be included in this calculation 24 of 24 years? 25 Α. A subset of the amounts that are in 1778

1 retirements during age interval.

2 And what subset would that be? I mean --Q. 3 Α. The retirements that have occurred over the last 20 years. So there's no -- it's not a column. It's a 4 5 portion of each of those numbers. So if I was to look at 6 2,882 retirements that occurred at age 0, a portion of those that were retired between 1978 and 2002 related to assets 7 8 that were put into service between 1978 and 2002 would be in 9 that -- the number that relates to 24.1 average age. Same 10 thing with the next number, same criteria. 11 Ο. And is it safe to say if you selected a 12 different subset, you'd get a different result? 13 It is a possibility that if you select a Α. 14 different subset, you could get a different result. 15 However, the point of doing the most recent band is that is an indication of what has happened most recently, which is a 16 17 factor and a strong factor of what I believe to happen in 18 the near future for this company. 19 What the business that they're doing today and 20 have done over the last 20 years is more indicative of what 21 I believe the business decisions they will be making in the next five years than it was in the '50s or '40s. I think 22 those decisions are different. 23 24 Ο. But, in fact, this account has an average 25 service life of 90 years and there's still plant in the 1779

1 account that goes out to 120 years; is that correct? 2 Α. That's correct. So --3 Q. Okay. I think you said that there is not sufficient data to do a district-by-district analysis; is 4 5 that correct? 6 Α. For the seven Missouri-American -- original Missouri-American districts, that's correct. 7 8 Q. It's true also of the Jefferson City district; is that --9 10 Α. Yeah. That's even a different issue, but that's a correct statement. 11 Yeah. But it's correct. 12 Q. 13 But we have plant records that go back to the 1880's. How can there not be sufficient data? 14 In some of the districts there's very small 15 Α. 16 data that you do not have enough activity that's occurred, 17 retirements, additions and so forth, to get any indication 18 whatsoever of expected service lives. If you don't have any 19 data to look at, it's all a judgment decision. 20 Again, if you have 10 sample points, is that 21 sufficient versus 100 sample points? In my opinion, you 22 need enough data to produce a conclusive answer if you're 23 going to base yourself just on historical information. 24 Q. Well, we're not talking about basing it just 25 on historical information.

1 Α. Well, I think we are. That's why I said that. 2 Q. If the plant records -- I mean, you said 3 yesterday, yes, there's plant that was 120 years old in this mains account. Now, if the records go back 120 years on the 4 5 plant, what data is missing that precludes a 6 district-by-district analysis? Well, my first point is the data doesn't go 7 Α. 8 back 120 years for every district. So some districts you 9 can do analysis on; other districts that are smaller, you cannot do information on. There's nothing here that says 10 all of those districts go back 120 years. 11 12 And if you have no recorded retirements that 13 have occurred for any of those 100 -- or in the case of the smaller districts where it only goes back 50 years and you 14 have no recorded retirements, you can't make any 15 determination of a service life. 16 17 Well, how far back does the -- what district Q. 18 has the 120-year-old property? 19 I know that St. Joe's goes back that far, Α. 20 which is a big district which you could do some analysis on. 21 And what data is missing from St. Joe that Ο. 22 precludes a district-specific analysis? 23 Α. For St. Joe there might not have been any data 24 that was missing that would preclude you from doing an 25 analysis. The point was made that I could not do an 1781

1 analysis on each of the seven districts separately. And, in 2 my mind, making a decision on all seven together was a much 3 more appropriate way of analyzing the -- the same assets in 4 all districts.

5 Q. Isn't it true that there is no record of 6 retirements in St. Joe prior to 1984, 1983?

A. There was no retirement data prior to 1983, but that does not preclude you from doing retirement rate analysis for that district given that you have 20 years of quality data -- quality retirement data and you know the exposures all the way back in time.

12Q.So had the company asked you to do a13St. Joseph-specific study, you could have done so?

A. I would have done so in the same manner that I did the combined analysis where I would have taken into consideration the specific historical data, other water utilities and the plans of those assets.

18 Q. Well, yesterday you said that you also 19 considered in assigning asset lives the company's need for 20 cash flow. You said that was a factor yesterday. Is that a 21 factor today as well?

A. That -- that is something that is incorporated into decision-making as to whether they're going to be retiring or replacing or repairing assets. So it is a factor. It's not a concrete factor, it's an implied factor

1 in what you determine for your estimates of service life. 2 Q. So if you said yesterday that simply the 3 company's need for cash flow was a separate factor that you consider in setting depreciation rates, your answer today is 4 5 different from that? MR. ENGLAND: Objection. That wasn't his 6 answer yesterday. 7 8 MR. SCHWARZ: Well, the record will reflect 9 that. BY MR. SCHWARZ: 10 If the record demonstrates that your answer 11 Ο. 12 yesterday was that the need for cash flow was a separate 13 factor, then your answer today would be different? 14 Α. I said today as well that it is a factor of the life that you're determining. It is not a concrete 15 16 factor in that you can see a -- a plotted change on a curve 17 that incorporates that. It's one of the factors that you 18 take into consideration when determining what the company's 19 going to be doing in the future. 20 In response to some questions by Commissioner Ο. 21 Murray I think, you indicated that your cost of removal factors were based on industry standards; is that correct? 22 23 Α. That is one of the factors that are -- that 24 are involved in the estimate, yes. 25 Ο. Well, let's take a look at just that 1783 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 structures and improvements, if you will.

2 Α. Page 3-121 of my report? 3 Q. Yes. Yes. So you drop that to industry standards from the results of your study; is that correct? 4 5 I've taken into consideration the actual Α. 6 expenditures that have occurred over the last 15 years, cost removal versus the regular retirements, what management's 7 8 plans are for these same type of assets and what others in the industry are doing and make my decision from there. 9 10 I see a trend going from minus 21 over the last 15 years to minus 19 over the last 5 years, which is 11 12 the bottom line on that page. Take that into consideration 13 as well as what others are doing, come up with my minus 15 14 estimate. Is the minus 15 the industry standard? 15 Ο. Well, there's -- as I said to Commissioner 16 Α. 17 Murray, norm is a more appropriate term. And the minus 10 18 to minus 20 range is what we have seen. Many of them are within minus 15. So I consider that to be a norm or 19 standard, if you wish. That's what -- what I've referred to 20 when I say the minus 15. 21 So is there literature where you could get a 22 Q. 23 description of the industry norms or industry standards? 24 Α. You can go through and find all public water 25 company results that have what the net salvage component is 1784

1 for each of these accounts for each of the companies across 2 the country. When you find those, you'll see all those 3 numbers.

4 Obviously I have a large number of 5 depreciation studies that would show what the companies that 6 we have worked on have as well as what other depreciation 7 consultants have proposed for structures in this particular 8 account.

9 Q. But those reports and data would not have any 10 empirical studies that we discussed yesterday about tracking 11 how much was collected each year for a particular vintage 12 and comparing that to the actual cost to remove the vintage; 13 is that correct?

A. The -- the type of study that you described,
you will not find that in those studies. It just summarizes
the results.

17 Q. Thank you.

18 In response to questions from Judge Thompson, 19 he asked you about what the Commission could use from your 20 study as opposed to Mr. Macias. So he could -- for 21 instance, the Commission could use your lives, but not use a life span, not include cost of removal and not use remaining 22 23 life; is that fair to say? I mean, they can tell what 24 average service lives you have calculated for the various 25 accounts?

1 Α. You can see the average service lives from my 2 study for each account, you can see each of the components 3 that you described in my study. You will not see how much each of those are relation -- related to the difference 4 5 between my estimation and Staff's. 6 But at any point you can determine just portions of that. My opinion is all these things combined 7 8 are what should be part of an estimation. But, yes, you can take pieces of it if you so wish. 9 Q. I think that the Judge referred to the 10 retirement of the old St. Joe plant as bizarre and unusual. 11 Do you recall his characterization? 12 13 Α. Yes. Is it bizarre and unusual for life span 14 Q. 15 property? 16 Α. Not for these type of structures. And I 17 believe -- and the Judge was referring to on a given year, that was bizarre and unusual because the fact that treatment 18 19 plants don't get retired every year. I think that was the 20 characterization. For structures such as this, there are retirements of these assets that at some point in time go 21 out of service. 22 23 Q. But it's not bizarre for life span property, 24 is it? 25 Α. No. 1786

Q. It's unusual because it doesn't occur
 necessarily every year, but it's certainly not bizarre.
 It's expected, is it not?

A. It's expected that these type of facilities
will have a concurrent retirement, which is the same
philosophy as a life span.

Q. And if, for instance, a component or element of the structure or the life span property had been put in service relatively recently, say a new roof on a building within the last five years, new doors, new windows, those sorts of things would not have fully depreciated before the vertical line drops as we discussed yesterday; is that correct?

A. It's a true statement. Although normally companies don't invest a lot of money into something and then in a very short term retire those assets. But it is -in the example that you presented, if that was to occur, then yes, those assets would have not had full recovery by the time of life span.

Q. And that's to be expected with life span
property. I mean, again, it would -- it would not be
bizarre. It may not be usual, but it's -- it's clearly and
firmly within the theoretical expectations of life span
property. Would you agree with that?
A. That's why you have an interim survivor curve,

so that's why those things occur. And that's -- that's not
 considered to be bizarre.

3 Q. I think that Judge Thompson also asked you about a switch in regimes going from the accrual of cost of 4 5 removal through the depreciation rate to expensing it as 6 Staff proposed. Do you recall those questions? I think I had a few from a few people, yes. 7 Α. 8 Ο. And I think you said it would be difficult to 9 predict the effect on ratepayers and on the company. Do you recall that answer? 10 11 Α. Yes. 12 Isn't it true that the effects would be Q. 13 precisely the differences between the company's approach and 14 Staff's approach on cost of removal that have been discussed earlier in the case? That would be the effects, would it 15 16 not? 17 Under that line of questioning, I don't Α. 18 believe that's the only effects that are involved because of 19 the fact that you have the remaining life basis, which is a

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component of cost removal. So in that regard, yes.

difference between the two sides, and you also have the

level of rate base given the fact that there's been some

accruals built into those numbers, which in a sense has a

Okay. So that -- all right. I think the

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ultimate yes is satisfactory.

1 MR. SCHWARZ: I think that's all I have. 2 JUDGE THOMPSON: I thought of another 3 question, but I'm not going to ask it. 4 Thank you very much. Let's see. We get some 5 redirect now. Mr. England? MR. ENGLAND: Thank you, your Honor. 6 REDIRECT EXAMINATION BY MR. ENGLAND: 7 8 Q. Mr. Spanos, yesterday and today you, I think, 9 had a question regarding cash flows and its impact on your 10 judgment, if you will, for purposes of determining average service lives. To the extent future cash flows and, 11 12 therefore, internally generated funds impact the company's 13 decision on its plans to invest in the future, whether that's replace or add new plant, is that taken into 14 consideration in your determination? 15 16 Α. That is a consideration in determining service 17 life, yes. But is it an element that is discreetly 18 Q. identifiable in your study in any way? 19 20 Α. No. 21 Ο. With respect to the Iowa curves that you used to determine average service lives, once you've made a 22 23 determination for purposes of a study, is that determination 24 static? Does it remain unchanged for some lengthy period of 25 time?

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1 Α. Those estimates will stay in place until the 2 next study is done, which is common for this company to be 3 every five or six years. So those estimates of life will be 4 in place for about five years. 5 Ο. Does that also impact your estimates of cost of removal net of salvage? 6 7 Α. Yes. Same time frame will happen. When a 8 study is done, you'll review those estimates as well. 9 So over a period of time between now and, say, Q. 10 the 2050 time frame that I believe Mr. Schwarz was talking about, how many times would you estimate depreciation to be 11 12 reviewed and studied either by you or by another 13 depreciation engineer? I would say 9 or 10 times between now and that Α. 14 time period. 15 16 Ο. Mr. Spanos, in your experience with Gannett 17 Fleming, how many depreciation studies have you been involved in, approximately? 18 19 Over 200. Α. 20 And how many of those have you had what I Ο. would call primary responsibility for? 21 22 At least 50. Α. 23 Q. And have those included depreciation studies for other water utilities other than St. Louis County --24 25 Α. Yes. 1790 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO

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1 Ο. -- and excuse me, Missouri-American? 2 In your experience, what has been the average 3 composite depreciation rate for those water utilities that you've reviewed? 4 5 MR. SCHWARZ: If I might inquire, to what question does -- from the Bench or on cross does this apply? 6 7 MR. ENGLAND: I believe Commissioner Murray 8 had some questions regarding his experience in the area and 9 his judgment. And I wanted to complete that, if I could, 10 your Honor. MR. SCHWARZ: But no one's asked about 11 composite depreciation rates. There's no definition. It's 12 13 not -- I don't believe -- is it referenced in his study? MR. ENGLAND: I'll ask the witness that. I 14 don't know. 15 16 MR. SCHWARZ: I mean, is that --17 BY MR. ENGLAND: Is there a composite rate in your study? 18 Q. 19 There's no specific line item that shows a Α. 20 composite rate on my study referencing -- the annual 21 recorded divided by the original cost is the composite rate for all assets. There's no line item on my study that shows 22 23 that. 24 MR. SCHWARZ: I think it's beyond the scope 25 of --1791

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1 JUDGE THOMPSON: Well, tell you what. It's 2 already been asked and answered, so we'll leave that in the 3 record and I'll just urge Mr. England to confine himself to 4 the proper scope of redirect. Please proceed. 5 BY MR. ENGLAND: 6 Ο. I'd like to take you through an example, I believe, to respond -- rather, to further respond to some 7 8 questions you received from Commissioner Clayton regarding a 9 hypothetical example. Say an asset with an original cost of 10 \$1,000, service life of 10 years and an estimate of cost of removal net of salvage of \$100. 11 12 Α. Okay. 13 Ο. What would the annual accrual be? It would be \$110, which would be the 1,000 14 Α. plus the \$100 of net salvage component divided by the 15 16 10 years. 17 Okay. Now, after the first year and you've Q. accrued \$110 of depreciation expense, what happens with the 18 19 reserve? 20 The reserve then would go up to \$110 for Α. that -- assuming there's no other assets in the account, the 21 reserve would go to 110, which would mean rate base would be 22 23 reduced by \$110. 24 Q. Now, again, kind of just focusing on the 25 hypothetical and keeping everything else constant. Assuming 1792 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 we're at the end of that piece of property's life, that it 2 is removed from service in the tenth year but the actual 3 cost of removal at that point is only \$50. What is the impact, if you will, on reserve? 4 5 Well, the reserve then would be reduced by the Α. 6 \$1,000 for the retirement and the \$50 for the cost of removal, which means the company in that particular case has 7 8 over-recovered, which means other assets would compensate for that. 9 10 If you don't have any other assets in that 11 particular account, then those costs are adjusted -- well, 12 assuming you didn't make any adjustments for the 10-year 13 period of time, that \$50 is an over-recovery and rate base 14 has been reduced by \$50. 15 Ο. At the end of the 10 years you retire an asset that had an original cost of \$1,000. And as I understand, 16 17 that's deducted from plant, deducted from the reserve; is 18 that right? 19 That's correct. Α. 20 And you've also incurred a \$50 cost of Ο. removal? 21 That's correct. 22 Α. 23 Q. That's a cash expense at that point in time? 24 Α. That's correct. 25 Ο. And an offset to the reserve; is that right? 1793 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 Α. That's correct. 2 Q. But during the period of the asset's life, you 3 have increased reserve by \$1,100. Correct? Α. Correct. 4 5 Ο. So don't you still have some money in the 6 reserve? Yes. You have \$50 left in the reserve. 7 Α. 8 Q. And that goes to reduce rate base; is that 9 correct? That's correct. 10 Α. And without taking you through all of those 11 Q. steps, if your cost of removal is actually higher, say \$150 12 then what you accrued for, is the effect the opposite --13 That's correct. 14 Α. 15 Ο. -- on reserve? 16 And, in fact, your rate base would be 17 increased by \$50 at the end of the property's useful life? That's correct. 18 Α. 19 Okay. Finally, I think Mr. Thompson had a Q. 20 question or two regarding the old St. Joseph treatment plant that was taken out of service I believe in 2001. Do you 21 recall that? 22 23 Α. Yes. 24 Q. And it's my understanding that in that case, 25 depreciation rates were inadequate to fully recover the 1794 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 original cost of that plant; is that right? 2 Α. There was not full recovery of those assets at 3 the time of retirement based on the depreciation rates that were in place for those assets. 4 5 Q. And those depreciation rates were designed to recover what? 6 7 They were designed to recover the original Α. 8 cost and the cost of removal. 9 Q. So in addition to an under-recovery of the cost of removal, there was also an under-recovery of the 10 original cost in the St. Joe case? 11 12 Α. That's correct. MR. ENGLAND: Thank you, sir. I have no other 13 14 questions. 15 JUDGE THOMPSON: Thank you, Mr. England. 16 You may step down, Mr. Spanos. 17 I believe this witness may be excused; is that 18 correct? 19 You are excused, sir. Thank you very much. 20 THE WITNESS: Thank you. 21 JUDGE THOMPSON: Have a safe trip back to 22 Pennsylvania. 23 THE WITNESS: Thank you. 24 JUDGE THOMPSON: Who's going to be our next 25 witness? Mr. Jenkins? 1795 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO

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1 MR. ENGLAND: Mr. Jenkins. 2 JUDGE THOMPSON: Very well. Before we start 3 with Mr. Jenkins, I have a quick question for counsel. It appears that the numbers on the reconciliation have no 4 5 perceptual relationship to the numbers that Mr. Spanos was 6 providing. Can that be explained? MR. ENGLAND: Of course, your Honor. 7 8 JUDGE THOMPSON: I'll give you first shot and 9 then he can weigh in. MR. ENGLAND: Well, actually I think maybe 10 this witness can answer those questions. 11 12 JUDGE THOMPSON: You were going to say? MR. SCHWARZ: Well, I think that after the 13 true-up, the Staff will produce --14 JUDGE THOMPSON: A new reconciliation? 15 16 MR. SCHWARZ: Yes. They will produce a new 17 reconciliation. They will also produce a new Staff 18 accounting run, which -- for instance, that reconciliation 19 will not tie to the pre-filed Staff accounting schedules 20 because Staff's --21 JUDGE THOMPSON: Position has evolved? MR. SCHWARZ: Well, yeah. The numbers have 22 23 changed somewhat so that until you get a final position at 24 the end of true-up, you can't really tie Staff's final 25 number to company's final number. And I think that at that 1796

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1 time we would be able to make that connection. 2 JUDGE THOMPSON: I appreciate that. Thank 3 you. MR. SCHWARZ: And I specifically did not try 4 5 to go through the Staff accounting schedules and list all the corrections and that sort of thing because there's a 6 fair number of them. It will just, I think, be better for 7 8 the Commission to get a final number at the end that ties 9 out. 10 JUDGE THOMPSON: Okay. MR. ENGLAND: There may also be a bit of a 11 12 difference between what the Staff accounting -- or excuse 13 me, the Staff reconciliation is also a revenue requirement 14 number, which may be different in some instances than, say, an expense number or certainly a rate base number. 15 JUDGE THOMPSON: Well, and I understand that. 16 17 And I'm --MR. ENGLAND: And this witness would be 18 19 prepared to that answer that. 20 JUDGE THOMPSON: Okay. I appreciate that very much. 21 Mr. Jenkins, I'll remind you that you're still 22 23 under oath. 24 THE WITNESS: Yes, sir. 25 JUDGE THOMPSON: And I think the reporter 1797 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 probably knows how to spell your name at this point, so 2 Mr. England, whenever you're ready, you may inquire. 3 MR. ENGLAND: Try to be brief, your Honor. My understanding is Mr. Jenkins has sponsored two pieces of 4 5 testimony, Exhibit 47 his Direct Testimony, and 79 his Surrebuttal -- excuse me 47 is his Rebuttal and 79 is his 6 Surrebuttal. 7 8 THE WITNESS: That is correct. 9 MR. ENGLAND: And I believe they've been offered and admitted. 10 JUDGE THOMPSON: I believe that to be true. 11 12 Do you want me to check? 13 MR. ENGLAND: Thank you. JUDGE THOMPSON: Of course I have to be able 14 to find the exhibit list. 15 Yes, Mr. England. Both of those have been 16 17 offered and received. MR. ENGLAND: Thank you. No other questions. 18 19 THE WITNESS: For purposes of the record, my 20 Exhibit 47 Rebuttal Testimony begins on the top of page 5 and ends on the bottom of page 7. I know I've got a lot of 21 22 stuff mixed in, but for purposes of the record. 23 JUDGE THOMPSON: I appreciate that. Thank 24 you. 25 Ms. O'Neill? 1798 ASSOCIATED COURT REPORTERS

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1 MS. O'NEILL: Your Honor, I don't have any 2 cross-examination on those pages of Mr. Jenkins' testimony. 3 JUDGE THOMPSON: Great. Mr. Schwarz? 4 5 MR. SCHWARZ: Yes. If I might have just a 6 moment. JUDGE THOMPSON: You may. 7 8 JAMES JENKINS testified as follows: CROSS-EXAMINATION BY MR. SCHWARZ: 9 10 Q. Mr. Jenkins, do you have a copy of what has been marked as Exhibit 121, which is the Rebuttal Testimony 11 of Barry Hall in Case WR-97-237? 12 13 Α. No, I do not. MR. SCHWARZ: May I approach? 14 15 JUDGE THOMPSON: You may. What was that case 16 number again? 17 MR. SCHWARZ: WR-97-237. 18 JUDGE THOMPSON: Thank you. BY MR. SCHWARZ: 19 20 Q. And I've got it open to page 5. And I would ask you to read the first question on page 5, if you would, 21 22 just to yourself. 23 Α. Just to myself? 24 Q. Yeah. That's fine. It's already been read 25 into the record. 1799 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 Α. Okay. 2 Q. And does company agree with the opinion that 3 Mr. Hall sets forth in his answer to that first question? 4 Α. Without reviewing the entire document and 5 getting the right context, I don't know if I agree or disagree with this. 6 7 Q. So you --8 Α. I don't know. 9 Let me ask you this. Do you know the purpose Q. 10 for which the company inserted that document and specifically that question into the record? 11 12 Α. I do not. Can you identify anyone at the company who 13 Ο. 14 does? 15 No. Α. 16 MR. SCHWARZ: May I approach the witness? 17 JUDGE THOMPSON: You may. BY MR. SCHWARZ: 18 19 Q. I show you what has been marked Exhibit 122 20 and ask you to turn to page 11 of that. And, again, look at 21 the first question on that page. 22 Page 11 as opposed to page 16? Α. Yes, sir. And read that, if you would, to 23 Q. 24 yourself. 25 Α. Okay. 1800 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 Ο. Do you agree with Mr. Robertson's answer to 2 the first question on that page? 3 Α. Generally speaking, yes. 4 Q. And is that the company's position in this 5 case? 6 Α. That with respect to the old St. Joseph water 7 treatment plant that one could build within a depreciation 8 accrual the cost of removal within it? 9 Q. The question as it's propounded -- or the 10 answer as it's written there altogether. Well, I think I answered that, yes, I 11 Α. 12 generally agree with the statement. 13 Ο. Well, but -- and that's the company's position 14 as well as your own. I mean, you're here for the company. 15 Correct? Well, since in this case I'm not testifying to 16 Α. 17 the treatment of the old St. Joseph water treatment plant and I'm being provided just one section of testimony, I 18 don't know. 19 20 Would you turn to page 16? Ο. 21 Α. Okay. And, again, the first question, would you read 22 Q. 23 the question and answer? 24 Α. Okay. 25 Ο. Do you agree with Mr. Robertson's answer as 1801 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 it's set out there?

