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1	CHARE OF MICCOIDI
1	STATE OF MISSOURI
2	PUBLIC SERVICE COMMISSION
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6	TRANSCRIPT OF PROCEEDINGS
7	Evidentiary Hearing
8	March 6, 2018
9	Jefferson City, Missouri Volume