As a general rule, no, I would prefer not to 2 Α. 3 have a postponement in terms of recovery. For rate-making purposes I think depreciation rates should reflect the cost 4 5 of removal on an asset and be incurred between the life 6 cycle of that asset. 7 So, generally speaking, I would like to not 8 push off problems into future dates. Because what happens 9 when you do that, you find yourself trying to recover the 10 cost of a new facility as well as the unrecovered cost of removal cost. 11 So, generally speaking, no. It's an option in 12 13 regulation you can do, but I would much rather address the issue up front. I think if we would have done that with the 14 old St. Joseph treatment plant, we wouldn't have the problem 15 16 we do today. 17 But you agree that it can be treated in the Q. manner that Mr. Robertson indicates? 18 19 That would be one option, yes. Α. 20 Yes. Okay. Ο. MR. SCHWARZ: I think that's all I have. 21 JUDGE THOMPSON: Mr. Jenkins, the 22 23 Commissioners are in agenda so we're going to defer 24 questions from the Bench until they are able to get down 25 here. I'm not going to ask you any questions at this time, 1802 ASSOCIATED COURT REPORTERS

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1 so what I will do is excuse you for the moment. 2 Who is the next witness? Mr. Macias? 3 MR. ENGLAND: We have Roesch, but we didn't have any questions. 4 5 MR. SCHWARZ: The only other company witness is Mr. Roesch. I have no questions for him. 6 7 MS. O'NEILL: I have no questions, your Honor. 8 MR. SCHWARZ: So I think we can --9 JUDGE THOMPSON: I had understood that Mr. Roesch wouldn't be here because no one had any questions 10 for him. 11 12 MR. SCHWARZ: So the next witness then would 13 be Mr. Macias. JUDGE THOMPSON: Why don't we bring Mr. Macias 14 15 up. 16 MR. ENGLAND: Your Honor, as a housekeeping 17 matter, if permissible then, I guess I would offer Exhibit 2, which I believe is Roesch's only exhibit. It's 18 19 his Direct Testimony. 20 JUDGE THOMPSON: Okay. 21 MR. ENGLAND: I mean --JUDGE THOMPSON: It hasn't been offered. Do I 22 23 have any objections to Exhibit 2? 24 MR. SCHWARZ: No. 25 MS. O'NEILL: No. 1803 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 JUDGE THOMPSON: Very well. Exhibit 2 is 2 received, made a part of the record of this proceeding. 3 (Exhibit No. 2 was received into evidence.) JUDGE THOMPSON: Perhaps this would be a good 4 5 moment to talk about there are some other witnesses who 6 aren't on the schedule, Deeters, Dunn, Mall, Bay. Do you want to just do all their testimony now to make sure that it 7 8 gets into the record? Do you want to wait until the end of the hearing? I mean, how do you want to handle that? 9 10 MR. ENGLAND: I'm afraid that maybe Staff doesn't have the people they need here to answer that 11 question so at least push it off until the January 12 13 proceedings. JUDGE THOMPSON: Fine. Very well. 14 Mr. Macias, come on up. Spell your last name 15 16 for the reporter, please. 17 THE WITNESS: M-a-c-i-a-s. 18 (Witness sworn.) 19 JUDGE THOMPSON: Mr. Schwarz, do you need a 20 moment? 21 MR. SCHWARZ: I do. JUDGE THOMPSON: Do you want to take a recess? 22 23 MR. SCHWARZ: No, no, no. I just needed to 24 find what his exhibit numbers are. It will take a moment. 25 JUDGE THOMPSON: You may inquire. 1804 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO

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1 GREGORY MACIAS testified as follows: 2 DIRECT EXAMINATION BY MR. SCHWARZ: 3 Q. Good morning, sir. Would you state your name 4 for the record, please? 5 My name is Gregory E. Macias. Α. 6 Ο. And by whom are you employed and in what capacity? 7 Α. 8 I'm employed by the Missouri Public Service 9 Commission as a utility engineering specialist two. 10 Q. And did you cause to be pre-filed in this case Direct Testimony that has been identified as Exhibit 19, 11 12 Rebuttal Testimony that has been identified as Exhibit 37, 13 and Surrebuttal Testimony that has been identified as 14 Exhibit 69? 15 Yes, I did. Α. 16 0. And do you have any corrections to that 17 testimony? Yes, I do. 18 Α. And what would those -- what's the first 19 Q. 20 correction? 21 The first correction would be in my Direct Α. Testimony on page 7, line 7. The first sentence --22 23 Q. All right. 24 Α. -- it should read, Yes, as described above and 25 shown in Schedule 4. 1805 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO

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1 Ο. So add the words "and shown in Schedule 4"? 2 Α. Yes. 3 Q. And what is your second correction? The second correction is to the schedules --4 Α. 5 Schedules 1, 2 and 3. And I'll just walk you through those step by step starting with Schedule No. 1. 6 7 Okay. Q. 8 Α. It's actually Schedule 1-1. On Account 9 No. 321.10 under the column of Proposed Lives Years the number is 120. The number should be 102. 10 Transposed? 11 Q. 12 Α. Yes. And what other corrections? 13 Ο. 14 The proposed depreciation rate --Α. 15 Ο. Yes. 16 Α. -- would be -- the number is currently .83 percent. That should be .98 percent. 17 18 Q. .98 percent? 19 JUDGE THOMPSON: I'm sorry. Give me that one 20 again. I had to respond to a Commissioner e-mail. Where's 21 the correction? THE WITNESS: Schedule 1-1. 22 23 JUDGE THOMPSON: Yes. 24 THE WITNESS: Account No. 321.10. If you go 25 to the column Proposed Life Years --1806 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 JUDGE THOMPSON: 102 instead of 120. What's 2 the next one? 3 THE WITNESS: Uh-huh. Proposed depreciation rate is 0.98 percent. 4 5 JUDGE THOMPSON: Instead of .83? 6 THE WITNESS: Uh-huh. And the proposed annual accrual would change from 41,297 to 48,558 -- excuse me, 7 8 48,585. 9 JUDGE THOMPSON: 585. Okay. 10 THE WITNESS: And then on Schedule 1-2 under the column Totals for Proposed Annual Accrual should read 11 9,962,741. 12 13 JUDGE THOMPSON: Okay. THE WITNESS: Now, if we move on to Schedule 14 2-1, the account number is 321.00. And the change is from 15 16 120 to 102 under proposed life years. The proposed 17 depreciation rate should be 0.98 percent. And the proposed 18 annual accrual should be 65,179. 19 JUDGE THOMPSON: Okay. 20 THE WITNESS: And on the Schedule 2-2, under the column Totals for Proposed Annual Accrual, it should 21 read 4,529,476. 22 23 JUDGE THOMPSON: Okay. 24 THE WITNESS: And Schedule 3-1, Account 25 No. 321 under the proposed year -- proposed life in years 1807 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 should be 102. The proposed depreciation rate, .98 percent. 2 The proposed annual accrual should be 5,976. And on the 3 column totals of that same schedule under proposed annual accrual it should read \$337,006. 4 5 JUDGE THOMPSON: 006? 6 THE WITNESS: Yes. 7 JUDGE THOMPSON: Thank you. 8 BY MR. SCHWARZ: 9 And if I asked you the same questions today as Q. 10 are propounded in your pre-filed testimony, would your answers be the same as corrected? 11 12 Yes, they would. Α. 13 Ο. And are those answers true and correct to the best of your information and belief? 14 15 Α. Yes, they are. 16 MR. SCHWARZ: With that, I would offer 17 Exhibits 19, 37 and 69. JUDGE THOMPSON: Do I hear any objection to 18 19 the receipt of Exhibit 19? 20 MR. ENGLAND: Your Honor, I don't have an objection at this point, but I'd ask that you reserve ruling 21 until I've had an opportunity to cross-examine the witness. 22 JUDGE THOMPSON: Is that on all three? 23 24 MR. ENGLAND: Yes. 25 JUDGE THOMPSON: Okay. Because you might have 1808 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 an objection?

2 MR. ENGLAND: Correct. 3 JUDGE THOMPSON: Would you like to voir dire 4 now? 5 MR. ENGLAND: As part of my cross-examination or separately, your Honor? I assume I'm probably the only 6 person that's going to cross this witness anyway. 7 8 JUDGE THOMPSON: Well, let's do it as part of 9 cross. 10 MR. SCHWARZ: I get to sit down now and we can 11 proceed. 12 JUDGE THOMPSON: Yeah. You get to sit down. 13 Okay. We'll have to put you off until after Ms. O'Neill is completed. 14 MS. O'NEILL: That's okay. He can go. 15 JUDGE THOMPSON: Okay. Mr. England. 16 17 MR. ENGLAND: Thank you. CROSS-EXAMINATION BY MR. ENGLAND: 18 19 Good morning, Mr. Macias. Q. 20 Α. Good morning. 21 I want to ask you a few questions first about Ο. your education and then your work experience, so I'm looking 22 23 at your Direct Testimony, page 1. 24 Α. I'm there. 25 Ο. Do you have that? You indicate you have a 1809 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

bachelor of science degree in civil engineering? 1 2 Α. That's correct. 3 Q. Am I correct in understanding that as part of that curriculum, there were no courses in your undergraduate 4 5 studies relating to depreciation of regulated water utility plant? 6 That's correct. 7 Α. 8 Q. Okay. Were there any general courses on the 9 issue of establishing appropriate depreciation rates, establishment of service lives, net salvage, those factors? 10 Α. I had course-- like courses such as 11 12 engineering economics that touched on the basic principles of depreciation, but nothing like the regulatory 13 depreciation that we do here. 14 15 Okay. And nothing like what you've done for Ο. 16 purposes of your study here. Correct? 17 Α. Yes. That's correct. That has been -- your experience for that has 18 Q. 19 come based on your work experience here at the Public Service Commission? 20 21 That's a true statement. Α. Is it fair to say you have no other work 22 Q. 23 experience besides your work here at the PSC that relates to 24 this subject matter? 25 Α. Yes. That's fair to say. 1810 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO

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1 Ο. Okay. Now, as I understand, you began your 2 employ with the Public Service Commission in 1997? 3 Α. Yes. That's right. 4 Q. And for the first four years you worked in the 5 gas safety department? I did. 6 Α. 7 Is it fair to say that during those four years Q. 8 you did not do any work in the area of depreciation? 9 Α. That's -- that's a fair statement. 10 So it was after your move to the engineering Q. and management services department in approximately 2001 11 12 that you took on these new duties? 13 Α. Yes. And you candidly admit in your testimony that 14 Q. you've never testified before, at least on depreciation; is 15 16 that right? 17 Α. I have never filed testimony in this -- for this Commission, no. 18 19 Or --Q. 20 Α. Or any other. 21 Ο. Thank you. 22 At pages -- or excuse me, at page 2 you 23 discuss your knowledge, skill, experience, training and 24 education upon which you base your testimony and your study. 25 Correct? 1811

ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO 1 A. Correct.

2 Q. And I'm going to summarize, but I believe it's 3 there on lines 7 through 15. You've performed on-site visits of most of the company's properties, as I understand; 4 5 is that right? That's true. 6 Α. 7 Okay. You now have work experience with the Q. 8 engineering and management services department? 9 Α. True. You attended the NARUC utility rate school, 10 Ο. which I believe is sponsored by the University of Florida 11 12 and maybe the NARUC Water Committee; is that right? 13 Α. Yes. Okay. And also I think something you referred 14 Q. to as the Basic NARUC Course at New Mexico State? 15 It was -- yes, it was actually conducted in 16 Α. 17 Jefferson City, but the New Mexico State University administered the course. 18 19 Q. Okay. Thank you. 20 JUDGE THOMPSON: You'll have to speak up, Mr. Macias. I'm having a hard time hearing you. Thank you. 21 BY MR. ENGLAND: 22 23 Q. Is this the first depreciation study that you 24 have performed? 25 Α. This is the first depreciation study that I 1812 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 have been solely respons -- or that -- lead responsible for. 2 Q. Okay. Fair to say it's the first study for 3 which you've had primary responsibility? 4 Α. Yes. 5 Ο. Okay. How many other studies have you worked 6 on in a secondary or support role? 7 Α. I worked -- I have worked on a support role on 8 one other study. 9 Q. And which one was that? It was for the Laclede Case GR-2001-356. 10 Α. Prior to your work with the Commission, do you 11 Q. 12 have any work experience working for a water utility? 13 Α. No, I do not. So it's fair to say that you have not been 14 Q. involved in any of the areas involving design, construction 15 16 or operation of a water utility? 17 Α. No. Are you a member of the Society of 18 Q. Depreciation Professionals? 19 20 Α. No, I am not. 21 And is it fair to say you have not written or Ο. lectured on the subject of depreciation? 22 23 Α. I have done neither. 24 Q. Getting back to these courses that were 25 offered by NARUC, I believe we asked some data requests 1813 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 regarding that and you indicated that none of the specific 2 curriculum on either of those courses was directed at or 3 addressed the issue of depreciation at least as we're looking at it here, appropriate rates, lives, net salvage 4 5 and that sort of stuff? 6 A. It mostly dealt with rate base aspects of depreciation. 7 8 MR. ENGLAND: Okay. I'd like to, if I may, approach the witness with some information that I believe he 9 10 provided to us which I understand are his work papers. JUDGE THOMPSON: Absolutely. 11 12 MR. ENGLAND: And this may not be in the 13 format, but I'd like you to take a look through it and make 14 sure. Your Honor, if I may, let the record reflect 15 16 I've handed the witness two volumes that are approximately 17 five inches thick of information that I believe are his work 18 papers, but I've asked him to take a look at that to make 19 sure that that is actually a fact. 20 JUDGE THOMPSON: And you're going to ask him that. Right? 21 MR. ENGLAND: Yes, I am. 22 23 JUDGE THOMPSON: Okay. 24 THE WITNESS: It looks -- it looks like the 25 work papers that I submitted. I haven't checked it for 1814 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 completeness, but it -- they are my work papers. 2 BY MR. ENGLAND: 3 Q. There's certainly a lot of them there, isn't there? 4 5 Yeah, there are. Α. 6 Ο. Okay. Well, and I'm going to have some questions. As we go through it, if you determine some 7 8 omissions or some inaccuracies, please identify that. 9 My understanding is that those work papers 10 consist of, among other things, handwritten notes as well as what I would call computer-generated information sort of on 11 12 a spreadsheet or print sheet type of basis; is that right? 13 Α. Yes. And I believe you've examined that information 14 Q. or produced that information on an account-by-account basis; 15 16 is that right? 17 Α. Yes. That's true. 18 Q. Okay. Now, the computer-generated information 19 that's in there or what appears to be generated by a 20 computer, it's my understanding that that was generated by Gannett Fleming software; is that right? 21 22 Α. That is right. 23 Q. And that Gannett Fleming software produces 24 information based on input that the company gives you; is 25 that right?

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1 Α. Yes. 2 Q. Okay. And that is the same Gannett Fleming 3 that employs Mr. Spanos; is that right? 4 Α. Yes. I believe so. 5 Ο. Okay. Now, the handwritten notes I believe were done by you. Correct? 6 7 Some were done by me. Some were done by Α. 8 another engineer in our department. 9 Q. Okay. Look at --10 MR. ENGLAND: If I may approach the witness. JUDGE THOMPSON: You may. 11 12 BY MR. ENGLAND: Look at the larger volume of the two, if you 13 Ο. would, please. Since they're so thick I only have one copy. 14 15 That's it. Thank you. 16 And the very first account there, would you 17 identify that, please? A. It's Account No. 331.11, transmission mains, 18 ductile iron. 19 20 Okay. And as we discussed a minute ago, there Ο. are some handwritten notes first. Correct? 21 22 Α. Yes. 23 Q. And are those your handwritten notes? 24 Α. Those are my handwritten notes. 25 Ο. And go to the next account, if you would, 1816 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 please.

2 Α. Is it flagged? 3 Q. Yes. Actually, there's a blue piece of paper, 4 I believe, marking the difference from account to account. 5 Α. Okay. And what account is that? 6 Ο. 7 It is lock joint transmission mains. And I Α. 8 believe that the account number used by the company is 9 343.12. MR. SCHWARZ: What's the account title again? 10 THE WITNESS: It's mains, lock joint 11 12 transmission. And the account number used by the company is 331.12. 13 BY MR. ENGLAND: 14 15 Q. And do you use a different account number, Mr. Macias? 16 17 Α. Yeah. We use different account numbers. So if we wanted to look that information up on 18 ο. 19 your study, what account number would that be? 20 Α. I believe it would be 343.12. I can check, if vou'd like. 21 22 No. That --Q. 23 JUDGE THOMPSON: So company and the Staff use 24 different account numbers? 25 MR. ENGLAND: That's my understanding, your 1817 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 Honor.

JUDGE THOMPSON: So if I look in Staff's 2 3 accounting schedules and try to follow the same item in company's accounting schedules, I would be sadly unable to 4 5 do so because of the use of different account numbers? Mr. Macias, is that the case? 6 7 And I apologize for breaking in on your 8 examination. 9 THE WITNESS: My understanding is that the 10 account numbers that Staff uses are the ordered accounts. And I'm not really sure what account -- accounting number 11 12 scheme that the company is using. 13 JUDGE THOMPSON: Okay. 14 MR. ENGLAND: And the other problem -- and I'll have Mr. Macias confirm this for you hopefully -- is 15 that Mr. Macias' study, if you remember, focuses on the 16 17 St. Louis property. Mr. Spanos' study focuses on the old seven districts of Missouri-American. 18 BY MR. ENGLAND: 19 20 So they're two entirely different studies, if Q. you will. Correct, Mr. Macias? 21 Yeah. They're studying different plant. 22 Α. JUDGE THOMPSON: If I can ask one more 23 24 clarifying question. Do not they all use the universal 25 system or Uniform System of Accounts as required by this 1818 ASSOCIATED COURT REPORTERS

573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO 1 Commission, Mr. Macias?

2 THE WITNESS: The Staff has attempted to use 3 the Uniform System of Accounts as established by this 4 Commission. 5 JUDGE THOMPSON: Okay. How about company? THE WITNESS: I do not know what account 6 numbers -- where -- what accounting numbering scheme the 7 8 company is using. 9 JUDGE THOMPSON: Is there anyone here --10 perhaps when Mr. Jenkins is back up, would he be able to answer that question? 11 12 MR. ENGLAND: He's indicating Mr. Grubb might 13 know better than he. JUDGE THOMPSON: Okay. I apologize. 14 15 MR. ENGLAND: That's all right. And you're right, it does make it a little bit difficult. But since 16 17 they're two different studies, you couldn't compare them anyway, I don't believe. 18 BY MR. ENGLAND: 19 20 But you can compare them account by account by Q. their titles, can you not, Mr. Macias? 21 22 Α. That's what I've attempted to do, yes. 23 Q. Okay. Now, getting back to the notes there on 24 mains, lock joint transmission --25 Α. Okay. 1819 ASSOCIATED COURT REPORTERS

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1 Ο. -- my understanding, those handwritten notes 2 have initials in the upper right-hand corner PWA? 3 Α. Uh-huh. Q. Would that stand for Mr. Paul Adam? 4 5 It would. Α. Another member of your depreciation Staff --6 Ο. Yes. 7 Α. 8 Ο. -- here at the Commission? 9 Okay. So these notes were prepared by him? 10 These notes were prepared by Paul Adam. Α. Okay. And with reference to that specific one 11 Q. 12 you're looking at, hopefully we're still looking at it, he 13 makes reference to engineering judgment concludes. Do you see that -- those three words in there? 14 15 Yes. It's highlighted. Α. Okay. And would that be Mr. Adam's 16 Ο. 17 engineering judgment? This account Mr. Adam ran and these are his 18 Α. handwritten notes. That would be referring to his 19 20 engineering judgment. 21 Okay. Would you agree with me that of the Ο. approximate 47 accounts that you have examined and that are 22 23 contained in those work papers, 36 of them were actually 24 studied and handwritten notes prepared by Mr. Adam? 25 Α. The -- that does sound about right, yes. 1820 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO

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1 Ο. Better than three-quarters of the accounts; is 2 that right? 3 Α. As far as the number of accounts, yes. MR. ENGLAND: Your Honor, at this time I would 4 5 object to the witness's testimony. I don't believe there's been a sufficient foundation for it as expert testimony and 6 I believe the majority of the work is not his own. 7 8 JUDGE THOMPSON: Well, Mr. Schwarz? 9 MR. SCHWARZ: May I inquire of the witness? 10 JUDGE THOMPSON: You may. VOIR DIRE BY MR. SCHWARZ: 11 12 Your testimony indicates that you have an Q. 13 engineering degree; is that correct? 14 Α. Yes, that's true. And in your course of engineering studies, did 15 Ο. 16 you have courses that would be directly applicable to the 17 kind of work that you do in depreciation studies? For 18 instance, did you study -- have a course in statistics? 19 Α. There were statistics in some -- in the 20 courses, yes. 21 Did you have courses such as calculus? Ο. Yes, I did. 22 Α. 23 Q. Did you have courses that would be applicable 24 to determining the effects of the forces of nature, as it 25 were, on metals? 1821

ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO A. Sure, yeah.

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2 Q. Did you have other engineering courses --3 well, what other engineering courses might you have had along those lines that would be useful in a depreciation 4 5 study? Well, you know, there's materials courses, 6 Α. there are -- I've had courses in construction management, 7 8 engineering economics, your hydrology classes, pip-- piping 9 and open channel flow and I had a water quality course, so 10 those types. Okay. And you have indicated that other Staff 11 Q. 12 members have looked over the work that you did in preparing 13 your study in this case; is that correct? 14 Α. Yes. Is it your understanding from his testimony 15 Ο. 16 that Mr. Spanos had people who worked with him in the 17 preparation of his study? MR. ENGLAND: Objection, your Honor. I don't 18 19 believe that's particularly relevant to the voir dire as a 20 foundation. 21 MR. SCHWARZ: I'll withdraw the question. BY MR. SCHWARZ: 22 23 Q. Is it unusual in your experience that someone 24 other than the person who's sponsoring a depreciation study 25 may have worked on it? 1822

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1 Α. I don't believe that's unusual, no. 2 Q. And is that true both for, for instance, 3 studies that are performed by Gannett Fleming as well as studies that are performed by the Staff? 4 5 MR. ENGLAND: Objection. I don't know that 6 this witness is qualified as to what Gannett Fleming does. JUDGE THOMPSON: Read back the question. 7 8 MR. SCHWARZ: I'll withdraw that question. 9 BY MR. SCHWARZ: 10 Are you familiar -- are you aware that a Q. gentleman named Mr. Weidemeyer assisted Mr. Stout in the 11 preparation of the depreciation study that was submitted in 12 13 the AmerenUE complaint case? 14 Α. Yes. MR. SCHWARZ: And I would suggest to the 15 16 Commission that Mr. Spanos' testimony, if reviewed 17 carefully, will give an indication that someone assisted 18 him. BY MR. SCHWARZ: 19 20 Now, let me ask you about general Staff Q. practices. Is it a general Staff practice for more than one 21 Staff member to work on a particular project for a 22 23 particular case, thus --24 Α. It's not uncommon. 25 Ο. And that's true in the auditing function, is 1823 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 it not? 2 Α. I believe so, yes. 3 Q. Is it true in the gas safety function? Α. Yes. 4 5 Ο. And it's true as well in the depreciation function? 6 7 Yes. Α. 8 Q. Are the conclusions that are set forth in your study your conclusions? 9 10 Α. Yes, they are. And the depreciation rates that are 11 Q. prescribed, are those what you believe should be prescribed 12 13 and are recommending in this case? 14 Α. Yes, they are. 15 MR. SCHWARZ: I would again offer Mr. Macias' 16 Direct, Rebuttal and Surrebuttal Testimony. 17 JUDGE THOMPSON: Mr. England? Somehow I feel you're going to chime in. 18 19 MR. ENGLAND: I'll try to be brief. With all 20 due respect, Staff's standard practice I don't believe is 21 relevant. 22 I believe this witness is being offered as an 23 expert in the area of depreciation and in that context 24 offering his judgment with respect to service lives, net 25 salvage, reserve deficiency amortizations and such. And I 1824 ASSOCIATED COURT REPORTERS

1 believe that the record demonstrates that he does not have 2 either the work or educational experience to do that. And, 3 more importantly, the judgment for the majority of these accounts appears to be not his, but some other person. 4 5 JUDGE THOMPSON: Well --6 MR. SCHWARZ: If I might respond. JUDGE THOMPSON: You may respond. 7 8 MR. SCHWARZ: The witness has said the conclusions are his own. And although there may be in 9 10 Staff's work papers notes of other Staff members, the witness has clearly identified the work as -- the results as 11 12 his own. 13 I think that if you take Mr. England's 14 argument another step, then of course, no one would ever testify for the first time. You couldn't testify for the 15 16 first time because you've never testified before. I think 17 that, you know, Mr. England's observations may go to weight. 18 I don't believe they go to -- are sufficient to preclude 19 admissibility. 20 JUDGE THOMPSON: Okay. Let me parse the objection as I understand it. There were actually two parts 21 to this objection. The first part was that insufficient 22 23 foundation had been laid or established for admission of the 24 testimony as expert testimony. And then I understood the 25 other part of the objection, what Mr. England actually

1 stated and I think twice, was that there were indications 2 that the majority of the work was not that of Mr. Macias. 3 And I wanted to clarify from Mr. England whether this was a hearsay objection or what exactly. But 4 5 it is clear to me that Mr. Macias has adopted the testimony. 6 Whether or not he is the only Staff member involved in its preparation at this point is immaterial. He has adopted the 7 8 testimony as his own so that aspect of the objection I think fails. In other words, if the sum or even most of the work 9 10 was not his, he has adopted it. Now, is there sufficient reason to accept this 11 12 testimony of Mr. Macias as expert testimony on depreciation? 13 Raises an interesting question. If Mr. Macias was 14 testifying as a physician, then we would ask whether he was licensed as a physician in this or any state and that would 15 16 be sufficient to show that he was not so licensed in order 17 to exclude the testimony and it would be sufficient to show 18 that he was so licensed to receive it. 19 But I'm unaware that depreciation experts are 20 licensed. Therefore, I'm strongly inclined to accept 21 Mr. Schwarz's view that when you compare his involvement in 2 depreciation studies to his involvement in 200 22 depreciation studies, that is a question of weight rather 23 24 than admissibility. 25 And so my ruling is going to be that we will 1826

1 receive the three exhibits and that counsel is free to show 2 that the Commission should not rely on them through cross-examination, but they will be received. 3 Therefore, Exhibits 19, 37 and 69 are received 4 5 over objection and made a part of the record of this 6 proceeding. (Exhibit Nos. 19, 37 and 69 were received into 7 8 evidence.) 9 JUDGE THOMPSON: Now, Mr. England, you may 10 proceed with your cross-examination. 11 MR. ENGLAND: Thank you, your Honor. May I 12 retrieve the work papers? I don't know that I have any 13 questions of them. Excuse me a second. CROSS-EXAMINATION (CONT'D) BY MR. ENGLAND: 14 Mr. Macias, in the last Missouri-American 15 Ο. 16 Water rate case in approximately 2000, it's my understanding 17 Staff and company entered into a joint recommendation in 18 which company agreed to perform a depreciation study on its 19 properties, which at that time included just the -- what 20 we've been referring to as the old seven districts. Is that 21 your recollection or understanding? 22 Α. That's my understanding, yes. 23 Q. Okay. In other words, that commitment to do a 24 depreciation study did not include the Jefferson City 25 property or district or the St. Louis County district. 1827

1 Right?

2 Α. I believe that's right. 3 Q. Okay. In addition, I believe the company agreed to supply the Staff with the actuarial retirement 4 5 histories in the Gannett Fleming format and provide cost of removal and gross salvage data for, at a minimum, the most 6 7 recent 15 years. Correct? 8 Α. That's -- I mean, that sounds correct, yes. 9 I've got the agreement if you want to look at Q. 10 it and just double check me. That would -- I mean --11 Α. 12 MR. SCHWARZ: No. Staff will concede that. I think the witness has conceded. 13 14 BY MR. ENGLAND: Paragraph 2 on the second page. 15 Ο. 16 Α. Thank you. 17 Okay. Yes, I see that. So I accurately characterized the agreement? 18 Q. 19 Yes, you did. Α. 20 And the company has delivered on its Q. agreement; is that right? 21 22 Α. Yes. 23 Q. Okay. Now, I'm going to switch gears on you. 24 I want to talk about Jeff City for a minute. In the last 25 rate case involving the Jefferson City district, the 1828 ASSOCIATED COURT REPORTERS

1 Commission adopted a set of depreciation rates. I believe 2 the case was WR-99-326 and the company was known as United 3 Water at that time. Is that your recollection or understanding? 4 5 JUDGE THOMPSON: What was the case number 6 again? MR. ENGLAND: WR-99-326. 7 8 THE WITNESS: I don't recall the case number. 9 BY MR. ENGLAND: 10 Q. Do you know if --I don't recall the details. 11 Α. 12 So you don't know if there was a requirement Q. 13 as part of that case whether a new depreciation study was 14 required? 15 I don't know. Α. 16 Q. Okay. Now, I want to talk about St. Louis 17 County district. In St. Louis County -- in its last rate 18 case the Commission approved the depreciation rates proposed by the company. Is that your understanding? 19 20 Α. Yes. And that case number, for benefit of the 21 Ο. record, is WR-2000-844. Do you recall that number? 22 23 Α. I believe that's -- that's correct. And in that case the Staff had a proposal 24 Q. 25 contrary, if you will, to the company and it was not adopted 1829 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 at that time?

2 Α. The company's rates were adopted. 3 Q. And I'm just trying to set some generic --4 Α. Okay. 5 -- parameters, if I can, and make some rough Ο. 6 comparisons. 7 In this case, as I understand it, the company 8 has proposed new depreciation rates for its old 9 Missouri-American properties, those seven districts that 10 we've talked about, based on the depreciation study conducted by Mr. Spanos; is that right? 11 12 That's right. Α. 13 Ο. The company has proposed to maintain the existing authorized depreciation rates that are in place for 14 the Jefferson City district and the St. Louis County 15 16 district; is that right? 17 Α. That's right. Okay. And then, finally, the company has 18 Q. 19 proposed to maintain the existing and authorized 20 amortization of depreciation reserve for the St. Louis district that was approved in the last case? 21 22 Α. Yes. 23 Q. Okay. Now, I want to compare what Staff is 24 proposing. You -- I'm saying you. Staff proposes new 25 depreciation rates for the St. Louis district based on the 1830 ASSOCIATED COURT REPORTERS

1 depreciation study that you sponsored. Correct? 2 Α. Correct. 3 Q. Staff also proposes elimination of the reserve deficiency amortization in the St. Louis district? 4 5 Yes. Α. And then, finally, Staff proposes new rates 6 Ο. for the Jeff City district and the old seven 7 8 Missouri-American districts based on what I would call a mix of Staff's standardized depreciation rates and rates Staff 9 developed for the St. Louis County district in the context 10 of this case? 11 12 That's a -- yes, that's correct. Α. 13 Ο. Okay. Now, for fear of completely confusing 14 the record, I'm going to try to see if I can understand the dollar impact associated with your proposals. Let me focus 15 16 on that. 17 And I think you've got it in your Direct Testimony, but the new depreciation rates in St. Louis that 18 19 you propose will reduce current annual accruals by 20 approximately \$6.5 million? 21 Α. Yes. In other words, depreciation expense will go 22 Q. 23 down \$6.5 million on an annual basis if your rates are 24 approved? 25 Α. From what's ordered. 1831 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO

573-442-3600 COLUMBIA, MO

Ο.

Thank you.

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2 By eliminating the reserve deficiency 3 amortization, you are eliminating \$4.8 million per year that 4 the company is currently collecting as a result of the 5 Commission's decision in the last case. Right? 6 Α. Yes. And then the new depreciation rates that you 7 Q. 8 propose for Jefferson City and the old seven districts 9 served by Missouri-American is an approximate \$2.1 million 10 reduction from existing rates for those eight districts. Right? 11 12 Yes. Yes, that's true. Α. 13 Ο. And if I add all of that up, 6.5 for depreciation rate in St. Louis, the 4.8 million for reserve 14 deficiency amortization in St. Louis and the \$2.1 million 15 16 reduction in the other eight districts, if you will, on an 17 order of magnitude, Staff is proposing a \$13.4 million 18 reduction in the company's annual accruals for either 19 depreciation or amortization of reserve deficiency? 20 Α. Yes. Would you agree with me that the current 21 Ο. annual accruals as shown on your Schedules 1, 2 and 3 are 22 23 approximately 23.5 million? And I basically just took the numbers from your Schedule 1.2, 2.2 and 3.1. 24 25 Α. Could you repeat that question again for me? 1832 ASSOCIATED COURT REPORTERS

1 Ο. You bet. The current annual accruals as shown 2 on your Schedules 1.2, 2.2 and 3.1 I believe are 3 approximately \$23.5 million on an annual basis? 4 Α. Yes. Does that \$23.5 million include the 5 Ο. \$4.8 million of amortization in the St. Louis district? 6 No, it does not. 7 Α. 8 Ο. Okay. So I'd have to add that on top of the 23.5? 9 10 Yes, you would. Α. 11 Q. Okay. Thanks. 12 So if I wanted to get an idea percentage-wise 13 of what Staff is recommending in this case in the way of a 14 reduction in both depreciation accruals and elimination of reserve deficiency amortization on existing accruals and 15 16 existing amortization of reserve deficiency, I would compare 17 your \$13.5 million reduction or, in essence, divide that by the sum of 23.5 million plus 4.8 million? 18 19 I think that would be the right way to do it. Α. 20 And that would also give me an approximate Ο. percentage reduction in internally generated funds or cash 21 flow for the company. Correct? 22 23 Α. I believe it would. 24 Q. Now, as I understand, the company's current 25 authorized composite depreciation rate is 2.66 percent; is 1833 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 that right?

2 Α. I don't know the number right off the top of 3 my head. I believe I answered a data request to that 4 effect. 5 I'll be happy to show that to you. Q. 6 MR. ENGLAND: May I approach? JUDGE THOMPSON: You may. 7 8 MR. ENGLAND: Thank you. 9 BY MR. ENGLAND: Let the record reflect I've handed the witness 10 Ο. a copy of I believe responses to data request the company 11 12 submitted to Staff in this regard; is that right? 13 Α. That's what I believe this is, yes. 14 Okay. And I believe in Question 2015 we asked Q. for the current annual composite depreciation rate. Do you 15 16 see that? 17 Α. I see that. 18 Q. And what was your answer, sir? 19 As of the 12/31/02 plant balances, the Α. 20 composite of the current authorized depreciation rates for Missouri-American Water Company is 2.66 percent. 21 Okay. And while you're on that, take a look 22 Q. 23 at the next question and response and I'm going to ask you 24 this question. What is the Staff's proposed composite 25 depreciation rate if its depreciation rates as proposed in 1834 ASSOCIATED COURT REPORTERS

1 this case are accepted?

2 Α. It would be 1.68 percent. 3 Q. Okay. Do you know what the industry average composite depreciation rate is for water utility companies? 4 5 Α. No, I do not. You do not think that would be useful for 6 Ο. purposes of testing the appropriateness of your overall 7 8 depreciation rate? 9 I don't believe it would, no. Α. 10 Ο. Let me ask you a hypothetical then. If the industry average composite depreciation rate for water 11 12 utilities is 2.7 percent and State A authorizes a 13 2.7 percent composite depreciation rate while State B authorizes 1.68 percent composite depreciation rate, all 14 other things being equal, aren't investors more likely to 15 16 invest capital in State A where they are going to get 17 quicker recovery of their capital dollars? MR. SCHWARZ: I'll object. It calls for 18 19 speculation on the part of the witness as to some 20 unspecified group of investors unknown and also implies 21 something about their expectations as to rate of return. 22 JUDGE THOMPSON: Objection is overruled. The 23 witness may answer, if he's able. 24 THE WITNESS: Could you repeat the question, 25 please?

1 BY MR. ENGLAND:

2 Q. I'll try. My hypothetical is that the 3 industry average is 2.7 percent composite depreciation rate. State A authorizes the industry average of 2.7 percent 4 5 composite depreciation. State B, however, authorizes 1.68 percent composite depreciation rate. 6 My question is, all other things being equal, 7 8 aren't investors more likely to invest capital in State A 9 where they're going to get quicker recovery of their capital dollars? 10 I -- I don't know. 11 Α. 12 Even based on common sense you don't know? Q. 13 MR. SCHWARZ: I'll object to the form of the 14 question. 15 MR. ENGLAND: I'll rephrase it. 16 BY MR. ENGLAND: 17 I'm not asking for any particular expertise. Q. 18 I'm just asking your general reaction to that. If you were 19 an investmest -- investor, wouldn't you be more inclined to 20 invest your capital in a state where you were likely to get quicker recovery of that capital through depreciation than 21 in another state where you don't? 22 23 Α. I guess what I'm hung up on is when you say 24 "all other things being equal." Because this -- these two 25 percentages aren't really apples and apples, as far as the 1836 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO

1 industry average rate is going to have the cost of 2 removal -- future cost of removal built into it and the 3 Staff's rate has taken that out. Q. I understand the difference between you and 4 5 company in this case. I was just comparing rates --6 Α. Okay. -- all other things being equal. So I 7 Q. 8 understand that you may not agree with all other things 9 being equal, but just based on the rate of 2.7 versus 1.68, 10 wouldn't you agree with me that you're going to get a quicker recovery of your dollars from a state that offers a 11 12 higher depreciation rate? 13 Α. That would appear to be the case. 14 Okay. I want to focus a little bit on what Q. you did with the old Missouri-American properties, those 15 seven districts plus Jefferson City, if I can for a minute. 16 17 As I understand, Staff's approach was to use 18 surrogate rates for these eight districts because the 19 company has not maintained complete or accurate data for 20 these districts, and therefore, in your words, it's not 21 possible to complete a life analysis with any degree of accuracy. Is that a fair characterization of your position? 22 23 Α. Yes. 24 Q. Okay. And I believe you discuss at length in 25 your prepared Direct Testimony, pages 10 through 14, the 1837 ASSOCIATED COURT REPORTERS

1 problems with the data?

2 Α. Yes. 3 Q. Okay. Now, would you agree with me that most all if -- or most, rather, if not all of the problems that 4 5 you cite with this data existed three years ago? I don't know for certain, but I believe that 6 Α. 7 three years ago the problems would have existed, yes. 8 Q. I mean, generally speaking, looking at the 9 nature of the problem it seems to me it's something that has 10 always been there. I don't know at what point the records were 11 Α. 12 lost. If, in fact, that problem existed three years 13 Ο. 14 ago, we'd actually be in a little better position today 15 because we'd have at least three additional years of data. 16 Correct? 17 Α. Yes. 18 Q. And you're not aware of this data ever 19 existing and somehow the company lost it or withheld it, are 20 you? 21 No. I guess I don't know if the data ever Α. existed. I guess I can assume that there were retirements 22 23 made prior to 1984, but I don't know if they kept records of 24 that. 25 Ο. I guess what I'm getting at is this data 1838 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 problem existed three, perhaps six years ago, yet Staff 2 depreciation witnesses in prior cases involving these 3 districts were able to conduct depreciation studies based on data that you say is incomplete and inaccurate, weren't 4 5 they? 6 I -- I don't know if they were able to do that Α. or not. And I further don't know if they had recognized the 7 8 errors and mistakes in the data at that point. 9 MR. ENGLAND: Your Honor, I'd like to ask --10 and I think this may be redundant so correct me or 11 straighten me out, if you would, please -- that the 12 Commission take official notice of Woodie Smith's Direct 13 Testimony in Case No. WR-97-237 involving Missouri-American 14 Water Company. MS. O'NEILL: Your Honor, is this Exhibit 120? 15 16 JUDGE THOMPSON: Excuse me. Which testimony? 17 MR. ENGLAND: Woodie C. Smith. 18 JUDGE THOMPSON: Yeah. Was it direct? 19 MR. ENGLAND: Direct Testimony. 20 JUDGE THOMPSON: No, that's not redundant. My records show that Exhibit 120, which is the Surrebuttal 21 22 Testimony of Mr. Smith in that case, has been offered and 23 received. I don't show any record that Mr. Smith's Direct 24 Testimony has been offered or received in this case. So 25 let's mark Mr. Smith's Direct Testimony as Exhibit 125.

1 (Exhibit No. 125 was marked for 2 identification.) 3 JUDGE THOMPSON: Please proceed. MR. ENGLAND: Thank you. 4 5 BY MR. ENGLAND: Mr. Macias, I've handed you a copy of 6 Ο. Mr. Woodie Smith's Direct Testimony in Case No. WR-97-237. 7 8 I believe it's been marked as Exhibit 125 and I believe the Commission has taken official notice of it. 9 10 MR. ENGLAND: Is that correct, your Honor? JUDGE THOMPSON: No, I've not yet taken 11 12 official notice of it. What I'd like you to do is offer it 13 and we'll see if there's any objections. There were 14 objections to the previous items from that case. And as I recall, you produced -- or asked me 15 16 to take notice of a transcript page showing that they had, in fact, been received in that case; whereupon, the 17 18 objections were withdrawn and I received those items. So if you can show me that this was received into the record in 19 20 the Case WR-97-237, then I'll take notice of it. In the absence of that, I don't know that I will. 21 MR. ENGLAND: Well, I may have to have you 22 23 hold that open then because I can't produce that for you 24 right at the moment, but if I may inquire of the witness. 25 JUDGE THOMPSON: You may inquire of the 1840

1 witness with respect to anything whether it's offered or 2 not. 3 MR. ENGLAND: Thank you. 4 BY MR. ENGLAND: 5 Mr. Macias, I'd like to direct your attention Ο. 6 to -- I believe it's page 4 of -- actually the majority of that page, but beginning at line 2 through line 6 and line 9 7 8 through line 18. Would you agree with me that Mr. Smith discusses to some degree some of the same difficulties with 9 10 the data that I believe you've identified in your testimony in this case? 11 12 Could you repeat the question? Α. 13 Ο. Sure. I believe Mr. Smith has identified 14 there on page 4 of his testimony some of the same data problems that you've brought forward and identified for 15 16 purposes of this case? 17 Α. It appears that some of them are alluded to in 18 this. 19 Okay. And, nevertheless, it also appears on Q. 20 lines 7 and 8 there that Mr. Smith was able to perform a depreciation study with that data for the Missouri-American 21 Water Company in their old seven districts. Correct? 22 23 Α. That's what it says. 24 Q. Okay. Now, are you familiar with the 25 testimony of Ms. Jolie Mathis in the United Water case that 1841 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO

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1 we discussed a moment ago?

I am familiar with it. I don't know that I 2 Α. 3 can answer any questions regarding it. Would you agree with me that she performed a 4 Q. 5 depreciation study for the Jefferson City district based on data from the Jefferson City district? 6 Α. I don't know the answer to that. 7 8 MR. ENGLAND: Your Honor, I have another document to be marked for purposes of identification. 9 10 JUDGE THOMPSON: All right. This will be 126. MR. ENGLAND: And it is the Direct Testimony 11 of Jolie Mathis, Case No. WR-99-326, United Water Missouri. 12 (Exhibit No. 126 was marked for 13 14 identification.) BY MR. ENGLAND: 15 16 Ο. Mr. Macias, I've handed you what's been marked 17 as Exhibit 126, a copy of the Direct Testimony of Jolie Mathis in Case No. WR-99-326 involving United Water 18 19 Missouri. And would ask that you take a look at page 2 of 20 that testimony, lines 7 through 14. And take a moment, if you would, to read that, please. I have a question or two. 21 22 Α. Okay. 23 Q. As I understand that testimony there, it 24 appears that Ms. Mathis was able to perform a depreciation 25 study on at least 86 percent of the company's depreciable 1842

1 plant for purposes of that case. Is that your understanding 2 as well? 3 Α. That is what this says. Based on data from the Jefferson City 4 Q. 5 district. Correct? 6 Α. The -- the Jefferson City district only has three years of data available. If this study was performed 7 8 before those three years, maybe they had a different database at that time. I don't know. 9 10 Ο. And that database would be in the possession 11 of Staff, would it not, because apparently Ms. Mathis had 12 it? 13 Α. I don't know if she would have kept that. Okay. Look at page 4, if you would, please. 14 Q. Could you read for me lines 1 through 7 beginning with, 15 16 Some? 17 Read it aloud? Α. 18 Q. Please. 19 Some accounts have not had enough retirement Α. 20 activity -- some accounts have not had enough retirement 21 activity to calculate historical characteristics of the 22 account's retirements. For those accounts, I propose that 23 the currently prescribed rates be retained. It is my 24 position that prescribed rates should be changed only when 25 there is sound and logical reason to do so.

1 If the historical data does not support a 2 reason to change the ASL or net salvage for the plant in 3 service or if there is no other information to support a change to the ASL or net salvage of any particular account, 4 5 then my recommendation is that the prescribed rate be 6 retained. Do you generally agree with that statement? 7 Q. 8 Α. In general, I would agree with that statement. 9 Okay. Page 3 then, if you would, please, Q. 10 again of Ms. Mathis' testimony, lines 11 and 12. Would you read that into the record, please? 11 12 Yes. The company's salvage data was of Α. 13 adequate history to determine net salvage values to use in 14 calculating my recommended depreciation rates. That tells me that at this point in time Staff 15 Ο. 16 was calculating depreciation rates with an accrual for net 17 salvage. Do you get the same import from her testimony? I believe at that time that was the case. 18 Α. 19 Q. Okay. And it also tells me that there 20 apparently was adequate history in the Jefferson City 21 district for her to feel comfortable with doing that. She says there the salvage data was of 22 Α. 23 adequate history. 24 Ο. Okay. Given Ms. Mathis and Mr. Smith's 25 testimony in the prior cases involving Missouri-American 1844 ASSOCIATED COURT REPORTERS

1 Water Company and the United Water, at least for the 2 Jefferson City district, would you agree with me that it is, 3 in fact, possible to conduct a depreciation study based on the company's data for these eight districts? 4 5 I do not agree that a depreciation study could Α. 6 be conducted for the Jefferson City district. And I do not agree that the other seven districts' data is adequate to 7 8 perform -- or to conduct the study with any degree of 9 reliability. 10 Is that your opinion or is that the Staff's Q. opinion? 11 12 I believe that would be the Staff's position. Α. 13 Ο. Okay. Do you have a different opinion? Do I have a different opinion? 14 Α. 15 Ο. Yes. 16 Α. No. 17 Now, let me get back to my original question Q. 18 because I'm not sure I got an answer. So you would say it 19 is not possible to conduct a depreciation study for either 20 the Jefferson City district or the old seven 21 Missouri-American districts based on the information available, even though apparently Ms. Mathis and Mr. Smith 22 23 of the Commission Staff were able to do so. Correct? 24 Α. I don't believe the results of the analysis of 25 the data would be reliable.

1 Ο. Okay. But that's not quite my question. So 2 let me turn it around. It would be possible to do a study, 3 you just don't agree with the results or the accuracy of the results; is that right? 4 5 The mechanics of the study could be done given Α. 6 the data that the company has, but the results are not accurate. 7 8 Q. And it's possible for a study to be done on combined data, as Mr. Spanos has done for purposes of this 9 10 case. Correct? 11 Α. Is it possible to combine data and run a 12 study? 13 Ο. Yes. 14 Α. Yes. 15 Ο. Now, as I understand your proposal for these 16 eight districts other than St. Louis County is to employ a 17 mix of rates, either rates that you've proposed for the 18 St. Louis County district based on your study or Staff's 19 standardized water plant depreciation rates; is that right? 20 Yes, that's right. Α. 21 Ο. Okay. I want to ask you some questions about these standardized rates that you reference. Are these 22 23 standardized rates published anywhere? 24 Α. I don't know if I understand the question. 25 Ο. Do you know if they're contained in any rules 1846 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 promulgated by the Commission?

2 Α. No, they are not. Not to my knowledge. 3 Q. Do you know if they've been adopted generally by the Commission in an order issued by the Commission? 4 5 I believe that those rates have been ordered Α. to various water companies throughout the state by the 6 Commission, yes. 7 8 Q. For example, which company or companies, 9 please? 10 Α. I would -- I have a list upstairs, but I don't -- I can't rattle off the names of the companies right 11 12 here. Would you agree with me that it is likely that 13 Ο. they are very small water companies for which those rates 14 15 have been adopted? 16 Α. I would agree with that characterization, yes. 17 Q. Okay. And my question was -- I'm not sure you understood it though. The Commission hasn't adopted these 18 19 rates generally for application to all water companies 20 regulated by them, has it? 21 The Commission has not --Α. 22 Q. Okay. 23 Α. -- to my knowledge. 24 Q. When were these standardized rates first 25 developed? 1847

1 Α. I don't know. 2 Q. Have they been revised or updated? 3 Α. They have been revised. And when was the most recent revision? 4 Q. 5 I believe that it was 2001, but I'm not Α. 6 exactly sure. 7 How are water utilities generally made aware Q. 8 of the fact that the Commission has standardized rates of 9 depreciation, if you know? 10 Α. I don't know that I am grasping the question, how are they generally made aware. 11 12 Well, are they made aware because people Q. 13 within the Staff inform them on an individual basis when they're in for a rate case, or are they sent out in a mass 14 mailing, if you will, on an annual basis to water companies, 15 16 if you know? 17 Α. I don't know that people are made generally aware of the rates. They are typically assigned when a 18 19 company would file for a rate case. 20 Ο. Do these standardized rates include any net salvage? 21 22 Α. No, they do not. 23 Q. So when they were revised in 2001, one of the 24 specific revisions was to remove any value for net salvage? 25 Α. I'm not sure of exact year, but yes, when they 1848 ASSOCIATED COURT REPORTERS

1 were last revised, the salvage was taken out.

2 Q. Okay. Now, when we asked in a data request for supporting documentation for these standardized rates, I 3 4 believe you responded that there was no specific 5 documentation; is that correct? That's true. 6 Α. So we don't know how these rates were 7 Q. 8 developed or upon what data these rates were developed; is 9 that right? 10 Α. The -- as far as data goes, we wouldn't know -- there's no database that they were derived off of. 11 12 Q. And we don't know how they were developed? 13 Α. Well, they were developed by the engineers in 14 the engineering and management services department and in conjunction with the water and sewer department engineering 15 16 and technical people, just their knowledge of the water 17 plants throughout the state and rates that you could 18 typically expect. 19 But as far as specific inputs like service Q. 20 lives, we've eliminated net salvage, but retirement 21 histories and things of that nature, we don't know what data was relied on to develop these rates; is that right? 22 I don't know. 23 Α. 24 Ο. Okay. So if I understand Staff's position, at 25 least with respect to these standardized rates, you're 1849 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO

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1 willing to propose that the company depreciate -- or rather, 2 use these standardized rates for certain properties in these 3 eight districts without any specific documentation for these rates, but you're not willing to develop depreciation rates 4 5 based on partial, but in your opinion, incomplete and 6 inadequate data that is specific to these districts. Is that a fair characterization of what you're doing here? 7 8 Α. The standardized rates the Staff believes are 9 typical of what could be expected of Missouri utilities. As 10 far as developing a depreciation rate off of bad data, it doesn't matter where it's coming from, it's bad. 11 12 But we don't know that -- we don't know what Q. 13 data you're using for purposes of your standardized rates. 14 It may be equally bad. Correct? 15 Α. I don't agree with that. 16 Ο. Well, we do agree that at least prior Staff 17 witnesses, despite your characterization of bad data, have 18 been able to use that data to develop depreciation rates 19 specifically for Jefferson City district and the other seven 20 Missouri-American districts. Correct? 21 Α. Do you have the studies that were done in 22 these cases? 23 Q. I just have their testimony. I'm taking their 24 testimony at face value. And I thought you agreed with me 25 that it appeared they'd done their own depreciation study 1850

1 based on information specific to those districts. Did I 2 misunderstand? 3 Α. These testimonies I think indicate that they made -- they did do studies of those districts. 4 5 Ο. Based on information from those districts. Right? 6 7 I believe so, yes. Α. 8 Q. Okay. 9 JUDGE THOMPSON: Let me break in, if I could. It's a little bit after the noon hour. I don't want you to 10 curtail your cross-examination. Why don't we break --11 12 MR. ENGLAND: Now would be a good time. I'm 13 switching subject matter. JUDGE THOMPSON: Why don't we break and come 14 back and you can continue after the lunch break. 15 16 So we will recess until 1:15. Thank you. 17 We'll return with Mr. Macias on the stand. 18 (A recess was taken.) 19 JUDGE THOMPSON: Mr. Jenkins, I'll remind you 20 once again that you're still under oath. THE WITNESS: Yes, sir 21 JUDGE THOMPSON: Mr. Adam keeps creeping 22 closer to the front. We're going to put you on the stand if 23 24 you keep it up. 25 JAMES JENKINS testified as follows: 1851 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 QUESTIONS BY JUDGE THOMPSON:

2 I wonder if you might remind me just summarily Q. 3 what the purpose of your testimony on depreciation was? Α. Yes. What I addressed in my testimony was the 4 5 financial impact on the company with respect to the depreciation adjustments in terms of the balance sheet --6 balance sheet implications. 7 8 Q. Okay. And would you summarize those 9 implications for me? What I had indicated that -- that as a result 10 Α. of Staff's depreciation adjustment, the company's 11 12 depreciation rate was going to be cut by approximately 13 63 percent. 63 percent? 14 Q. 63 percent. Going from an effective 15 Α. 16 depreciation rate of 2.66 percent down to 1.68 percent. 17 And, therefore, what that will require the company to do instead of deploying what I would refer to as our 18 19 reinvestment strategy is we'll have a lot to reinvest and 20 we'll need to go out into the marketplace and issue more 21 debt and equity, which will just put pressure on our balance sheet. And for what -- in my view, ultimately add to the 22 23 cost of the -- to the ratepayers. We're pushing off issues 24 that could be addressed today versus in the future. 25 JUDGE THOMPSON: Okay. Thank you.

1 Commissioner Murray?

2 COMMISSIONER MURRAY: Thank you, Judge. 3 QUESTIONS BY COMMISSIONER MURRAY: Good afternoon, Mr. Jenkins. 4 Q. 5 Good afternoon. Α. 6 Can you tell me what is the total reduction in Ο. revenue requirement that would be -- that would result from 7 8 the Staff's position on depreciation? 9 Α. Yes. The revenue requirement position is 10 around \$13.2 million. And it's really made up of three components. First, with respect to depreciation lives --11 and one of the difficulties in getting this -- the number in 12 13 terms of the precision on the number is we've got about 14 three time frames to work with. One is 12/31/02, the other is the June 13th 15 16 file position with Staff and then we've got a November 30th 17 true-up position. And what I'll do is talk from the 18 June 30th position. And I think as we move through the 19 case, that would help. We'll have another true-up and --20 and perhaps we can work with the Staff and get some numbers 21 that the Commission can, you know, get comfortable with now that I've sat here and listened to the record. 22 23 But with respect to the depreciation lives, 24 company's requesting about 15 -- \$15,601,938. The Staff's 25 proposal --

JUDGE WOODRUFF: What was that number again? 1 2 I'm sorry. 3 THE WITNESS: \$15,601,938. JUDGE THOMPSON: Thank you. Please proceed. 4 5 THE WITNESS: The Staff proposal in life is 6 \$12,532,317. The difference between those two numbers in terms of the life issue is \$3,069,621. 7 8 Then the second issue we have is the cost of removal net salvage issue. The company amount is 9 10 \$4,301,796. The Staff proposal through an averaging process 11 is \$559,036. The difference between those two numbers is 3,751,760. 12 13 Then the third issue is the reserve 14 deficiency. The company is recommending an amortization and really following two previous Commission orders of 15 16 4,848,071. The Staff is recommending 0. And then one more 17 point to keep in mind with the reserve deficiency 18 amortization is a piece of that amortization is not tax 19 deductible, so therefore, there is an income tax 20 consequence. And that income tax implication is \$1,590,760. 21 JUDGE THOMPSON: So you would add together the 4,848,071 plus the 1,597,060 to get the total? 22 THE WITNESS: 1,590,790 to get the total, 23 24 which would add to 6,438,861 which ties to the Staff's 25 reconciliation revenue requirement reconciliation sheet. 1854 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO

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1 JUDGE THOMPSON: I see. 2 THE WITNESS: And then backing up to the cost 3 of removal salvage, the number that I referred to as the 3,751,760, that ties to Staff's reconciliation sheet. Do 4 5 you have that, Judge? 6 JUDGE THOMPSON: Thank you. THE WITNESS: And then the first one was the 7 8 3,069,621, the difference when I talked about lives. So if 9 we sum all those up, we'll get to that 13-- 13,260,000. So 10 then that's how we can get tied back to the Staff's reconciliation sheet. Does that help, Commissioner? 11 12 JUDGE THOMPSON: Thank you. Very much. BY COMMISSIONER MURRAY: 13 Yes. And that is the -- that is a reduction 14 Q. to revenue requirement? 15 16 Α. Yes. That's a reduction to revenue 17 requirement then of around \$13.2 million. 18 Q. Is that the largest -- is the depreciation the 19 largest single issue in the case as far as dollar amounts? 20 Α. Yes, it is. 21 And you said this was divided into three Ο. components. The second and third components are both a 22 23 result of the Staff recommendation that the Commission adopt 24 a new methodology for treating net salvage; is that right? 25 Α. The -- the second component in its entirety 1855 ASSOCIATED COURT REPORTERS

1 would be, yes. That has an implication on the reserve 2 deficiency because then, by definition, your theoretical 3 reserve needs to be lower. Okay? Then if you lengthen the lives, that's 4 5 another -- another issue that would shrink the reserve --6 theoretical reserve. And when you add those together, it's Staff's position that the reserve deficiency that's been 7 8 approved in two prior Commission cases goes away. 9 Okay. On page 6 of your Rebuttal Testimony Q. 10 you get a little bit into the ISRS issue there. 11 Α. Yes. 12 Can you tell me if the depreciation that MAWC Q. 13 is accumulating for ISRS property includes an amount for cost of removal net of salvage? 14 Yes, it would. 15 Α. 16 Ο. And sorry this is taking me so long to find my 17 question here. Since I'm not finding the one I'm looking for, let me see if I can ask you a different question. 18 19 This reduction in revenue requirement that the 20 Staff is recommending of \$13.2 million resulting from a --21 primarily from a new method of treating depreciation, is it Staff's position, do you know, that that's not a loss to the 22 23 company of something that the company is entitled --24 otherwise entitled to? 25 Α. Don't know exactly, you know, how to --1856 ASSOCIATED COURT REPORTERS

Staff's position, I believe, is they -- they believe that they're following the principles theoretically correct. But one of the points that -- that -- in terms of depreciation in general, that's recovery of investor-supplied capital. That's capital that our investors have supplied to run the utility.

Q. And that's why I'm asking you the question, because I know that the company is entitled to recover on those assets. And if this method changes the degree to which the company is recovering to the point of reducing revenue requirements \$13.2 million in one year, how is the company supposed to recover on those assets what it is entitled to recover?

A. Yeah. I mean, what Staff's done is basically stretching that out over a longer period of time, which does cause us significant amount of concern, as I've raised in this testimony.

18 I think, first thing, it artificially lowers rates to the current -- to current ratepayers. And if 19 20 you're not careful, what you're going to run into is you're 21 going to have one generation of ratepayers, which will be 22 those in the future, paying for new facilities and at the 23 same time have not collected in the entirety the second set 24 of facilities, the facilities that are being retired. The 25 old St. Joe treatment plant is a good example of that.

1 And I think one of the things that's very 2 important, as I mentioned earlier in my testimony, is the 3 facts haven't changed. This is a rising cost industry. In the last five years, we've added to our net original cost 4 5 rate base approximately 50 percent of value just with new 6 capital additions.

And the reason that's taking place is we're 7 8 getting through the first generation of these facilities that were priced at 1900 prices, 1930 prices. And as you 9 10 begin to replace those with current costs that, you know, here in 2003 -- or '99 to -- 1999 to 2003, we're seeing a 11 12 rapid increase in our rate base. And that's what's caused 13 us for concern is really making sure we get the right 14 intergenerational equity. And it causes us great concern that the period's being lengthened so much outside the norm. 15

16 Ο. Okay. And I've been trying to attempt for 17 some time to understand why Staff is trying to take this new 18 approach and not just for Missouri-American, but for many of 19 the companies that we regulate. And I'm trying to 20 understand that -- I'm looking at the facts that, like you 21 just told me, if you've added approximately 50 percent of 22 new capital asset value in the last five years, then -- to 23 rate base. Correct?

24 Α. That's correct.

Ο.

25

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That those new capital assets based on an

1 analysis of cost of retirement such as Mr. Spanos performed,
2 the cost of retirement for those new assets would be
3 significantly more, I would assume, than the cost of
4 retirement that was being included in the accrual for the
5 older assets?

A. Right. I mean, that's one of our big concerns is that as you begin to replace the newer assets to replace that first generation of water utility facilities, those new assets are going to require a removal cost. And I think if I understand -- understood Mr. Spanos' testimony correctly, is that's going to just continue to increase.

And our biggest concern is if you take a look at, I mean, some of our retirement history and, for example, with Staff's position now in this case is they're using an averaging methodology that gets us about \$542,000 cost of removal to allow us to apply towards cost of removal. We only have to go back to the year 2000 and my company spent \$1.2 million on cost of removal.

19 That averaging methodology causes us great 20 concern especially if the averaging is expected to go up 21 over time. And this change in policy, in our view, is 22 likely to cause us to not collect enough cost because we'd 23 always be trying to chase an average.

24 Now, in the short term there could be some
25 volatility with that, but we're very concerned about chasing

an average. And in chasing an average, what that means is that if we incur, for example, like we did in 2000, \$1.2 million of expense and what I'm allowed in rates is \$540,000, I have a write off. I don't get to collect all that cost in rates, I don't get to come back to the Commission and try to request recovery unless -- unless the Commission gave us that opportunity.

8 The current system and the way the majority of 9 US water utilities are regulated across the country rely on 10 the depreciation reserve. It's recorded in the reserve, it's deducted from ratepayers' rate base, therefore, the 11 12 ratepayers are made whole on the funds collected and there's 13 not a risk for the under-recovery issues unless we run into 14 a situation like St. Joe, which, in my view, is an anomaly. It happens all the time with numerous assets being retired. 15 16 It's been my experience that that process works fine.

17 And the result of an application of the new Q. 18 methodology would be that, okay, if Staff would be averaging 19 over a certain number of years the actual cost -- if Staff 20 is averaging over a certain number of years the actual costs 21 of retiring assets, going forward as the costs of 22 retirements increase, which I don't know that anybody 23 disputes that that's what's likely to happen, there will be 24 a point in time in which the ratepayers are paying more for 25 retirement of assets because they're -- they're having to

1 realize those increased costs even though the ratepayers 2 that use those assets that cost more to retire didn't have 3 to share in those increased costs; is that right? Yeah. And I think if I understand your 4 Α. 5 question, Commissioner, what I was trying to refer to, at 6 the bottom of page 6, line 22 and 23, is that -- is relying on average in taking -- of actual experience with 7 8 retirements will begin to compress -- compress your retirement history and put it in current dollars. But 9 10 you're compressing it on the current -- a current generation 11 of ratepayers. 12 And if you run into a situation in which you

have new capital additions or a major -- I'll call it base load water treatment plant like we had in St. Joe, which is in the works with Joplin in terms of being considered, you can have our ratepayers encountering the situation where we have the new -- the new base load facility at the same time you've compressed an average as we get out in a point in time. There's going to be anomalies.

In 200-- I believe 2002 we did sell some -- I believe it's some buildings because of the St. Joe situation, we didn't need an office -- as big an office building with some of the consolidations that were taking place. So, you know, in this -- which happens not very frequently, but you do get salvage value.

1 And, you know, with that you could run into a 2 situation where your net salvage is not -- it's salvage, 3 it's income as opposed to expense. If you have some one-time asset you can dispose of and you get to sell. 4 5 My point is, that brings in volatility. 6 Volatility is difficult for all of us, I think, to deal with in regulation, whether it's the ratepayer and definitely 7 8 from a company's perspective and as a treasurer of this 9 company trying to -- to, you know, keep our earnings at our 10 authorized levels, etc., when we have to deal with volatility, that just concerns me. 11 12 And I don't think this is an issue that we 13 should -- should introduce volatility into the rate-making arena. I think it's a policy decision for this Commission 14 to make and it's one that we'll be watching very closely and 15 16 don't think it's the right policy moving forward. 17 It's a very significant policy decision, I Q. 18 would assume? 19 Α. Absolutely. 20 And the volatility is not a concern with the Ο. traditional depreciation treatment because of the fact that 21 you're averaging those costs of removal and the entire 22 23 service life of the plant; is that right? 24 Α. You're collecting it over the entire service 25 life instead of a compression. And then the protection, 1862 ASSOCIATED COURT REPORTERS

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1 like we do with many things in terms of developing the net 2 original cost rate base, is with that going into the 3 depreciation reserve, then there's a mechanism there to make sure that -- that the company's being treated fairly as well 4 5 as the ratepayer in terms of designing rates are being 6 treated fairly and that's through that deduction of rate base and, therefore, those funds are compensated for. 7 8 Q. And is it your understanding that almost every 9 other jurisdiction treats depreciation in the way that we 10 have traditionally treated it with Missouri-American? 11 Α. Yes. 12 COMMISSIONER MURRAY: Thank you. I think 13 that's all I have. JUDGE THOMPSON: Thank you, Commissioner. 14 FURTHER QUESTIONS BY JUDGE THOMPSON: 15 16 Ο. Mr. Jenkins, if you know, did Mr. Spanos' 17 study include a variance between the theoretical reserve and the book reserve? 18 I don't know. 19 Α. 20 Ο. You don't know. 21 Okay. His figures are somewhat different from 22 yours because perhaps he's using the December 31st, 2002 23 figures and you're using the June 30th, 2003 figures? 24 Α. Right. And then the other thing, judge, To 25 keep in mind that causes, I'm sure you, a lot of aggravation 1863 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO

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1 in dealing with this, keep -- there's some other thing we're 2 depreciating in this case. So I kept it only to 3 depreciation within the issues in the context of our issues 4 list. 5 Q. Okay. 6 Α. We've got depreciation -- which ties to Staff's reconciliation. 7 8 Q. Right. 9 Α. Keep in mind we've been here and we've talked 10 about depreciation related to a call center and shared service center. That adds -- that's the reason Mr. Spanos' 11 12 numbers and my numbers, there will be some reconciliation on 13 that. 14 Q. I see. And that's also in Staff's reconciliation. So 15 Α. 16 we don't have it double counted, but I know for somebody 17 needing to make decisions, it can be hard to craft through 18 it. But we've got issues with the call center depreciation, 19 the utility plant acquisition adjustment. As the company, 20 we're depreciating that. 21 Ο. Okay. 22 Α. And that would be in there. And Staff's got 23 it on a different line. So -- so we kind of got to work our 24 way with that. Amortization of the -- of the old St. Joe 25 retirement cost, the company's depreciating that. It's not 1864

1 in these numbers because I tied it to the 13.2 million, but 2 it's on a different line of Staff's reconciliation. 3 Q. Okay. Okay. I appreciate your pointing those things out because, just as a comment, when thousands of 4 5 pages of testimony are filed, many of which are covered 6 entirely with numbers and I start working through those --7 Α. Right. 8 Ο. -- it's very difficult to make them make any particular sense. Perhaps at the time of the true-up, 9 10 parties might think about filing something and they can do 11 it jointly or separately, however they choose to do it, but 12 you know, you've given us these numbered issues, okay, and 13 if you could give us a piece of paper that tells us for each of those numbered issues your position as of the true-up 14 with respect to revenue requirement and rate base. Okay? 15 16 Your position. Not the difference, but if 17 each of us gives us their own position, then we'll see how 18 these numbers have changed and hopefully be able to track 19 them all through then at that point. 20 But I appreciate very much your pointing out that there's even still some additional items of 21 depreciation floating around that aren't reflected in these 22 23 four issues here. 24 Okay. I think that's all the questions that I 25 had. 1865

1 Oh, I do have one other one. I appreciate 2 these numbers you gave me and those are all revenue 3 requirement items. My question is, do any of these have rate base? Are there any rate base effects that I need to 4 5 know about for these items? For example, when you throw out 6 this amortization of the St. Louis reserve deficiency, is the unamortized portion of that sitting in the reserve? 7 8 Well, I guess it's a -- you see what I'm saying? 9 Α. Yeah. The rate base effect --10 Ο. It's a good question. And I don't believe any 11 Α. 12 of these have a rate base impact. 13 Ο. Okay. And the reason being, Judge, is that -- just 14 Α. think about it this way. We're recording depreciation as we 15 16 go through this case. At the point in time the Commission 17 authorizes us, if they were, to reduce depreciation, that's 18 when it will begin to have a rate base impact. And that's 19 the point I was trying to get at in my testimony, it will 20 start driving up rate base quite dramatically in the future. 21 JUDGE THOMPSON: Okay. Thank you. 22 Further questions from the Bench? 23 FURTHER QUESTIONS BY COMMISSIONER MURRAY: 24 Q. I probably shouldn't do this, but your last 25 statement about the impact over time if the Staff's position 1866 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO

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1 were to be ordered then rate base would be driven up over 2 time. Is that what you said?

3 Α. That's what I said. Which means, does it not, that --4 Q. 5 And the point to remember is because we'll Α. have to finance that rate base, we'll have to incur 6 additional issuance cost, for example, on debt. See, if you 7 8 re-invest your capital, if you think about it in the simplest terms, that's the cheapest source of funds. 9 10 It's the shareholders' money, shareholders put the investment in, this is recovery of shareholder 11 12 investment. And what we're electing to do, which I think is 13 very good financial management, is we are re-investing that 14 depreciation. You run into problems with regulated utilities if they don't re-invest it because in reality that 15 16 pretty much becomes liquidation. 17 So, therefore, we are re-investing as much as we can. That's evidenced throughout this record that we're 18 19 paying two to two and a half times that of new capital 20 investment. Therefore, when we re-invest it, we don't incur additional issuance costs or carrying costs of that money. 21

22 It's driven right back into the rate base.

23 JUDGE THOMPSON: Not exactly free money, but 24 you don't have any new cost.

25 THE WITNESS: That is true.

1 COMMISSIONER MURRAY: Okay. I think that's 2 all. Thank you. 3 THE WITNESS: Thank you. JUDGE THOMPSON: Thank you, Commissioner. 4 5 Ms. O'Neill? 6 MS. O'NEILL: Thank you. RECROSS-EXAMINATION BY MS. O'NEILL: 7 8 Q. Mr. Jenkins, would you agree with me that the 9 depreciation methods being proposed by the Staff will allow 10 the company to fully recover the original cost of utility plant over the life of that plant? 11 12 If you define original costs as the actual Α. 13 cost of installing that facility but not accounting for any cost of removal on top of it. 14 But the original cost component of whatever 15 Ο. 16 method of depreciation is the same component. Correct? And 17 it's what you just described? 18 Α. Yes. And one of the differences between the 19 Ο. 20 company's proposal and the Staff's proposal is -- and their approaches to depreciation is the timing of the difference 21 by the length of recommended length of service lives. 22 That's one of the issues? 23 24 Α. That's correct. 25 Ο. But if you apply the Staff's depreciation 1868 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 method to the Staff's service life, there will still be a 2 full recovery of that original cost? 3 Α. If the assets, for example, last consistent with the Staff's methodology on length of time, the old 4 5 St. Joe treatment plant is a very good example of when 6 depreciation lives are estimated and it doesn't last that long, then you're stuck with the issues that are surrounding 7 8 the old St. Joe treatment plant with unrecovered investment. 9 Q. But you have that problem with any kind of definition of service lives because all service life 10 components of depreciation rates are, by their nature, 11 12 estimates; isn't that correct? 13 Α. Yes. MS. O'NEILL: Nothing further. 14 JUDGE THOMPSON: Thank you, Ms. O'Neill. 15 16 Mr. Schwarz? 17 RECROSS-EXAMINATION BY MR. SCHWARZ: 18 Q. In my notes I have that in answer to a 19 question from Judge Thompson you answered that issuing debt 20 and equity puts pressure on the balance sheet. Do you 21 recall that answer? 22 Α. Yes. 23 Q. How does issuing equity put pressure on a 24 balance sheet? 25 Α. Okay. Now, you changed -- do you want to 1869 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 address equity first and then go to debt? 2 Q. How does issuing equity put pressure on a 3 balance sheet? Α. Okay. Issuing equity does not put pressure on 4 5 a balance sheet. It's the debt part that puts pressure --6 Ο. 7 Α. It's the debt part. 8 Q. Okay. But the company has the option of issuing equity as well as debt, doesn't it? 9 We do. 10 Α. In answer to a question from the Bench, you 11 Ο. 12 said the company was concerned about chasing averages as far 13 as cost of removal is concerned. Do you recall that? 14 That is correct. Α. 15 Would you concede that it's Staff's concern Ο. 16 that it is -- that the formulaic approach to cost of removal 17 is with paying for a cost that won't be recovered for perhaps 50 years, if ever? 18 19 Α. No. 20 What do you think Staff's concern is with Ο. using the formula approach to --21 I'm sorry. I thought you said if that was my 22 Α. 23 position. 24 Q. No. That's Staff's --25 Α. That's my understanding of Staff's position, 1870 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 yes. 2 MR. SCHWARZ: May I approach the witness? 3 JUDGE THOMPSON: You may. MR. SCHWARZ: Let the record reflect that I am 4 5 handing the witness Mr. Spanos' depreciation study. JUDGE THOMPSON: Very well. 6 BY MR. SCHWARZ: 7 8 Q. And I have three orange flags attached there, 9 which are his analysis of three different accounts, Accounts 304.30, 305 and 306. Will you confirm that? 10 Is it 304.80 with your orange --11 Α. 12 Q. It may be. 13 Α. All right. Yes. And do the graphs accompanying those 14 Q. calculations all have a vertical line terminating the graph? 15 16 Α. Perhaps counsel can show me. 17 Okay. Got it for the first two, counsel. I don't see it for the second one -- or third one unless your 18 tabs got off. There's one -- oh, okay. Okay. 19 20 Ο. So those are those three accounts. And one of them is water treatment plant, is it not? I'm not sure --21 Yeah. One of them is structure and 22 Α. 23 improvements, water treatment plant. 24 Q. Okay. And if I suggest to you that I had a 25 discussion with Mr. Spanos that that vertical line indicated 1871 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 life span property, do you recall that? 2 Α. I recall your discussion with Mr. Spanos. 3 Q. In one of the questions from the Bench, you indicated that Staff's approach artificially lowers 4 5 depreciation rates and gave the old St. Joe plant as an example. Do you recall that? 6 That's correct. 7 Α. 8 Q. The old St. Joe plant is one of those life span plants, is it not? 9 10 Α. Yes. And if I suggest to you that those three 11 Q. 12 accounts are the only three life span accounts in 13 Mr. Spanos' study, would you agree that the old St. Joe plant is one of three plant types to reflect that kind of 14 depreciation curve? 15 16 Α. Don't know. I don't know. 17 Q. Okay. 18 Α. Okay. 19 But his study will show? I mean --Q. 20 His study will show what it shows, yes. Α. 21 And you said that Staff's method may cause a Ο. write-off. Do you recall that? 22 23 Α. Yes. 24 Q. If the cost of removal is expensed and the 25 cost of removal increases or decreases for that item, the 1872 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 company will either over- or under-recover; is that correct? 2 Α. That's correct. 3 Q. How is that any different than payroll increases that occur between rate cases? 4 5 And perhaps just the -- the idea of a Α. 6 write-off, the -- when I was referring to write-offs, that means within any accounting period, an under- or 7 8 over-recovery, an expense with that type of volatility then would have to be written off. 9 Has -- I'm sorry. I didn't mean to --10 Ο. And, therefore, to tie back to your payroll 11 Α. example, the reason that that would be different, sure, you 12 13 have different employee levels, you have different, you 14 know, salary type increases that could change your overall labor, but in terms of volatility, that's not an item that's 15 16 typical, it's been my experience, that would be subject to 17 the volatility that we're talking about here. All we got to do is go back to 2000 in terms 18 of write-offs. We had write-offs in terms of the net 19 20 salvage cost of removal expense of 1.2 million in 2000 yet in 2002, because we sold the buildings, we had an income --21 a little slight gain. And so you can -- volatility can go 22 23 all the way up from \$1.2 million of expense down to something that's slightly negative expense, if you will, and 24 25 that's what I call volatility.

1 You don't get anything near that type of 2 volatility with the payroll or typical expense item when 3 you're setting rates because by definition you don't want to set rates to -- in terms of good rating with the outcome 4 5 being volatility. 6 Ο. Has the company written off the undepreciated balance of the old St. Joe plant? 7 8 Α. That was written off in -- at the time of the rate order. 9 10 Q. I -- go ahead. 11 Α. Okay. 12 I mean, finish your answer. I didn't mean to Q. 13 cut you off. That was written off at the time of the rate 14 Α. order, but since then with the advent of the appellate court 15 16 decision in which that was reversed and remanded, we've 17 written it back on our financial statements. 18 Q. So that's currently on the books as -- that's 19 what's in Account 186, if I --20 Yeah. That -- I think -- I mean, in order to Α. find a place to recover it, I think we've got it set up in 21 the 186 account. 22 23 Q. You didn't put it back into the plant account, 24 did you, because it's been retired? 25 Α. I don't believe we put it back in the plant 1874 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

2 Q. Right. So it's parked off on the side? 3 Α. Right. Okay. I believe that there was a reference to 4 Q. 5 the Staff's depreciation approach as a new method of treating depreciation. Do you recall that in your 6 discussions with the Bench? 7 8 Α. Yes, I do. 9 ο. Isn't it true that this is the method that 10 Staff proposed in the last Missouri -- the last St. Louis County Water case? 11 12 In terms of the cost of removal issue? Α. 13 Ο. Yes. Yes. Staff proposed it, the Commission 14 Α. rejected it. 15 16 Q. So it's not new in that sense? 17 Α. Correct. And isn't it true that Staff has proposed the 18 Q. 19 same treatment of cost of removal with respect to other 20 utilities and that the Commission has accepted it in some of 21 those cases? That's my understanding. 22 Α. So, again, in that respect, it would not be a 23 Q. 24 new method; is that correct? 25 Α. A polite -- yes. 1875 ASSOCIATED COURT REPORTERS

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account.

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1 Ο. I have in my notes that in response to a 2 question from Judge Thompson that you stated that the 3 company is depreciating the old St. Joe plant. Would that 4 be correct? That's what I have in my notes. I'm just 5 trying to clear it up. What I was indicating is that we've got a 6 Α. request to amortize that for the -- with respect to the --7 8 to the part of the old St. Joe plant that's not been 9 recovered. And sometimes financial people --It was --10 Ο. Amortization and depreciation get mixed up in 11 Α. 12 the same sentence. 13 Ο. You misspoke? 14 Α. Yes. Okay. I just wanted to clear that up. 15 Ο. 16 Α. Yes. 17 MR. SCHWARZ: I think that's all I have. JUDGE THOMPSON: Mr. England? 18 19 MR. ENGLAND: No redirect, your Honor. 20 JUDGE THOMPSON: You may step down, Mr. Jenkins. Thank you very much for your testimony. 21 Particularly appreciated using numbers that tie into 22 23 something else in the case. That's unusual and much 24 appreciated. 25 Let's see. Do we return to Mr. Macias now? 1876 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 Good afternoon, Mr. Macias.

2 THE WITNESS: Good afternoon. 3 JUDGE THOMPSON: I'll remind you you're still under oath. For the hard of hearing people on the Bench, 4 5 you will have to speak a little louder, use your microphone. 6 That would be me, in case you were wondering. And, Mr. England, you were just about to 7 8 change gears, as I recall, with your cross-examination. 9 MR. ENGLAND: Yes, I was, your Honor. Thank 10 you. And before I begin, with respect to at least 11 12 one of those testimonies that I had requested official 13 notice, over the lunch able I was able to secure a copy of 14 the transcript from Case No. WR-97-237. It appears to be Volume 6 for August 18th, 1997. The Direct Testimony of 15 16 Woodie C. Smith that we referenced earlier was identified as 17 Exhibit No. 32 and accepted into evidence by ALJ Whitcliff 18 at page 92 of that transcript. JUDGE THOMPSON: Okay. Very well. So you're 19 20 offering Exhibit No. 125? 21 MR. ENGLAND: If that's Mr. Smith's Direct. I can't recall the number. 22 23 JUDGE THOMPSON: That's the number. Direct 24 Testimony of Woodie Smith, WR-97-237. Any objections to the 25 receipt of that testimony? 1877 ASSOCIATED COURT REPORTERS

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1 MR. SCHWARZ: None. 2 MS. O'NEILL: I don't have any, your Honor. I 3 just -- never mind. No objection. JUDGE THOMPSON: Hearing no objections, that 4 5 exhibit is received and made a part of the record in this 6 proceeding. 7 (Exhibit No. 125 was received into evidence.) 8 CROSS-EXAMINATION (CONT'D) BY MR. ENGLAND: 9 Good afternoon, Mr. Macias. Q. Good afternoon. 10 Α. I believe you indicated in response to our 11 Q. 12 Data Request No. 2001 that you agree with the definition of 13 depreciation as set out in the Uniform System of Accounts as 14 adopted by this Commission, but then you went on to disagree that net salvage needs to be included as a part of the 15 16 depreciation rate. Is that a fair characterization of your 17 response? 18 Α. Yes. 19 It's Staff's proposal, I think everyone now Q. 20 knows, to treat the net salvage amount as a separate or 21 discreet expense item for purposes of rate-making; is that right? 22 23 Α. That's right. 24 Q. And, by contrast, the company's proposal is to 25 increase it -- or excuse me, is to include it as an element 1878 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 of the actual depreciation rate?

2 Α. The company is proposing to include the future 3 projected amount of net salvage. The Staff is proposing to expense the currently experienced level of net salvage cost 4 5 of removal. 6 Ο. And that future amount that the company includes is an element of the actual depreciation rate? 7 8 Α. Yes, it is. 9 MR. ENGLAND: Okay. I'd like to show the 10 witness an exhibit from a prior case, if I may, your Honor. This is Exhibit 67 from the St. Louis County rate case. I 11 12 believe it's the 2000-844 that's been referenced. I suppose 13 we need to mark it for purposes of this case. JUDGE THOMPSON: This will be Exhibit 127 14 described as Exhibit 67 from WR-2000-844. 15 (Exhibit No. 127 was marked for 16 17 identification.) BY MR. ENGLAND: 18 19 Mr. Macias, do you have Exhibit 127 in front Q. 20 of you? Yes, I do. 21 Α. This was an exhibit that I used for purposes 22 Q. of my examination of Mr. Adam in the old St. Louis County 23 24 rate case. And the purpose was to try to graphically, if 25 that's the right term, compare the way in which this company 1879 ASSOCIATED COURT REPORTERS

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1 handles net salvage versus the way in which Staff handles 2 net salvage. Were you familiar with this exhibit at all in 3 your preparation for this case? 4 Α. No. I've not seen this before. 5 Ο. Okay. Would you see take a look at it and 6 tell me if those two representations, in your opinion, adequately represent -- the first being the way in which 7 8 company handles net salvage and the second under Staff 9 position the way in which Staff handles net salvage? 10 Α. In the St. Louis district specifically? Well, actually for purposes of this case as 11 Ο. 12 well. 13 Α. Okay. The Missouri-American properties the 14 company's proposed remaining life formula, so the formula is 15 different. 16 Ο. Okay. 17 But as far as the net salvage component, it Α. would be in both the remaining life formula and the whole 18 19 life formula used by the company. 20 Ο. Okay. Then it would be accurate for purposes of St. Louis County, but a little bit different for purposes 21 of Missouri-American or the eight districts that we've 22 referred to? 23 24 Α. Seven, yeah. 25 Ο. Well, seven plus one for Jeff City. 1880 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 Α. I don't think Jeff City has got remaining 2 life. So the company's only proposed remaining life on the 3 seven districts. Q. I'm sorry. You're right. I got confused. 4 5 So this might be more of an accurate representation for Jeff City and St. Louis --6 Α. Yes. 7 8 Ο. -- versus the seven districts? 9 But even with remaining life, the net salvage 10 is dealt with as a percent either plus or minus added to the original cost and then divided by service life --11 12 Α. That's right. 13 Ο. -- generally? 14 Generally, yes. Α. 15 Ο. Thank you. 16 And I believe in my examination of Mr. Adam he 17 acknowledged that the company's position could be referred 18 to as sort of the traditional approach to depreciation and 19 the Staff's position is the expensing method; is that fair? 20 Yeah. That would be fair. Α. Okay. Now, when I inquired of Mr. Adam -- and 21 Ο. I want to find out if it's the same with you -- he was not 22 23 aware of any authoritative texts on the issue of 24 depreciation that advocates Staff's formula as depicted here 25 on Exhibit 127. Are you?

1 Α. No. 2 Also, when I discussed this with Mr. Adams, he Q. 3 indicated -- excuse me, Adam, he indicated that he was only aware of two jurisdictions where Staff's position as 4 5 reflected here on Exhibit 127 has been approved, those being 6 Pennsylvania and Florida. First, are you aware that those 7 two states may have adopted this -- Staff's position, if you 8 will? 9 Yes. Α. 10 Are you aware of --Q. I'm aware of that conversation that you had --11 Α. 12 Q. Okay. 13 Α. -- with Mr. Adam. 14 Do you have any personal knowledge as to what Q. states may have followed Staff's approach? 15 16 Α. What do you mean by "personal knowledge"? 17 Any research on your own, any discussions with Q. NARUC --18 19 No. Α. 20 -- colleagues? Q. 21 I haven't done any other research. Α. 22 Q. So, to your knowledge, you know of no others 23 other than Pennsylvania and Florida? 24 Α. Could you repeat that question for me? 25 Ο. You know of no other states other than 1882 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 Pennsylvania and Florida where this approach may have been 2 adopted? 3 Α. It's been adopted in Missouri, I believe. Q. I'm so--4 5 Outside of those three. Α. Fair enough. Fair enough. Thank you. I 6 Ο. stand corrected. 7 8 Α. Well --9 That's what I get for not asking a very artful Q. 10 question. I take it then, based on your answer, just a 11 12 minute or so ago that you do not know why these 13 jurisdictions -- and I'm talking about other jurisdictions other than Missouri, Pennsylvania and Florida -- may use 14 this, what particular circumstances exist that may -- that 15 16 they may consider in adopting the Staff position? 17 Α. I'm familiar with the circumstances, but I haven't done the research as far as -- I believe the 18 19 Pennsylvania was a Supreme Court decision, but I haven't 20 read through those orders or decisions. 21 Other than that, you don't know what Ο. circumstances exist or --22 23 Α. That's right. 24 Q. -- factors were considered? 25 All right. Thank you. 1883 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO

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1 Α. That's fair.

2 Q. Now, let me focus on the St. Louis County 3 district for a few minutes. As I understand it, one of major differences in the rates that you've developed and 4 5 those that the company is advocating, which are the existing 6 ones, is your handling of net salvage as we've just talked 7 about. Right? 8 Α. That's right. 9 Another major difference is your use of Q. 10 different average service lives then those that were used for developing the rates currently in effect for St. Louis 11 12 County? 13 Α. That's right. Okay. And as I understand it, generally 14 Q. speaking, you have proposed longer lives than those used to 15 16 develop the existing authorized rates? 17 Α. I believe the net effect is longer lives. Account by account, I don't really know off the top of my 18 head. 19 20 So there may be accounts where you're shorter, Q. others where you're longer --21 22 Α. That's right. 23 Q. -- but overall effect is a longer life? 24 Α. Correct. 25 Ο. Okay. Now, I believe you indicate in your 1884 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 testimony that your goal is to determine an average service 2 life that approximates the useful life of an asset; is that 3 right? 4 Α. That's true. 5 And your proposed rates are designed to 0. provide the company recovery of 100 percent of the original 6 7 cost of its plant. Right? 8 Α. I believe so. 9 Would you agree with me that whatever rates Q. 10 are authorized by this Commission, the company is obligated to follow those? In other words, it can't charge something 11 12 different? 13 Α. I agree. Okay. Now, let me visit with you a little bit 14 Q. about what would happen if the average service life you use 15 16 to set rates is too short. And we're going to hold 17 everything else constant, if we can. Do you have that --Average service life is too short. 18 Α. 19 Q. Right. 20 Everything else is constant. Α. Right. That's my hypothetical construct. 21 Ο. 22 Would you agree with me then that the company 23 recovers 100 percent of its original cost in plant before 24 it's taken out of service? 25 Α. Yes. 1885 ASSOCIATED COURT REPORTERS

1 Ο. Okay. And then there would be a group of 2 ratepayers who continue to receive the benefit or the 3 service from that plant even though it's fully depreciated? 4 Α. Yes. 5 And through the rate-making process, once it's Ο. 6 fully depreciated they would no longer be paying for that plant? 7 8 Α. I believe that's correct. 9 Okay. Now, I want to kind of reverse the Q. 10 example for you and say that the average service life is too long. Would you agree with me then there would be a group 11 12 of ratepayers continuing to pay for the plant even though it's been pulled out of service? 13 14 Α. Yes. 15 Ο. Okay. And in that situation the typical 16 rate-making response is to either continue depreciation 17 expense even though the plant's been pulled out of service or create some sort of special amortization to recover it; 18 19 is that right? 20 Yes. Depending on the circumstance, yes. Α. And I want to make sure it is your opinion, is 21 Ο. 22 it not, that it is appropriate for investors to recover the 23 full original cost of their investment in utility plant? 24 Α. I believe, yes, that's what I've said. 25 Ο. Okay. But as we've discussed maybe not with 1886 ASSOCIATED COURT REPORTERS

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1 you, but with other witnesses here in the proceeding, that 2 hasn't happened in the St. Joseph area, has it? 3 Α. Apparently not. I don't know the details on it. 4 5 So if average service lives are set too long Ο. 6 and the company experiences undepreciated costs when plant is retired, there is a very real possibility that investors 7 8 may not recover all of their investment given the 9 St. Louis -- or excuse me, the St. Joseph experience. Right? 10 I really don't know the details surrounding 11 Α. 12 the St. Joseph experience. As far as a mass property 13 account, you know, typically that would just be handled 14 by -- in the -- when you do a future depreciation study, the life would be adjusted to reflect the appropriate life of 15 16 those assets in the account. 17 You would agree with me that we obviously have Q. 18 an issue with regard to the St. Joseph plant or it wouldn't 19 be identified for one for purposes of this case? 20 I agree there's an issue with the St. Joseph Α. plant. I don't know the details. 21 Okay. Let me ask you a little bit about 22 Q. 23 reserve deficiency. My understanding is it's primarily a 24 function of the parameters that you use in developing your 25 depreciation rates, is that right, lives and things of that 1887 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 nature?

2 Α. Yes. It's the lives and dispersion pattern. 3 Q. Okay. So if the -- and when I say "yours," I mean, whoever's deriving the rates or developing the rates. 4 5 It's a function of the parameters that they use or inputs 6 they use in developing those rates. Right? 7 Α. Yes. 8 Q. So I guess what I'm trying to get at is if the PSC accepts our rates and the parameters that we use to set 9 10 those rates from the last case, then I think you would agree that a theoretical deficiency -- excuse me, a theoretical 11 12 reserve deficiency does exist? 13 Α. If it existed in -- when the previous study 14 was done and you're going off of those figures, I believe, yes, that there would still be a reserve deficiency. 15 16 Ο. Conversely, if the Commission accepts your 17 rates and the parameters that go into developing them, then 18 you have determined a theoretical reserve where there is no 19 deficiency when you -- compared to the actual; is that 20 right? There is not a deficiency in the reserve for 21 Α. the St. Louis accounts in my study. 22 23 Q. I'm really just trying to get to the fact that 24 this reserve deficiency issue is driven a lot by whose rates 25 you accept -- depreciation rates and the underlying 1888

1 parameters that establish those rates. 2 Α. As far as lives and net salvage considerations, yes, that --3 Thank you. 4 Q. 5 MR. ENGLAND: If I haven't done so, may I offer 124, Exhibit 124? 6 JUDGE THOMPSON: 127? 7 8 MR. ENGLAND: I'm sorry. I can't read my own 9 handwriting. 10 JUDGE THOMPSON: Do I hear any objections to the receipt of Exhibit 127? Exhibit 127 is received and 11 made a part of the record of this proceeding. 12 13 (Exhibit No. 127 was received into evidence.) 14 BY MR. ENGLAND: 15 Ο. Getting back to this net salvage issue, you 16 disagree with the company's position with the way in which 17 to recover it, but I want to find out, you don't disagree --18 if you're going to include it as a portion of the rate and 19 accrue for it as we've proposed, the way in which Mr. Spanos 20 has done it is acceptable. Correct? It's standard industry practice, if you will? 21 22 Α. The way that he has done it as far as 23 calculating the net salvage percentage --24 Q. Yes. 25 Α. -- I believe that that would be considered 1889 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 how -- the standard industry way to do it. However, I don't 2 believe that that ratio can accurately predict the future. 3 Q. I understand. You've got a problem with the whole concept of the policy, if you will, of collecting net 4 5 salvage through the depreciation rate on a prospective basis? 6 7 I -- I have a problem with collecting unknown Α. 8 amounts of money --9 Q. Okay. -- for potential removal of assets. 10 Α. All right. But if the Commission accepts that 11 Q. 12 policy, the way in which Mr. Spanos has done it is a 13 standard way of doing it. Correct? I mean, there's nothing unusual or unique or, in someone's terms, bizarre about the 14 way he does that, is there? 15 16 Α. While I don't agree that it gets -- accurately 17 predicts what the cost of removal will be, I have not seen 18 it done any other way. 19 Okay. I guess my next question, if you know, Q. 20 and that's the way Staff used to do it before they changed three or four years ago. Right? 21 I believe that's the way the Staff used to do 22 Α. 23 it. 24 Q. Okay. Would you agree with me that 25 depreciation rates are not static? 1890 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 Α. Yes. 2 Q. Okay. And that they do and can change from 3 time to time? Α. Yes. I agree. 4 5 Okay. At page -- I believe it's your Rebuttal Ο. 6 Testimony. Let me double check myself. Okay. It is Rebuttal Testimony, page 3, lines 22 and 23 and then 7 8 carrying over to the top of the next page. 9 If I may, you say, The company proposes to use 10 the cost of removal in gross salvage percentages for the past 15 years as a basis for predicting the cost of removal 11 12 and gross salvage that will be experienced by current plant 13 in service for decades into the future. And I quess based on my earlier question, 14 you're not saying that the rates that are established here 15 will be set for decades into the future. Your concern is 16 17 for the recovery of costs of decades in the future? My concern is with the company's position of 18 Α. 19 predicting the cost of removal decades into the future and 20 collecting it now. 21 Well, collecting it now and in the future. Ο. Correct? 22 23 Α. And I'm not testifying that the rates won't 24 change for decades. 25 Ο. Okay. And we're not collecting it all at one 1891 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 year. We're collecting it ratably over the future years. 2 Correct? 3 Α. That's right. Q. Okay. And I think you just indicated and --4 5 you're not saying that once we set that, it has to stay that 6 way for decades? You're just concerned with the accuracy of 7 predicting those costs for decades into the future? 8 Α. For the most part. 9 If you know, would you agree with me that, at Q. 10 best, rates set in this case will probably be in effect no longer than three years because of the requirements of the 11 12 new ISRS statute? That's my understanding of that statute. 13 Α. 14 Q. So we'll be revisiting this at least in three 15 more years? 16 Α. I believe, yes. 17 Okay. Would you agree with me that if a Q. customer pays too high of a rate for depreciation, they also 18 get the benefit of an accelerated deduction in rate base 19 20 because of the increase to the reserve? 21 Α. If a customer pays an accelerated rate of depreciation, there will be a reduction to rate base. 22 23 Q. And it will be similarly accelerated. 24 Correct? 25 Α. Yes. I don't want to speak as to the benefit 1892 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 of that.

Well, at least they pay less rate base or less 2 Q. 3 of a return because the rate base is smaller. Right? Α. I believe that's how it would work. 4 5 Ο. Okay. If I can, let me turn your attention to your Schedule 4.14, please, attached to your Direct 6 7 Testimony. This is part of your study. And I believe you 8 have a graph there, table, whatever the right determination 9 or definition. I see it. 10 Α. Do you see that? 11 Q. 12 Yeah. Α. My understanding this is Account 304.22, 13 Ο. structure and improvements, booster pumps. Are you with me? 14 15 Α. Yes. 16 Ο. Okay. What types of plant are in this 17 account? I believe that the structures and 18 Α. 19 improvements, booster pumps account would have small 20 buildings, maybe some vaults, concrete slabs, that type of --21 What types of buildings would they be and what 22 Q. 23 types of material used to construct them? 24 Α. There would probably be metal buildings as 25 well as brick buildings. I don't know if there's any stone 1893 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO

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1 buildings in the St. Louis district. 2 Q. Okay. Now, I believe you chose an Iowa curve 3 of 178-R2.5; is that right? Α. Yes. 4 5 By the way, was this an account that you did Ο. or Mr. Adam? 6 7 Α. Judging from the handwriting this -- and my 8 recollection, this is an account that Paul Adam did. 9 Okay. Would you agree with me that this curve Q. 10 implies an average service life of 178 years? That's correct. 11 Α. 12 And a maximum life of 348 years? Q. 13 Α. Yes. The maximum life would be 348. 14 Okay. That means the last piece of property Q. to be retired from this account, if everything works out the 15 way this curve shows, will be 348 years old? 16 17 Α. No piece of property in the account will live long -- could you rephrase that -- or restate the question 18 for me? 19 20 Sure. Under this curve, my understanding is 0. that the last piece of property to be retired from this 21 account will be -- it will be in year 348? 22 23 Α. I don't know that I can agree with that. If 24 the account is still active 300 years from now, I don't 25 think the last piece of property in the account will retire 1894 ASSOCIATED COURT REPORTERS

573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO 1 at 348 from now.

2 Q. Well, what does maximum life then mean in the 3 context of the curve? 4 Α. The maximum age is -- which in this case is 5 348, you said? Yes. Well, that's what this curve says. 6 Ο. 7 Α. It's hard to see where the line ends, but the 8 oldest age that a piece of plant will achieve in this 9 account is 348 years. And less than 1 percent of the plant in this account will live that long. 10 Okay. Let me ask you this. Is it your 11 Ο. 12 opinion that this type of plant, the booster pumps that we 13 talked about or the structures housing the booster pumps, are going to live anywhere near 348 years or survive 14 anywhere near 348 years? 15 16 Α. Yes. 17 That's your engineering judgment? Q. I believe that less than 1 percent of the 18 Α. 19 plant has the potential to live to 348 years. 20 Ο. Let's look at your Schedule 4-48, please, on another graph or curve. I believe this is Account 331.12, 21 mains-lock joint transmission. Correct? 22 23 Α. Yes. Okay. What are lock joint transmission mains? 24 Q. 25 Α. It's mains where the sticks of mains are held 1895 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 together with lock joints. 2 Q. So it's a type of main with a unique type of 3 joint --4 Α. Yes. 5 Ο. -- joints, I guess? Uh-huh. 6 Α. 7 Okay. What are these mains made of, do you Q. 8 know? Ductile iron, cast iron, PVC? 9 I can't -- I can't recall. Α. 10 Q. I believe that you've identified an Iowa curve or selected an Iowa curve of 139-R1; is that right? 11 12 Yes. Α. And, again, that means an average service life 13 Ο. of 139 years? 14 15 Α. Yes. And a maximum life under this curve of 16 Q. 17 approximately 273 years? 18 Α. That's correct. 19 Q. Okay. You don't know the type of transmission 20 main or the material in that transmission main but you think it's reasonable to expect some of that plant to be surviving 21 at 273 years? 22

A. You know, judging from the data as submitted
by the company, there was no compelling reason to shorten
the life.

1 Ο. The company has a different life for this 2 account, don't they? 3 Α. The data that the company provided indicates that this is an appropriate life. 4 5 JUDGE THOMPSON: That's why you disagree, but 6 your answer is yes or no. Right? 7 THE WITNESS: What was the question? 8 BY MR. ENGLAND: 9 That the company has a different life? Q. 10 Α. Oh, yes. I'm sorry. JUDGE THOMPSON: Thank you. 11 12 BY MR. ENGLAND: 13 Ο. The company uses the same data but applies different judgment, different analysis and arrives at a 14 different life than you do. Would that be a fair statement? 15 16 Α. The company arrives at a different life, yes. 17 Q. Based on the same data? I believe I had two more years of data, but 18 Α. 19 it's essentially the same data. 20 Q. Okay. Thank you. Schedule 4-80, Account 334.71, meter installations. Do you see that? 21 Yes, I do. 22 Α. 23 Q. Okay. What's in that account? 24 Α. Installation labor, meter coupling, meter 25 bars, meter yolks, meter fittings, connections and sleeves, 1897 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 meter vaults and boxes and stops. 2 Q. That's on the prior page. Right? 3 Α. Yes. I'm sorry. That's on --That's fine. That's all right. 4 Q. 5 You've selected an Iowa curve of 113-S2. Correct? 6 Yes. 7 Α. 8 Q. Was this one that you did or Mr. Adam? Give me just a second, please. 9 Α. I believe that Mr. Adam did this one. 10 Just for clarity, you did the previous ones we 11 Q. talked about, the mains-lock joint transmission, didn't you? 12 13 I think that was the first one in your work papers we talked 14 about. 15 Α. Okay. 16 Q. I stand corrected. 17 Α. I believe that you're right. This is one that 18 Paul did. 19 The lock joint tran--Q. 20 Α. Yeah. I stand corrected. I misstated that. Sorry. 21 Ο. Okay. Back to 4.80, we decided that was an 22 Iowa 113-S2 curve. Correct? 23 24 Α. Correct. 25 Ο. That means an average service life of 113 1898 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 years?

2 Α. Correct. 3 Q. And a maximum life of roughly 205 years; is that right? 4 5 That's right. Α. For meter installations? 6 Ο. For meter installations. 7 Α. 8 Q. Let's look at Schedule 4.93, please, and the 9 following page, but I believe this is Account 391, office 10 furniture and equipment? 11 Α. Yes. 12 Is this one you did or Mr. Adam, do you know? Q. I'm going to -- judging by the amount of 13 Α. dollars in the account, I'm going to presume that Mr. Adam 14 did it, but let me double check the balance. 15 I believe that's one that Mr. Adam did. 16 17 Something in your answer caused me to back up Q. for a second. You indicated that judging by the amount in 18 19 the account, you thought it was one Mr. Adam did. Does that 20 mean Mr. Adam did most of the accounts with the major dollars in them? 21 Actually Mr. Adam did the smaller dollar 22 Α. 23 accounts. I did the accounts I believe that added up to 24 somewhere around 85 percent of the plant in service. 25 Ο. Okay. And this account has approximately 1899 ASSOCIATED COURT REPORTERS

1 \$7.8 million in original cost plant in it? 2 Α. Yes. 3 Q. Okay. I'm sorry. Back to the Iowa curve shown on Schedule 4.94. 4 5 Α. Okay. I'm there. You've selected an Iowa 56-R1 curve; is that 6 Ο. right? 7 8 Α. That's right. 9 And, again, that's 56 years of average service Q. life for office furniture? 10 That's right. 11 Α. 12 And a maximum life of 110 years? Q. 13 Α. Yes. And that, in your judgment, is an appropriate 14 Q. curve and appropriate average and maximum life for office 15 16 equipment or furniture? 17 Α. For filing cabinets, desks. You know, you need to understand that what's living to 110 years is less 18 19 than 1 percent of the plant in that account. 20 Ο. I understand that. But even the average service life is 56 years. Correct? 21 22 Α. That's right. MR. ENGLAND: Okay. Your Honor, I don't think 23 24 I have any other questions of the witness, but I think I've 25 got a few outstanding exhibits that I need to take care of. 1900 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO

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1 I believe 127 was offered and received. 2 JUDGE THOMPSON: That's correct. 3 MR. ENGLAND: 125 was offered and received. That was the Direct Testimony of Mr. Smith? 4 5 JUDGE THOMPSON: That's correct. MR. ENGLAND: 126 I still have pending. I 6 need to provide documentation of where it was in that 7 8 WR-99-326 file. 9 JUDGE THOMPSON: That is correct. 10 MR. SCHWARZ: Which is that? MR. ENGLAND: Ms. Mathis' testimony. And I've 11 12 lost track --13 JUDGE THOMPSON: You may have forgotten, but you also were going to provide additional foundation for the 14 support agreement, Exhibit 99. 15 16 MR. ENGLAND: And Mr. Snodgrass and I have 17 talked. We haven't reached resolution on that, but he indicated it might not be necessary for us -- but that's not 18 a done deal and Mr. Jenkins will be back after the first of 19 20 the year, if need be, to lay a foundation for that one. 21 JUDGE THOMPSON: I should remind you, Mr. Schwarz, Mr. Gibbs' work papers of a pension issue --22 23 was that you or was that Snodgrass? I thought that was you. 24 MR. SCHWARZ: Probably should be me. 25 JUDGE THOMPSON: Exhibit 106. 1901

1 MR. SCHWARZ: What is it? If I have failed to 2 offer them, I would do so now. 3 JUDGE THOMPSON: Do you have them? You were going to provide copies. 4 5 MR. SCHWARZ: Oh, oh, oh, oh. JUDGE THOMPSON: I'll remind you about it 6 after the first of the year. 7 8 MR. SCHWARZ: I'd make a note of it, but the question is where will I not lose it? 9 JUDGE THOMPSON: Exactly. I'll remind you 10 about it after the first of the year. It's time for a --11 12 are you done, Mr. England? MR. ENGLAND: I believe I am. I think there 13 14 were only three exhibits I had here in the course of my examination. 15 16 JUDGE THOMPSON: It's time for a break for the 17 reporter. So we'll go ahead and --MR. SCHWARZ: I have no objection to 18 Exhibit 126, if --19 MR. ENGLAND: Ms. Mathis? 20 21 MR. SCHWARZ: Yeah. MR. ENGLAND: Thank you. 22 23 JUDGE THOMPSON: No objections to 126? 24 MS. O'NEILL: I don't have an objection as to 25 a authenticity. I'm not sure what the purpose of the 1902 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 offering is, if it's offered in general or for a limited 2 purpose. 3 JUDGE THOMPSON: It's offered to show that Ms. Mathis in that rate case found the data available to be 4 5 sufficient to do a depreciation study. Right? 6 MR. ENGLAND: Yes, your Honor. JUDGE THOMPSON: You see, I was awake. 7 8 MS. O'NEILL: I'm not going to object. 9 JUDGE THOMPSON: Very well. Exhibit 126 will 10 be received and made a part of the record of this 11 proceeding. 12 (Exhibit No. 126 was received into evidence.) JUDGE THOMPSON: We are in recess. Ten 13 14 minutes, and I mean 10 minutes. 15 (A recess was taken.) JUDGE THOMPSON: We're back on the record. 16 17 And I think we're ready for questions from the Bench for Mr. Macias. Commissioner Murray? 18 19 COMMISSIONER MURRAY: Thank you. 20 OUESTIONS BY COMMISSIONER MURRAY: 21 Ο. Mr. Macias, good afternoon. Good afternoon. 22 Α. 23 Q. Can you tell me why you are adopting the work 24 papers of Mr. Adam? 25 Α. Those are the work papers that were produced 1903 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 to determine the depreciation rates that I have set forth in 2 my Schedule 1. 3 Q. And Mr. Adam is still a member of the Staff. 4 Correct? 5 Yes, he is. Α. 6 Ο. And Mr. Adam is in the hearing room --Α. Yes. 7 -- today? 8 Q. 9 Α. Yes. 10 And my question is, why is Mr. Adam not Q. presenting his depreciation studies? Why are you doing it? 11 12 I guess to answer that question, the Α. 13 assignment of this case was mine and Mr. Adam assisted in doing the analysis of the data, running the computer 14 15 software, etc. Q. And how long have you been with the 16 17 Commission? Α. I have been with the Commission for about six 18 19 years. I've been in my current position for two. 20 Q. Okay. And how many people are in the depreciation group? 21 22 There are four engineers and a manager. Α. 23 Q. And where do you fit in that line of people in 24 terms of experience? 25 Α. I would be the newest employee. 1904 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 Ο. And who makes the decision as to which Staff 2 member will present the testimony? 3 Α. I believe that responsibility would fall with 4 the department manager. 5 Ο. And that would be? Lisa Kramer. 6 Α. 7 And the department manager then would make the Q. 8 decision as to whether it would all be presented by one 9 individual or whether there would be several or --I guess it -- you know, usually there's just 10 Α. one witness for depreciation in a rate hearing. 11 12 Okay. Out of the schedules that are in your Q. testimony, how many of those did you actually prepare? 13 14 Out of the schedules? Α. 15 Ο. First of all, how many schedules are in your 16 testimony? 17 Α. Are you referring to the depreciation studies service life statistics that's Schedule 4-1, or are you 18 referring to the spreadsheets? 19 20 I'm referring to every supporting work paper Q. 21 document that is attached to your testimony. 22 Α. Okay. 23 Q. If you know. You may not know that number 24 offhand. 25 Α. I don't -- I don't know the exact number of 1905 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 accounts offhand. The way that I kind of organized the work 2 was to sort the accounts by their plant balances. And then 3 I worked down from the highest dollar accounts. And I guess Mr. Adam would have worked his way 4 5 up, but I would say that due to his experience, he can work 6 more rapidly as far as manipulating the software, etc. And then I believe there was a point at which I had to begin 7 8 getting the testimony together so he would have completed a 9 few of the accounts after I had stopped working on it -- on 10 running the accounts. Okay. Did you make the decision in this case 11 Ο. 12 to recommend the methodology for treatment of net salvage 13 that is being recommended here, you personally? 14 I made the decision, yes. It was also the Α. Staff's position in general. 15 16 Ο. I want to turn to page 2 of your Direct 17 Testimony where you talk about your experience and the schools that you have completed. 18 19 Α. Uh-huh. 20 In any of those rate schools that you've Ο. attended -- it looks like you attended the NARUC utility 21 rate school and the NARUC -- let's see -- and the New Mexico 22 23 State University basic NARUC course? 24 Α. Yeah. That's the one that was held here. 25 Ο. Okay. 1906 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO

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A. It's just administered by the New Mexico State
 University people.

3 Q. Now, in those or in any rate school that you have attended was the method of treating cost of removal 4 5 that you're recommending here a method that was promoted? 6 Α. No, it really wasn't discussed too much. Okay. So how did you arrive at the decision 7 Q. 8 that that is the methodology that should be used for Missouri-American Water going forward? 9 10 As I -- as I mentioned, it's -- it is the Α. Staff's position and it has been the Staff's position -- and 11 in my two years in the department it's been kind of a 12 13 mentor -- mentoring relationship between myself and the 14 senior engineers in the department. So that's where I gained the knowledge to be 15 16 able to do the studies and present this testimony. And that 17 would be where I learned, if you will, about that -- Staff's treatment and my recommendation for the treatment of net 18 19 salvage. 20 And as you were being mentored, is that the Ο. 21 direction in which you were being mentored, that that was 22 the methodology that would be recommended going forward? 23 Α. That would be fair to say. 24 Ο. Okay. So is it fair to say that your decision

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was based more upon the recommendations from the Staff that

25

1 you were learning from than from your own independent 2 analysis? 3 Α. I don't know if I would characterize it like that. You know, we would discuss the way that the companies 4 5 address the net salvage issue. And then we would, you know, 6 compare that to what the Staff's position has been. And it is the position that I believe in and --7 8 Q. And why do you believe in it? What does it accomplish that you think is a worthy goal? 9 10 It allows the company to collect the money Α. that it needs to remove plant from service while charging 11 12 the customers the actual known amount of cost of removal. 13 Ο. And why is that better than the way -- why is 14 that better, in your opinion, than the way that the traditional method of treating net salvage recovers those 15 16 costs? 17 Well, my first concern would be that the Α. 18 traditional method -- there's -- you really don't know the 19 cost and you don't know what they're going to be if they're 20 going to be incurred. And the -- the calculation that is 21 performed to predict that really has no empirical basis behind it. And it just -- you can't predict the future that 22 23 way. 24 Q. Can you predict the future of the service life 25 of plant or is that an estimate also? 1908

1 Α. That is an estimation that is based on 2 empirical evidence. 3 Q. And are you saying there's no empirical evidence as to the cost of retirement of assets? 4 5 There's no empirical evidence to tie the Α. historic cost of retirements to the future predicted cost of 6 removal. 7 8 Q. And what empirical evidence is there to tie 9 the historical average service lives of plant to the 10 average -- the actual service life of the plant in the future? 11 12 The -- what we're doing is we are comparing Α. 13 the retirement pattern that is being experienced by the 14 plant in a particular account and we are comparing that to a model which was empirically developed at the Iowa State 15 University. It's widely accepted, you know, with 16 17 depreciation people. 18 And so in that respect, we're taking the 19 historical retirement patterns of the account and applying 20 it to an accepted empirically derived model to determine 21 average service life. And don't you do something similar to 22 Q. determine the cost of removal? 23 24 Α. No, you do not. 25 Ο. And you don't think that Mr. Spanos' studies 1909 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 showed any relationship to empirical data?

2 Α. They used the actual data as far as what the 3 cost of removal was relative to the cost -- original cost of the retirements, but they have no study -- and I believe he 4 5 even, you know, testified to that. There is no study that -- that shows empirically that that ratio will carry on 6 forward into the future. 7 8 Q. And he did testify, did he not, that at least every five years that ratio is re-examined? 9 10 Α. Yes, that's correct. And adjusted, if need be? 11 Q. 12 That -- I believe that was his testimony. Α. 13 Ο. And are the average service lives re-examined periodically as well? 14 15 Α. Yes, they are. 16 Q. And are they re-adjusted if it's found to be 17 necessary? 18 Α. Yes, they are. 19 And are they frequently re-adjusted? Q. 20 On the same period as, you know, every five Α. 21 years or so. Okay. So when you start out with the 22 Q. 23 estimation of average service lives, you really don't know 24 that they're accurate, do you? 25 Α. I guess I don't understand the question. 1910 ASSOCIATED COURT REPORTERS

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1 Ο. Well, if you have to adjust them every so 2 often, every few years, it appears that they don't 3 necessarily start out to be an accurate estimate of the actual service life, the asset. 4 5 Well, I don't know that that's true because Α. 6 the behavior of the plant in the accounts can change. You know, new technologies, management decisions, there's many 7 8 variables that can, you know, lengthen or shorten perhaps the average service life over time. 9 And --10 Q. 11 Α. So I guess what I'm trying to say is the 12 estimation that -- when you do a study, the estimation that 13 you give is an accurate estimation of the plant that is in 14 service at that date. And is not the cost of retirement subject to 15 Ο. 16 those same variables or similar variables? 17 I believe it would be. Cost of removal? Α. 18 Q. Cost of removal. 19 Α. Yes. 20 Yes. On page 4 of your Direct Testimony you Q. 21 list a number of cases and you say Staff has consistently 22 used this approach in the following cases. Were you here 23 for those cases? 24 Α. I was not in this department at that time. 25 Ο. Okay. So you're getting this information 1911 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 from -- who gave you that information?

2 A. I believe I got it from Steve Rackers or Ed3 Began.

Q. Okay. Now, can you tell me -- of those where
you list that as Staff's approach, can you tell me which
ones the Commission -- in which the Commission adopted
Staff's approach?

8 A. I believe that I can.

9 Q. Okay. Go ahead.

10 And this is just to the best of my knowledge. Α. The -- well, we'll start at the top, GR-2000-512 I believe 11 12 that the Staff's position was not taken. EC-2002-1, the 13 Staff's position was not taken in that case. GR-2001-621, 14 the Staff's position was taken there, expensing. GR-2002-356, the Staff's position was accepted. 15 16 WR-2000-866, the Staff's position was not accepted. 17 ER-2001-299, the Staff's position was accepted. And for the 18 rest of those the Staff's position was accepted. 19 Q. All right. And how many of those were by 20 stipulation or how many of those orders were by Stipulation

and Agreement?

22 A. I don't know the answer to that.

Q. So when you say Staff's position was accepted, you don't know, do you, whether the Commission made a determination on that issue?

1 Α. Not -- no. Not in all the cases, no. 2 Q. But someone told you to list these cases, is 3 that right, in support of Staff's position? 4 Α. Yes. 5 So would it be your position that this is only Ο. in support of Staff's position and it is not to indicate the 6 7 Commission's position? 8 Α. Yes. That's -- that's the intention of this 9 question and answer. 10 On page 6 of your Direct Testimony in the Q. 11 middle of page at line 11 your answer beginning on line 11 12 where you define depreciation expense, where did you -- and 13 you also define accounts annual accrual? 14 Α. Yes. Where did you get those definitions? 15 Ο. 16 Α. I believe that those are my own words 17 describing how the -- what the depreciation expense is and 18 what the plant in service balance -- or excuse me, the annual accrual is. 19 20 All right. Please turn to page 8, same Ο. testimony. Beginning on line 7 your answer there, just read 21 22 that whole answer out loud, if you would. 23 Α. The depreciation reserve access is a result of 24 the Staff's proposed depreciation rates being lower than the 25 existing rates. One reason Staff's rates are lower is 1913

1 because Staff's depreciations are based solely on the 2 recovery of original cost. The basis for the existing 3 depreciation rates have been influenced by factors such as 4 investment policy and future cost of removal. 5 And is it your position that those two factors 0. are no longer appropriate for consideration? 6 7 Yes. Α. 8 Q. And is it your understanding that they were 9 considered appropriate at the time that the current 10 depreciation rates were set? I would have to answer yes. 11 Α. 12 Q. Okay. On page 9 at the bottom of the page at 13 line 18 you indicate certain accounts there, beginning with 14 Account 303, and indicate that they have accrued their original cost and their depreciation rates have been set to 15 16 zero. Is that your testimony? 17 Α. Yes. Is there any dispute that these accounts have 18 Q. 19 been fully depreciated? 20 I am unsure, but I could probably look that up Α. if you -- if you would give me a moment to look at 21 22 Mr. Spanos' schedule. 23 Q. All right. Do you have his testimony? 24 Α. I have it right here, yeah. 25 I do not believe that those are in dispute. 1914 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 Ο. All right. On page 4 of your Rebuttal 2 Testimony beginning at line 13 --3 Α. Okay. Q. -- are you there? 4 5 Yes, I'm there. Α. 6 Ο. You say, Developing cost of removal and gross salvage percentages by comparing relatively recent cost of 7 8 removal and gross salvage amounts to the original cost of 9 retired plant amounts as old as 122 years produces net 10 salvage percentages as high as 60 percent. To clarify, the company is proposing to collect as much as an additional 11 12 60 percent of the original cost of plant in service for cost 13 of removal escrow salvage. Is that an accurate reading of your testimony? 14 Yes, it is. 15 Α. 16 Q. So is it accurate to say as assets age, the 17 cost of removal becomes a larger percentage of the original 18 cost? 19 I would -- I would say that is a historically Α. accurate statement. I don't know that that will continue to 20 21 be accurate into the future. Do you have any reason to suspect that it 22 Q. would not? 23 24 Α. That -- that the percentage would not continue 25 to grow? 1915 ASSOCIATED COURT REPORTERS

1 Ο. Correct. In relation to the original cost of 2 the asset. 3 Α. Sure. If, for example, the company was to start retiring plant in place and not removing it, there 4 5 would be substantially less cost of removal than there would 6 be if they're pulling pipe out of the ground, for example. But do you have any reason to think that that 7 Q. 8 is the direction that the company is going in treating retired assets? 9 10 Α. I -- I really have no way of knowing what the 11 company is going to be doing 20 years from now. 12 Q. So you really don't know whether that trend 13 will continue? I guess so. No, I don't know if the trend 14 Α. 15 will continue or not. 16 Ο. On page 5 of your Rebuttal Testimony at 17 line 13 the question is posed in this way, Given that the 18 future cost of removal and gross salvage formula proposed by 19 MAWC is inappropriate for rate-making, what is the Staff's 20 position on the collection of monies that the company should collect in rates for cost of removal and gross salvage? 21 And my question to you -- I realize you didn't 22 23 ask the question, you answered it, but why is it a given 24 that the future cost of removal and gross salvage formula 25 proposed by MAWC is inappropriate for rate-making?

1 Α. I -- I believe that that is just in reference 2 to my answer to the previous question where I say that it is 3 not appropriate to increase depreciation rates. Okay. So given that that is Staff's position? 4 Q. 5 I guess that -- that would probably be more Α. 6 accurate. And do you know at what point in time it 7 Q. 8 became Staff's position that that was inappropriate for 9 rate-making? 10 No, I do not. I don't know the date. Α. But you are aware that it was not Staff's 11 Q. 12 position forever; is that correct? 13 Α. Yes. Yes. And at the beginning of line 18 in the middle 14 Q. of the sentence there highlighted, The Staff's position is 15 16 to allow the company to collect the cost of removal less 17 gross salvage based on the company's recent historical 18 costs. 19 And you're talking about through expensing 20 versus through accumulating depreciation; is that correct? 21 That's correct. Α. 22 Q. On the next page, page 6 of that Rebuttal 23 Testimony, where you say there's -- I'm on lines 11 and 12, 24 There's no indication that the company is retaining the 25 customer-supplied cash until the time it will be needed. 1917 ASSOCIATED COURT REPORTERS

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1 There's no requirement to maintain a separate 2 fund for accrued depreciation, is there? 3 Α. Not for the water utility, to my knowledge, 4 no. 5 Is there any traditional regulatory treatment? Ο. 6 Α. The only circumstance I can think of would be a nuclear power plant that's handled a little bit different. 7 8 But, in general, to answer your question, no, they are not 9 required. 10 But yet you are indicating some concern there. Q. Is your concern that the company won't be able to pay the 11 12 cost of removal? 13 Α. That -- that is -- yes, that -- there's a 14 potential for that to happen, I believe, and that causes 15 concern. 16 Ο. Next page, beginning actually on the bottom of 17 page 6 and going on to the top of the page, you're speaking 18 about the company's proposal to switch from the home life 19 technique to the remaining life technique for adjustment? 20 Α. Okay. Yes. And what is the dollar difference that that 21 Ο. change amounts to? Can you quantify that? 22 23 Α. I can give you an approximation based on 24 12/31/2002 plant balances. 25 Ο. All right. 1918 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

A. Would that be sufficient? I believe it's
 \$275,000 a year.

Q. And that adjustment based on a remaining life formula check, is that similar to what Staff and the company were recommending in the 1997 rate case as to the old St. Joseph plant, or do you know?

A. Well, I don't really know, but I don't believe
8 it is. The remaining life is adjusting for a reserve -9 theoretical reserve versus book reserve variance and it's -10 it's ratably over the remaining life of the account.

11 Q. Okay. Turn to your Surrebuttal Testimony, if 12 you would, on page 2. And the reference that you are citing 13 there from public utility depreciation practices, you set 14 out further text to what Mr. Spanos had provided in his 15 testimony; is that correct?

\_

16 A. That's right.

Q. And your further text indicated that some Commissions have abandoned the above procedure, which was talking about gross salvage and cost of removal being reflected in depreciation rates and that the reference states that some Commissions have abandoned the above procedure and moved to current period accounting for gross salvage and/or cost of removal.

And what I want to ask you is if we assumed arguendo that the Staff's position is correct and that the

1 Commission should adopt the current period of accounting, 2 shouldn't there be some reluctance by the Commission to make 3 a flash-cut change in methodologies that would result in significantly -- over \$13 million significantly lower 4 5 revenue requirement for the company? Shouldn't that be a 6 concern to the Commission when it makes a flash-cut change in methodologies that results in that much of a change in 7 8 revenue requirement?

9 The change in the revenue requirement that is Α. 10 occurring by expensing the current level of net salvage as opposed to collecting the predicted amount of salvage and 11 rates is -- the company is collecting all the money that it 12 13 needs to remove the plant under the Staff's position. 14 Under the company's position, they're collecting extra dollars now on the theory that they will 15 16 need it in the future to remove that plant. So I guess, you 17 know, what my concern is, is that they are collecting this 18 money for cost of removal and using it for something else. 19 Q. But they're collecting depreciation on assets 20 that they have already expended the money for also. Correct? 21 22 Α. They are recovering -- yes, their investment 23 in -- in the recovery of the original cost, they're

24 recovering their investment. With the net salvage, they are 25 collecting money to remove plant in the future, okay, and

1 they're booking it, but the -- the cash that they're 2 collecting today that is to be spent in the future is not 3 going to be there. 4 Q. That has been the methodology that we have 5 used since at least 1987 for this company; is that correct? 6 Α. I -- I believe that's probably true. 7 And should we have any concern for making a Q. 8 flash-cut change in methodology that results in a 9 significant change in revenue requirement for a company? 10 Α. I don't know that I am prepared to testify on the impact of the revenue requirement to the company. 11 12 Did you consider it? Q. 13 Α. No. COMMISSIONER MURRAY: That's all I have. 14 15 Thank you. 16 THE WITNESS: Thank you. 17 JUDGE THOMPSON: Commissioner Forbis? QUESTIONS BY COMMISSIONER FORBIS: 18 19 Just a few questions and I think -- I'm sorry Q. 20 I missed some of your earlier testimony, so I may be repeating a few things. I think Commissioner Murray's 21 touched on it quite a bit. 22 23 So your position with regard to the whole cost 24 of removal and salvage is to expense it out? 25 Α. That's right. 1921 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO

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1 Ο. And then the other position is to depreciate 2 as you go along, right, and build it up. There's been an 3 argument made by other parties that there is a detriment to the consumer because it can -- later on they're paying for 4 5 both new plant and the cost of removal instead of having paid for it all along. So you'll get to a point where the 6 impact on future customers is exaggerated, if you will, 7 8 because of that practice. Do you agree with that notion or what's your comment on that? 9 10 Future customers will be paying for new plant Α. as well as removal of the old plant --11 12 Q. Yes. 13 -- as opposed --Α. 14 Having prior customers having expensed it Q. along the way so the impact is sort of minimized on any 15 16 given subset of customers through the years that way, 17 arguably. 18 Α. I guess the first point I would want to make 19 is that with expensing, the costs of removal is known. With 20 collecting the net salvage percentage in a depreciation 21 rate, okay, you are predicting the future, forecasting what this cost will be many, many years into the future. And I 22 23 don't believe that the method that the company's proposing 24 to calculate that future cost of removal can, in fact, 25 accurately predict that -- that dollar amount.

1 Ο. So even though -- because of this inability to 2 predict that amount, help me state this correctly, that 3 offsets the risk, if you will, to asking future customers to pay what might be a large amount? 4 5 I guess -- I guess I don't understand what you Α. 6 mean by paying that -- a large amount for the removal. Yeah. That comes in at the -- you pay that at 7 Q. 8 the time it happens, right, as opposed to building it into 9 the rate. So you could get to a point where, as I 10 understand it, there could be a fairly large amount of money going along with that particular activity in a given year as 11 12 well as the standard amount of paying for the plant as it 13 goes on, so you could make an argument that that could be a 14 larger amount than otherwise -- in a given year as opposed to the other method. Does that make sense? 15 Well, I don't know. Maybe I'm confusing --16 Α. 17 I'm probably confusing it myself. Q. 18 Α. -- what you're saying. In a mass property 19 account you will have retirements every year, you know, 20 like --21 Ο. Yeah. -- mains. You've got mains retiring and 22 Α. 23 there's costs associated with removing those. So either you -- all of the customers on -- I believe under both 24 25 methods are paying for the company's investment in plant, 1923

they're paying the return of that investment ratably over
the estimated life of that asset.

3 Now, under the Staff's method, the cost to remove the plant that has already been collected, you know, 4 5 given that our estimates are relatively close, with the 6 Staff's method, customers are paying the actual amount that is -- that it costs to remove the plant. 7 8 Under the company's method, customers are 9 paying every year a forecast -- a rat-- ratably paying for 10 the average service life of the account a forecasted unknown amount of salvage. And as -- as -- as far as the magnitude 11 12 of that, I don't know that I can say given the way that the 13 plant in these mass property accounts retires -- I don't 14 know that I can speak to the magnitude of what it would be. It seems like it would even out. 15 16 Q. Okay. 17 But I -- maybe I'm not understanding your Α. 18 question. No. I think you're -- you probably do as well 19 Q. 20 as I can explain it. 21 The other question I was going to ask, the ISRS, are you familiar -- you didn't talk about it much in 22 23 your testimony, so are you a guy to talk to about that? 24 Α. I did not make any mention of the ISRS and 25 I --

1 Ο. You prefer we talk to Mr. Rackers or somebody 2 coming along? 3 Α. You'd probably, yeah, do better talking to them. I couldn't answer many questions I'm sure. 4 5 COMMISSIONER FORBIS: Okay. Thank you. JUDGE THOMPSON: Commissioner Clayton? 6 7 COMMISSIONER CLAYTON: No questions. 8 QUESTIONS BY JUDGE THOMPSON: 9 Mr. Macias, do you know whether Mr. Spanos' Q. 10 study included a variance between the theoretical reserve and the book reserve? 11 12 I believe that it did and that is -- the value Α. 13 of that was approximately \$275,000 a year. That's the -using the remaining -- remaining life calculation as opposed 14 to the whole life calculation. The remaining life amortizes 15 16 any variance over the remaining life of the account. 17 Q. Okay. So he found a variance, the variance was positive and using that method it is amortized over the 18 19 remaining life of the account and goes to an amount of 20 \$275,000 annually. Do I understand you right? 21 He found that the reserve was deficient Α. \$275,000 annually. 22 23 Q. That's to amortize the deficiency? 24 Α. Yes. For the remaining life of the assets in 25 the account. 1925

1 Ο. The deficiency would actually be some sum? 2 Α. Correct. 3 Q. 275 is some fraction of that sum? Α. That is correct. 4 5 Ο. Do we know what that amortization period is, 6 the composite amortization period? 7 Α. I don't -- I don't know if he provides that or 8 not. 9 Okay. Very well. Q. 10 Now, you say he used the remaining life method? 11 Α. 12 That's correct. 13 Ο. And Staff uses the whole life method? 14 Α. Yes. What's the difference, if you can say that in 15 Ο. 16 just a few words? 17 Α. Okay. Essentially the remaining life technique will adjust for any variance between the book 18 19 depreciation reserve and the theoretical depreciation 20 reserve. And it will allocate that difference over the remaining life of the assets --21 22 Q. Okay. 23 Α. -- in the various accounts. 24 Q. Is that why it has that name, remaining life? 25 Α. Yes. 1926 ASSOCIATED COURT REPORTERS

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1 Ο. Because it has the amortization, the variance 2 built into it? 3 Α. It's because the -- instead of using the average service life as a denominator in the equation, a 4 5 remaining life is calculated for an account I think is why it's named that, but essentially it is a method of 6 adjustment. 7 8 Q. Okay. So in St. Louis where we have the issue 9 on the amortization of a reserve deficiency from two 10 previous cases, I assume they were not using the remaining life method? 11 12 That's right. Α. And that's why the Commission ordered 13 Ο. amortization over 10 years? 14 15 That's correct. Α. 16 Q. Would it have to do with remaining life? 17 It would be inherent in the calculation. Α. So the whole life method, is that where you 18 Q. 19 use the average service life in the denominator? 20 Α. Correct. 21 Ο. And then any variance the Commission has to deal with separately? 22 23 Α. Yes. 24 Q. Such as happened in St. Louis in the past? 25 Α. Such -- yes. 1927 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 Ο. Okay. Now, does the definition of 2 depreciation in the Uniform System of Accounts include cost 3 of removal net of salvage? Α. The definition includes a term called "service 4 5 life." And the definition of service life is the original 6 cost less a net salvage, which is a gross salvage minus the cost of removal. So then you'd just -- when cost of removal 7 8 is greater, you'd add cost removal to the original cost. 9 Okay. The Commission has directed through a Q. 10 regulation, in fact, that water utilities of this size adhere to Uniform System of Accounts; isn't that correct? 11 12 I believe so. Α. 13 Ο. So doesn't that mean that the Commission has 14 essentially, by regulation, directed that depreciation include cost of removal net of salvage? 15 I -- I'm -- I would say the Staff's method 16 Α. 17 does include cost of removal net of salvage just on a 18 current basis. And, you know, the Commission would not 19 necessarily have to agree that to the extent that you can 20 predict the future, what the cost of removal is going to be. The cost of removal, I believe, can be considered on a 21 current level basis. 22 23 Q. I understand it's two different ways of doing 24 it, and I understand it's each in its own way intellectually 25 consistent and each has its benefits and drawbacks, I 1928

1 suppose, depending on who you are. My question is whether 2 the Uniform System of Accounts mandates the system that the company is here proposing? 3 4 Α. I guess I -- I wouldn't know -- if that's a 5 legal question, I wouldn't know the answer. 6 Ο. Well, it's really an accounting question, isn't it? I mean --7 8 Α. I -- I think that to the extent that you feel 9 comfortable predicting what the future cost of removal is 10 going to be, you can consider that in that definition. JUDGE THOMPSON: We're in here for Mr. Rackers 11 12 later today. Right? Didn't we figure out you're an 13 accountant? I'll ask you this question. BY JUDGE THOMPSON: 14 Now, Mr. England used this exhibit. And if we 15 Ο. 16 were, in fact, going to understand -- this isn't exactly 17 right for company's position, is it? 18 Α. No. 19 This should say 100 percent minus -- and then Q. 20 there should be -- actually 100 percent plus and then there should be a parenthesis, shouldn't there, and inside the 21 parenthesis should it not say cost of removal minus net 22 23 salvage, closed parenthesis? Isn't that what they're 24 proposing? 25 Α. It would actually say 100 percent minus, open 1929 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO

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1 parenthesis, gross salvage minus cost of removal, which is 2 net salvage. 3 Q. Okay. Okay. That was going to be my next question. What's the difference between gross salvage and 4 5 net salvage? Cost of removal. 6 Α. Cost of removal. Very good. Very good. You 7 Q. 8 know, it all starts to make sense eventually. 9 JUDGE THOMPSON: And that's all the questions that I have. Any further questions from the Bench? 10 Well, then, Ms. O'Neill? 11 12 MS. O'NEILL: Thank you. RECROSS-EXAMINATION BY MS. O'NEILL: 13 Good afternoon, Mr. Macias. 14 Q. 15 Good afternoon. Α. 16 Q. Now, is the purpose of your depreciation study 17 to determine the most appropriate depreciation rates to recommend in this case? 18 19 Α. Yes. 20 And is it your opinion that you are Q. recommending the most appropriate depreciation rates for 21 this company in this case? 22 23 Α. I believe I am. 24 Q. And is it your opinion that the depreciation 25 rates that you are proposing will allow the company to 1930 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO

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1 appropriately recover the original cost of its capital 2 investment in plant? 3 Α. Yes. And by also allowing for the method that 4 Q. 5 you -- that the Staff is proposing on cost of removal, will 6 the company also be able to recover those costs at the time 7 that items of plant are removed? 8 Α. Yes. 9 Now, when we talk about original cost -- oh, Q. wait a minute. Never mind. 10 You've had some discussions here and one of 11 12 the things you've talked about are mass property accounts. 13 What's a mass property account? 14 An example would be mains, services, meters Α. where you have large number of units. 15 16 Ο. And the St. Joseph plant that was retired, is 17 that a mass property account or a different kind of account? 18 Α. I believe that would be a life span account. 19 Okay. Commissioner Murray asked whether or Q. 20 not you had considered the impact to the company on revenue 21 requirement of this change in depreciation rates. Did you consider the impact of this change in depreciation rates on 22 23 the company's customers? 24 Α. Yes, I did. 25 MS. O'NEILL: Okay. No further questions. 1931 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO

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1 JUDGE THOMPSON: Mr. England? 2 RECROSS-EXAMINATION BY MR. ENGLAND: 3 Q. Specifically, Mr. Macias, following up on that question, what was your consideration of the impact on 4 5 customers? 6 Α. My concern was that the customers using the traditional method, as you've coined it, would be paying an 7 8 unknown future amount that has no statistical basis or isn't 9 based on empirical study of any kind. 10 Ο. Is it unreasonable, in your opinion, for customers to contribute now to the cost of future retirement 11 12 or is your concern over the amount that they're contributing 13 and whether that's accurate or not? I believe my main -- my main concern rests in 14 Α. the accuracy of the amount. 15 16 Ο. Okay. And then I take it as part of your 17 consideration, you did not consider the impact that your recommendation would have upon cash flow and internally 18 19 generated funds; is that right? 20 Yes, that's right. Depreciation is not a cash Α. flow mechanism. 21 Okay. And similarly then, you wouldn't be 22 Q. 23 concerned with the company's ability to replace existing 24 plant or add to its existing plant as far as internally 25 generated funds are concerned? 1932 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO

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1 Α. I don't know that I would say I'm not 2 concerned about it. It was not a consideration in my study. 3 The money that they're collecting for cost of removal, I 4 don't necessarily agree that that should be used for cash 5 flow needs. 6 Ο. I'm talking just your overall recommendation, which includes elimination of the net salvage from their 7 8 accrual rate as well as lengthening lives and a reduction --9 or excuse me, elimination of the reserve deficiency 10 amortization. So I'm talking about the whole package here. What was the question? 11 Α. And apparently you're not concerned about the 12 Q. 13 impact that's going to have on the company's ability to fund 14 either replacements or new addition to plant? I don't believe it's appropriate for those 15 Α. 16 considerations in a depreciation study. 17 Do you think it's appropriate for this Q. Commission to consider the company's ability to fund new 18 19 additions as well as replacements? 20 I believe the Commission, yes, should be Α. concerned, but the depreciation rate is not the appropriate 21 place to handle that concern, if it's a concern. I don't 22 know if it's a concern. 23 24 Ο. Okay. You indicated in a response to 25 Commissioner Murray that you didn't know what the company 1933 ASSOCIATED COURT REPORTERS

1 will be doing in 20 years from now. Do you recall that? 2 Α. Yes. 3 Q. Is it fair to say you've had no conversations with company's management to determine their plans for the 4 5 future regarding investments of new plant, investments for 6 replacement of plant and things of that nature? 7 Α. I have had discussions with various company 8 personnel about their plant and -- but nothing for 20 years 9 down the line. 10 Ο. Management's plans? 11 Α. Probably not. 12 Do you agree or disagree with Mr. Spanos who Q. believes that that's a factor to take into consideration 13 when you're trying to develop appropriate service lives and, 14 therefore, depreciation rates? 15 16 Α. I agree that that is -- would be an 17 appropriate factor. 18 Q. Okay. Let me switch gears on you a little bit 19 briefly. And hopefully not to confuse anything that -- more 20 than might be already confused, but you mentioned in the 21 remaining life methodology there would be an amortization, I believe, of the deficiency or excess. Do you recall that? 22 23 Α. I -- I don't remember my exact words. If 24 those were them --25 Ο. What I'm trying to get at, I think, 1934 ASSOCIATED COURT REPORTERS

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1 technically there is no amortization in a remaining life? 2 Α. That's true. That was the wrong word choice. 3 MR. ENGLAND: Okay. Thank you. I have no other questions. 4 5 JUDGE THOMPSON: Thank you, Mr. England. Mr. Schwarz? 6 REDIRECT EXAMINATION BY MR. SCHWARZ: 7 8 Q. I believe you had a number of questions about studies that support the life estimation and studies that 9 10 may or may not support the cost of removal formula. Do you recall those questions? 11 12 Α. Yes. 13 Ο. Would you agree with me that the scientific 14 method, at least in part, says that you make a hypothesis and then you test the hypothesis to see if it's true? 15 16 Α. I would agree. 17 And would you agree that as far as the life Q. 18 estimate is concerned, that you have a hypothesis that given 19 the original cost of utility plant by vintage and historical 20 retirements from that original cost by vintage, that you can predict the pattern of future retirements of the plant that 21 is then in service? 22 Yes. I would agree. 23 Α. 24 Q. So that's the hypothesis? 25 Α. Sure. 1935 ASSOCIATED COURT REPORTERS

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1 Ο. And would you agree that the Bulletin 125 that 2 developed the Iowa curves is such an empirical study that 3 tests that hypothesis? 4 Α. Yes, it is. 5 Would you agree that the formula for cost of Ο. 6 removal states the hypothesis that I know what the original cost of certain plant was and I know what the cost to remove 7 8 that plant has been and, therefore, I can predict future cost of removal based on that ratio? 9 10 Α. That -- yes. That's the hypothesis? 11 Q. 12 That's my understanding of the hypothesis, Α. 13 yes. 14 Has there ever been an empirical study to Q. 15 validate or support that hypothesis? 16 Α. Not to my knowledge, no. 17 So that's an untested hypothesis? Q. 18 Α. As far as I know, yes. 19 And do you think that it's reasonable for Q. 20 rate-making purposes for the Commission to adopt what is 21 essentially a long-standing but untested hypothesis? I don't think that's appropriate. 22 Α. 23 Q. Do you recall a question on cross-examination 24 about a depreciation -- a composite depreciation rate in 25 State A being 2.7 percent and a composite depreciation rate 1936

1 in State B being 1.68 percent and wouldn't an investor 2 prefer the 2.7 percent state for his investment? 3 Α. I remember the question. Q. Would there be other factors that might 4 5 influence an investor's decision as to where he might want to make his investment? For instance, the overall 6 management and maintenance of the property? 7 8 Α. I imagine those would be factors. 9 ο. Whether or not the investor has a long-term or short-term investment horizon? 10 11 Α. Sure. 12 There would be other factors as well perhaps? Q. 13 Α. I imagine there would be. Is it safe to say that at least with respect 14 Q. to the old MAWC properties that there is retirement data 15 16 missing from the records of the company? 17 Α. Yes. Did Staff lose that data? 18 Q. No. The Staff did not lose that data. 19 Α. 20 Is the company responsible for maintaining its Q. depreciation records? 21 22 Α. Yes. 23 Q. You had some questions here after lunch 24 concerning or asserting that the reserve deficiency is a 25 function of various parameters, lives and the retirement 1937 ASSOCIATED COURT REPORTERS

1 dispersion pattern. Do you recall those questions? 2 Α. Yes, I recall. 3 Q. Wouldn't another parameter be the net salvage or cost of removal factor in the depreciation rate? 4 5 Yes. That would be another one. Α. And isn't it true that if the Commission would 6 Ο. adopt the Staff's approach on the cost of removal and net 7 8 salvage, that that alone is adequate to eliminate the 9 reserve deficiency? I believe that that would be correct, yes. 10 Α. You recall that Mr. England took you through a 11 Ο. 12 series of accounts where the Staff was prescribing what appear to be very long lives. Do you recall those? 13 14 Α. Yes. 15 Let me ask you this. Are you aware that there Ο. 16 are gothic cathedrals still standing in Europe that have 17 been in existence for hundreds if not thousands of years? 18 Α. Sure. 19 And such buildings may contain acres of glass; Q. is that correct? 20 21 I don't know the exact amount, but I imagine Α. they have quite a bit of glass. 22 23 Q. You've seen pictures of them with the big 24 stained-glass windows? 25 Α. Sure. 1938 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 Ο. And are the types of buildings that we're 2 talking about for housing pumps and things of that nature 3 anywhere near as delicate as those structures? 4 Α. I don't believe they would be, no. 5 Are you aware that there are buildings in the Ο. United States that are as old as 300 years? 6 7 Α. Sure. 8 Q. Do you know how much more the company is 9 collecting currently for cost of removal through the 10 depreciation rate than it is spending on cost of removal currently? 11 12 I believe I have the answer to that question. Α. 13 I just need to find it. 14 Q. That's fine. I believe the -- I believe that the company is 15 Α. 16 collecting approximately 4.5 million for cost of removal 17 while spending approximately 700,000 a year. 18 Q. Thank you. There were some questions about the fact that 19 20 costs now are -- costs of removal now may be higher than they have been in the past. Do you recall that? 21 22 Α. Yes. 23 Q. Do you recall and do you know that some of 24 this plant has been in service since 1881 or 1882? 25 Α. I believe the plant dates as far back as 1880 1939 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO

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1 for the Missouri-American properties. 2 Q. So are you aware or do you remember from your 3 history lessons that there was a depression in 1893 in the 4 United States? 5 I have heard that, yes. Α. Did the United States suffer another economic 6 Ο. depression between 1929 and, say, 1940? 7 8 Α. Yes. 9 And if you had looked of cost of removal in Q. 10 those periods, might you get a different impression than you do looking just at the immediate recent history? 11 12 I imagine you probably would. Α. 13 Ο. And with plant that has an average service life of 60, 80, 90, 100 years, are you likely to go through 14 several business cycles boom and bust? 15 16 Α. Yes. At least historically we have. I'm not 17 predicting that we will again. Very good. 18 Q. 19 Were you here earlier when Mr. Jenkins 20 suggested that in order to meet its need to fund plant 21 additions and replacements, that it would be possible for the company to issue debt and equity? 22 23 Α. I was here for that. 24 Ο. If the Commission believes that the company 25 does have a need for additional funds for its plant, 1940 ASSOCIATED COURT REPORTERS

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1 wouldn't it be cleaner for the Commission to simply order 2 ratepayers to contribute cash directly to the company rather 3 than try to do it through adjusting the depreciation 4 calculations? 5 Α. It would be cleaner. 6 Ο. Thank you. 7 Mr. England asked you about reduction in 8 internally generated funds and cash flow due to changes in 9 depreciation. Correct? 10 Α. Yes. Are there other items besides depreciation 11 Ο. 12 expense that affect internally generated funds and cash 13 flow? 14 I imagine there would have to be, yes. Α. 15 So if you compute -- well, assume for a moment Ο. 16 that there is. If you compute the percentage reduction in 17 depreciation expense, that doesn't necessarily translate into the same percentage reduction in cash flow and 18 19 internally generated funds. Correct? 20 Α. I believe that's a correct statement. MR. SCHWARZ: I think that's all I have. 21 JUDGE THOMPSON: Thank you, Mr. Schwarz. 22 23 You may step down Mr. Macias. Who's the next witness? Is it Mr. Rackers or 24 25 Mr. Began? 1941

1 MR. SCHWARZ: Mr. Began. 2 JUDGE THOMPSON: Step up, Mr. Began. You've 3 been waiting here patiently I think for several days. Go ahead and spell your last name for the reporter, please. 4 5 THE WITNESS: It's B-e-g-a-n. 6 (Witness sworn.) JUDGE THOMPSON: You may inquire. 7 8 ED BEGAN testified as follows: 9 DIRECT EXAMINATION BY MR. SCHWARZ: 10 By whom are you employed and in what capacity? Q. I'm a regulatory auditor for the Missouri 11 Α. 12 Public Service Commission. 13 Ο. And did you cause to be pre-filed in this case Direct Testimony that's been identified as Exhibit 13 and 14 Surrebuttal Testimony that has been identified as Exhibit 15 16 65? 17 Yes. Α. 18 Q. Do you have any corrections or additions to make at this time? 19 20 Α. No. 21 Ο. iF I asked you the same questions, would your answers be the same? 22 23 Α. Yes. 24 0. And are those answers true and correct to the 25 best of your information and belief? 1942 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 Α. Yes. MR. SCHWARZ: I would offer Exhibits 13 and 65 2 3 and tender the witness for cross-examination. 4 JUDGE THOMPSON: Any objection to the receipt 5 of Exhibits 13 and 65? MR. ENGLAND: No objection. 6 JUDGE THOMPSON: Hearing no objections. 7 8 Exhibits 13 and 65 are received and made a part of the record of this proceeding. 9 (Exhibit Nos. 13 and 65 were received into 10 evidence.) 11 12 JUDGE THOMPSON: Ms. O'Neill? 13 MS. O'NEILL: No questions, your Honor. JUDGE THOMPSON: Mr. England? 14 MR. ENGLAND: A few. Thank you. 15 CROSS-EXAMINATION BY MR. ENGLAND: 16 17 Good afternoon, Mr. Began. Q. 18 Α. Hello. 19 I've got a few questions on your Surrebuttal Q. 20 and primarily your Schedules 1.1, 1.2, 1.3. 21 Α. All right. Let me start first with Schedule 1.1, if I 22 Q. 23 may, please. And I believe that this is a reproduction of a 24 schedule attached to Mr. Stout's paper that's attached to 25 Mr. Spanos' Rebuttal Testimony; is that correct? 1943

1 Α. That's my understanding. 2 Q. I think you indicate source, JJ Spanos 3 Rebuttal Testimony Schedule JJS-2, Table D, as in David, 1. 4 Correct? 5 Yes. Α. Okay. First question or so I have on this is 6 Ο. looking at the first two columns there, that pretty much 7 8 graphically describes the debate, doesn't it, over the 9 expensing of net salvage versus the accrual of net salvage and the depreciation rate? 10 11 Α. Yes. 12 On the one hand, if you accrue it in the Q. 13 depreciation rates, ratepayers for 10 years under this analysis would pay \$16.29 each year for a 10-year period? 14 15 Correct. Α. 16 Q. And under the expensing, ratepayers in year 10 17 would pay the full amount of net salvage of 162.90? That's the cost of removal --18 Α. 19 Okay. I'm sorry, cost of removal. Q. 20 -- at the end, yes. Α. 21 And as I said, that sort of graphically Ο. demonstrates the fact that under Staff's expensing plan, 22 23 ratepayers in years 1 through 9 make absolutely no 24 contribution to the cost of removal even though that plant 25 was in service and providing service to them. Right? 1944

1 Α. That's correct. Okay. Now, I looked at Mr. Stout's Table D-1. 2 Q. 3 Do you have that in front of you? 4 Α. No, I don't. I just have that excerpt that 5 was in my Surrebuttal Testimony. If your counsel could provide you with a copy, 6 Ο. 7 I have a question or two about that. 8 Α. All right. 9 As I understand, as you I think get into Q. Schedule 1.2, you take issue with Mr. Stout's calculation of 10 income taxes or lack thereof; is that right? 11 12 Yes. Α. Okay. But if you look at Mr. Stout's 13 Ο. Table D-1 up at the very top three lines, actually third 14 line that says flow through --15 All right. Go ahead. 16 Α. 17 Q. -- do you see that? 18 Do you understand that that table is a 19 calculation of revenue requirements based on the 20 flow-through method of determining income taxes for the 21 utility company? 22 I'm not familiar with the term "flow through" Α. 23 in this application. 24 Q. Okay. You don't know that for rate-making 25 purposes depreciation expense as a deduction for income 1945 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 taxes that it is normalized as opposed to flow through by 2 this Commission? Do you know that? 3 Α. No. Q. Okay. Do you understand the difference 4 5 between flow through and tax of normalization, Mr. Began? 6 Α. No. Shortens up that line of questioning. 7 Q. 8 And then finally on Schedule 1.3, and I think 9 I have to go to your testimony to make sure I get this 10 correct, but that is an attempt to show the revenue requirement, net present value of costs of removal using a 11 12 10 percent discount rate -- 10 percent discount rate which is equal to the utility's cost of capital. Correct? 13 14 Α. Correct. Okay. And using a higher discount rate that 15 Ο. 16 you indicate is comparable to its cost of capital tilts the 17 net present value calculation in favor of the ratepayer; is that right --18 19 That's correct. Α. 20 Ο. -- for expensing? 21 Would it be fair to say that if you use a lower discount rate than the 8 percent in the prior 22 23 schedules, it tilts the net present value against the 24 ratepayer of the expensing method? 25 Α. Yes. 1946

1 Ο. Okay. And for purposes of this case, would 2 you accept -- better not ask that question. 3 Do you know what the Staff's proposed cost of capital is for this company? 4 5 Α. It was below 10 percent. Below 8 percent, wasn't it, sir? 6 Ο. 7 Α. I was going to say that, but my memory was 8 just a little bit fading. 9 Roughly in the 6 to 7 percent, isn't it? Q. I believe that's correct. 10 Α. So if we use that as our discount rate, in 11 Q. 12 essence, the net present value calculation cuts against the ratepayer under the expensing method. Correct? 13 14 Α. Yes. 15 Ο. Thank you, sir. 16 You have taken a five-year average, as I 17 understand, of actual costs of removal for purposes of the Staff adjustment in this case? 18 19 Α. No. Our general average was a four-year 20 average --21 Ο. I'm sorry. 22 -- with one exception. Α. 23 Q. Okay. In any event, the point I want to get 24 at is you look at the most recent four years in this case? 25 Α. Most recent four years was all that was 1947 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO

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1 available. The earliest year, 1998, was not available. 2 Q. Okay. Well, I'm not so much concerned with 3 exactly what you did but the nature of it. And that is to look back, determine cost of removal of specific plant over 4 5 a period of time and average that. Right? The total net cost of removal, cost of removal 6 Α. net of any salvage value recorded by each district in each 7 8 of those four years. 9 And that's a backward-looking analysis? Q. 10 Α. I agree. Do you have any concerns, sir, that someone in 11 Q. 12 the rate-making setting, Staff, Public Counsel for that 13 matter or an intervenor in the future may determine or argue 14 that those costs are nonrecurring? Isn't that a possibility? 15 16 Α. Yes, it is a possibility. 17 Okay. So by that rate-making technique, we Q. wouldn't be allowed any cost of removal if it was determined 18 19 that based on prior years experiences, technically those 20 costs are nonrecurring. Right? 21 With those assumptions, that would be that --Α. the obvious following conclusion. 22 23 Q. And that would not be a fair result, would it, 24 sir? 25 Α. Doesn't seem reasonable to me. 1948 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 MR. ENGLAND: Thank you, sir. I have no other 2 questions. 3 JUDGE THOMPSON: Thank you, Mr. England. Questions from the Bench, Commissioner Murray? 4 5 COMMISSIONER MURRAY: I have none. JUDGE THOMPSON: Commissioner Forbis? 6 COMMISSIONER FORBIS: I have none. 7 8 JUDGE THOMPSON: I have no questions. Redirect, Mr. Schwarz? 9 REDIRECT EXAMINATION BY MR. SCHWARZ: 10 Isn't the point of your schedules to your 11 Q. Surrebuttal Testimony that the cost of removal is not 12 13 deductible for income tax purposes until it's experienced? That was the intent and the heart of Schedules 14 Α. 1-2, 1-1, 1-3. 15 16 Ο. Isn't it true for cost of removal, deferred 17 taxes are not calculated in Missouri? 18 Α. That's correct. 19 Q. So if deferred taxes are not calculated, you 20 must account for the tax effect as you have proposed; is 21 that correct? 22 Α. Those taxes are payable currently because that deduction is not allowed for the accrual. 23 24 MR. SCHWARZ: Thank you. That's all. 25 JUDGE THOMPSON: You may step down, Mr. Began. 1949 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 And this witness may be excused; is that 2 correct? MR. ENGLAND: Your Honor, I'm not sure if he 3 has any -- I'm not sure if this witness has any other issues 4 5 or not. I honestly don't know. But he certainly can be excused as far as I'm concerned for purposes of 6 depreciation. 7 8 JUDGE THOMPSON: Thank you, Mr. Began. Have a safe trip back to St. Louis. 9 Who's the next witness? 10 MR. SCHWARZ: Mr. Rackers is, but I personally 11 12 would like a brief --JUDGE THOMPSON: Brief. We will take a brief 13 14 recess. 15 (A recess was taken.) 16 STEPHEN RACKERS testified as follows: 17 JUDGE THOMPSON: Okay. We are back on the 18 record. Mr. Rackers, I'll remind you that you're still 19 under oath. And since we're not going to get any direct, 20 why don't you just tell me briefly what the purpose of your testimony on this issue is. 21 THE WITNESS: Since the last case, the 22 23 legislature passed a law that allows the company at least 24 for its St. Louis County Water district to enact a surcharge 25 outside of a normal rate case. 1950

1 And the purpose of that legislation was to 2 specifically deal with the company's need to recover its 3 infrastructure replacement -- infrastructure replacements. And for that reason, Staff thinks that -- or Staff believes 4 5 that that new law is a change in circumstances from one of 6 the statements or at least what the Commission said guided its decision in ruling against Staff with regard to the cost 7 8 removal and salvage issue in the lasts St. Louis Water 9 county case. 10 JUDGE THOMPSON: The last St. Louis Water 11 County case? 12 THE WITNESS: Right. And that St. Louis 13 County area is now a district of Missouri-American Water 14 Company. JUDGE THOMPSON: I understand that. So in one 15 16 sentence, what's Staff's position? 17 THE WITNESS: Well, Staff's position is the 18 same as Mr. Macias stated, that we believe our position with 19 regard to cost removal and salvage is appropriate. And the 20 fact that there is new legislation out there to specifically deal with the infrastructure replacement issue should bear 21 on whether the Commission accepts Staff's position or not. 22 23 JUDGE THOMPSON: Very well. Thank you. 24 Ms. O'Neill? 25 MS. O'NEILL: Thank you. 1951 ASSOCIATED COURT REPORTERS

573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO 1 CROSS-EXAMINATION BY MS. O'NEILL:

2 Mr. Rackers, in reference to this County Water Q. 3 case that you were just briefly discussing which you discussed in your Direct Testimony, I think you start at 4 5 page 8 maybe and go through for a couple of pages, would you 6 agree that in the decision in WR-2000-844 the primary rationale that the Commission gave for continuing to allow 7 8 County Water to continue with the depreciation method that 9 they proposed and which included a net salvage component was 10 to provide County Water with the opportunity to generate cash flow for addressing those infrastructure problems you 11 12 just mentioned? 13 Α. Yes. 14 And I think you describe the fact that this Q. new ISRS statute provides an accelerated means of recovery 15 16 of expenditures that the company makes for infrastructure 17 main replacements now; is that correct? 18 Α. That's correct. 19 In fact, the company has already applied for Q. 20 and an order just came out regarding the first such 21 infrastructure system surcharge; is that right? That's correct. 22 Α. 23 Q. And in your testimony I believe you compare --24 well, actually your testimony pretty clearly states your 25 position. I want to skip a couple of these questions. 1952

1 Even though ISRS is a little bit different 2 type of recovery, it's a recovery between rate cases and --3 in fact, the company can file several ISRS applications 4 between rate cases up to a certain percentage; is that 5 correct? That's correct. 6 Α. And although these two devices are allowing 7 Q. 8 for cash flow to help with infrastructure replacement that 9 the Commission discussed in the 844 case and now this ISRS 10 device are different methods of providing the company with assistance in addressing its main replacement problem, would 11 12 you agree that they both give a benefit to the company above 13 what they would get under normal rate-making procedures? 14 Α. Yes. And now that the ISRS is in place, is it your 15 Ο. 16 opinion that the Commission should reconsider its decision 17 regarding the method of depreciation that Missouri-American should use on a going-forward basis? 18 19 Α. Yes. 20 And what do you believe the Commission should Ο. 21 do? I believe the Commission should accept Staff's 22 Α. 23 methodology for expensing of cost removal and salvage. 24 MS. O'NEILL: Thank you. No further 25 questions. 1953 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO

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1 JUDGE THOMPSON: Thank you, Ms. O'Neill. 2 Mr. England? 3 MR. ENGLAND: Thank you. 4 CROSS-EXAMINATION BY MR. ENGLAND: 5 Ο. Good afternoon, Mr. Rackers. 6 Α. Good afternoon. 7 Now I will try to be brief. At page 10 of Q. 8 your Direct Testimony, lines 17, 18 and 19 you indicate that 9 the company was required to spend approximately 4.8 million on infrastructure as a result of the last case. Do you see 10 that? 11 12 Yes. Α. 13 Ο. And would you agree with me that it has met that commitment? 14 15 Α. Yes. 16 Q. Okay. And you were involved in the current 17 ISRS case, if you will; is that right? 18 Α. Yes, I was. 19 And roughly how much gross infrastructure Q. 20 eligible plant did the company include in that filing? I believe 28 million. 21 Α. 22 Q. Okay. And that was for a two and a half year 23 period of time, correct, since the last rate case? 24 Α. Approximately two and a half years, yes. 25 Ο. So roughly speaking, the company has placed on 1954 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

an annualized basis between 9 and 10 million dollars of 1 2 infrastructure eligible plant? 3 Α. Yes. It has indicated in this case that it plans to accelerate that level. 4 5 Okay. I just want to make it clear that the Ο. company has more than met the commitment set in the last 6 7 case of 4.8 million a year. You don't dispute that, do you? 8 Α. I don't dispute that. 9 Okay. And also with respect to total capital Q. 10 expenditures, Mr. Spanos identifies those at least for the last five years in his Surrebuttal Testimony, Exhibit 81, 11 12 page 8. Have you seen that? I probably read it. I don't have it in hand. 13 Α. MR. ENGLAND: May I hand this --14 JUDGE THOMPSON: You may. 15 16 BY MR. ENGLAND: 17 And now that I no longer have that in front of Q. me and can't refer to any specific --18 19 MR. SCHWARZ: Where are we? I'm sorry. 20 MR. ENGLAND: Spanos' Surrebuttal, page 8. 21 Yes. MR. SCHWARZ: Do you want to share? 22 BY MR. ENGLAND: 23 24 Q. I'll try to make it general. You have no 25 reason to dispute those figures, did you? 1955 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 Α. No, I don't. I don't -- he indicates net 2 capital expenditures. I'm not sure net of what, but I don't 3 have any reason to dispute them. 4 Q. Okay. But, I mean, roughly speaking over that 5 five-year period of time the company has spent at least 6 twice as much in capital expenditures than it has accrued in 7 depreciation expense. Correct? 8 Α. I thought the annual accrual for depreciation 9 expense was in excess of 20 million a year. And did you ask me if they'd spent twice --10 No. I'm sorry. For that five-year period of 11 Ο. 12 time. My understanding -- for example, in 1998 the actual accrual was only 17 million. Correct? 13 I don't know that. 14 Α. 15 Ο. Okay. Oh, I'm sorry. Oh, I see. Okay. The annual 16 Α. 17 accrual is to the side here. It's in the far right column. 18 Q. 19 Α. I see. 20 And you would expect it to be less because Ο. rate base was probably less back then. Right? 21 22 That's correct. Α. 23 Q. Okay. And each year it grows with the 24 addition of rate base and presumably if there had been 25 increase in depreciation rates, it might grow as well? 1956

1 A. That's correct.

2 Q. My question generally though was, just looking 3 at the five-year history, that the company has spent in net capital expenditures at least twice as much as they have 4 5 received in annual depreciation expense? That's correct. 6 Α. 7 Okay. And, therefore, the company's net rate Q. 8 base over that period of time has -- all other things being 9 equal, has been increasing. Correct? 10 Α. Yes. MR. ENGLAND: Okay. Thank you. I have no 11 12 other questions. JUDGE THOMPSON: Thank you, Mr. England. 13 Questions from the Bench, Commissioner Murray? 14 15 COMMISSIONER MURRAY: Thank you. QUESTIONS BY COMMISSIONER MURRAY: 16 17 Mr. Rackers, back on page 10 of your Q. testimony -- actually it's pretty close to the area you were 18 19 just referencing. At line 15 you have some discussion about 20 WR-2000-844 and the Commission's order in that case that 21 required the company to either set aside in a depreciation fund or spend \$4.8 million annually for infrastructure 22 23 replacement --That's correct. 24 Α. 25 Ο. -- is that part of your testimony? 1957 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 Now, that was an unusual treatment of 2 depreciation that the Commission ordered, was it not? 3 Α. Yes, I believe it was. Q. Are you aware of any other time in which 4 5 depreciation has been tied to actual expenditure for infrastructure replacement? 6 7 Α. I'm not with regard specifically to 8 infrastructure replacement. It seems to me there were some 9 Bell cases where the allowance for depreciation was tied to 10 improvements in a company's system, whether you want to say that was infrastructure replacement. 11 12 Okay. The purpose of depreciation, as I Q. 13 understand it, is to apportion the costs of the assets over 14 the years in which those assets are used and useful; is that right? 15 Yes. Or said another way, to provide recovery 16 Α. 17 of the original cost of investment. 18 Q. Okay. And can you cite any authority which 19 defines depreciation the way that you treat it on page 11 of 20 your testimony, which I read as treating depreciation as a contribution in aid of construction? 21 I cannot. And this comment isn't meant to in 22 Α. 23 any way stifle the question, but the issue we're talking about right here, it's no longer an issue between the 24 25 company and the Staff. We settled that. But in response to 1958

1 your question, I cannot.

2 Q. Okay. Did Staff withdraw its position then 3 that contribution in aid of construction should be considered here? 4 5 Staff settled this issue with regard to Α. 6 treating the additional depreciation provided in the last case as a contribution in aid of construction. 7 8 Q. Okay. Boy, I'm glad to hear that, because that was just the strangest thing I have ever read. 9 10 COMMISSIONER MURRAY: All right. Thank you. I guess that's all I have. 11 12 JUDGE THOMPSON: Commissioner Forbis? 13 COMMISSIONER FORBIS: I think my questions 14 were addressed. JUDGE THOMPSON: Commissioner Clayton? 15 16 COMMISSIONER CLAYTON: No. 17 QUESTIONS BY JUDGE THOMPSON: 18 Q. How was that issue settled? 19 As -- as part of Staff and company's Α. 20 discussions during the prehearing in consideration with some other issues, that item was settled. 21 Well, in what direction? 22 Q. 23 MR. SCHWARZ: Well, I'm not --24 JUDGE THOMPSON: Does no one know? 25 MR. SCHWARZ: I'm not sure about the propriety 1959 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 of discussing it at this point in time. I assume it's --2 MR. ENGLAND: You're on your own on this one. 3 THE WITNESS: I mean --JUDGE THOMPSON: 4 5 Ο. Answer as --6 Α. I thought discussions during prehearing 7 conferences were privileged, so I -- if you instruct me to 8 answer --9 MR. SCHWARZ: I'd say go ahead and answer. 10 We're entitled to waive the privilege. The company's indicated they have no objection, so off you go. 11 12 THE WITNESS: In consideration for other 13 adjustments which the company settled in Staff's favor, this item was settled in the company's favor. 14 BY JUDGE THOMPSON: 15 Okay. Thank you. What about the Uniform 16 Q. 17 System of Accounts? Did you hear my question to 18 Mr. Began --19 Yes, I did. Α. 20 -- or whoever it was I asked that question? Ο. 21 Yes, I did. Α. How does the Uniform System of Accounts treat 22 Q. 23 the inclusion of net salvage in depreciation? 24 Α. Well, my understanding is that the system of 25 accounts does not mandate some formula approach that must be 1960 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO

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1 followed in the determination of cost removal and salvage, 2 but rather it must be accounted for in some manner. And 3 Staff's method accounts for cost removal and salvage through an expensing mechanism. 4 5 JUDGE THOMPSON: Okay. Thank you very much. 6 COMMISSIONER MURRAY: Judge? JUDGE THOMPSON: Yes, ma'am. 7 8 COMMISSIONER MURRAY: I just want to make sure I --9 10 JUDGE THOMPSON: Absolutely. FURTHER QUESTIONS BY COMMISSIONER MURRAY: 11 12 Q. Even though this issue was settled, I just 13 want to ask a couple more questions about what it was you 14 were recommending at the time --15 Α. Sure. 16 Q. -- that you filed your testimony. And as I 17 read that -- and I had to read it several times and try to 18 figure out how in the world you could tie CIAC to 19 depreciation, but it seems to me that if the bottom line of 20 your recommendation had been followed, was that that 21 traditionally accumulated depreciation amount you would be somehow segregating that and labeling it as contribution in 22 23 aid of construction; is that right? 24 Α. Well, the Commission's order, in fact, 25 required the segregation of some depreciation and funds into 1961 ASSOCIATED COURT REPORTERS

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1 a separate depreciation account so that the funds would be 2 there for the company to spend on infrastructure. 3 Q. So the Commission's order segregated it? Α. Correct. 4 5 Ο. Would you go further and label it as contribution in aid of construction? 6 I think that that was an appropriate response 7 Α. 8 to the Commission saying that it wasn't necessarily ordering depreciation in the last case specifically as a recovery of 9 10 investment. It was ordering that rate as a means of providing money to the company to fund its construction. So 11 12 that, to me, is a definition of contribution. 13 Ο. Okay. So if you treated it that way, it was 14 based upon what you've already agreed was an unusual treatment of depreciation by the Commission order; is that 15 16 right? 17 Α. That's true. And it looks like the bottom line of that 18 Ο. 19 would have been that -- that depreciation, that accumulated 20 depreciation would have reduced rate base three different times? You can tell me if I'm wrong. First, it would have 21 reduced rate base as it was accumulated and the accumulated 22 23 depreciation; is that right? 24 Α. That's -- that's where the dollars existed 25 before Staff made its adjustment. The dollars were 1962 ASSOCIATED COURT REPORTERS

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1 accumulated in the depreciation reserve. 2 Q. And that would serve to reduce rate base? 3 Α. Yes, it would. Okay. That's one. Then it appears that it 4 Q. 5 would have reduced rate base again as an offset to the plant 6 in service since it provides cash to the utility to fund construction? 7 8 Α. Well, the adjustment that I initially proposed 9 removed it from the depreciation reserve so we canceled out 10 one and moved it to the contribution account. So we got rid of what you labeled as one and so it still --11 12 Q. Reduced it? 13 Α. -- just one reduction to plant in service. 14 Once by the second --Q. 15 Α. Correct. 16 Q. -- method? 17 But then as it's amortized as an offset to the 18 depreciation expense of the plant that it funded, isn't that a third time? 19 20 Well, it -- you would depreciate the plant Α. that it funded. That would be a positive expense. And then 21 you would amortize this contribution. That would be a 22 23 negative expense. So those two would offset each other. So 24 there would be a zero net effect there. 25 Ο. So it was not reducing rate base three 1963 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO

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1 different times for the same amount of accumulated 2 depreciation? 3 Α. No. That would be inappropriate. COMMISSIONER MURRAY: Thank you. 4 5 THE WITNESS: Sure. JUDGE THOMPSON: Further questions from the 6 Bench? 7 8 Okay. Recross Ms. O'Neill? 9 MS. O'NEILL: No questions, your Honor. 10 JUDGE THOMPSON: Mr. England? MR. ENGLAND: If I may from back here. 11 12 RECROSS-EXAMINATION BY MR. ENGLAND: 13 Ο. Following up on that line of questioning, 14 Mr. Rackers. But the other effect of categorizing this plant, if you will, or these dollars as contribution in aid 15 16 of construction you would get no depreciation expense on 17 them, would you? 18 Α. Well, as I said to Commissioner Murray, you 19 would receive depreciation expense on the plant that it 20 funded and that would be offset by an amortization of the contribution. So the net effect there would be zero. 21 No --22 Q. 23 Α. The depreciation would be offset. 24 As opposed to if it was truly plant Q. 25 contributed by investors, there would be a depreciation 1964 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 expense on that?

2 Α. It would be the same effect. You would have 3 depreciation on the plant that was funded, you would record 4 negative depreciation on the contribution. They would offset. 5 Not in the current year, would you? First 6 Ο. year you would have depreciation expense, but there would be 7 8 no reduction to rate base? 9 Α. No. I don't believe that's true. MR. ENGLAND: No other questions. 10 JUDGE THOMPSON: Mr. Schwarz? 11 REDIRECT EXAMINATION BY MR. SCHWARZ: 12 What other sources of cash flow does 13 Ο. 14 Missouri-American have besides depreciation to meet its investment needs, capital needs? 15 16 Α. Well, it has deferred taxes, finance --17 additional financing of both debt and equity are sources of 18 cash the company has. 19 Q. What about contributions in aid of construction? 20 Contributions in aid, advances for 21 Α. construction are also available. Governmental bodies 22 23 provide funds when facilities have to be relocated. MR. SCHWARZ: That's all. Thank you. 24 25 JUDGE THOMPSON: Thank you, Mr. Schwarz. 1965 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

1 You may step down, Mr. Rackers. 2 Now I believe we're done for today; is that 3 correct? Someone else has a witness somewhere that we need to hear from? Got 10 minutes if we can get another couple 4 5 in. 6 MR. ENGLAND: I don't have a witness but maybe a housekeeping matter we can take care of. 7 JUDGE THOMPSON: Sure. We have some other 8 housekeeping matters we need to take care of too. Did you 9 10 have a housekeeping matter, Mr. England? MR. ENGLAND: We'll take it up in January 11 12 proceedings. JUDGE THOMPSON: We will return on January 5th 13 at ten o'clock. The room will be in use starting at 8:30 14 for a hearing on the settlement of the Ameren gas rate case 15 16 so we will convene at ten o'clock. I doubt that I'm going 17 to have an opportunity to send notice to those traveling 18 from out of town -- well, I guess I better come in tomorrow 19 and do exactly that or else they're not going to know. 20 WHEREUPON, the hearing was adjourned until 21 10:00 a.m., January 5th, 2004. 22 23 24 25 1966

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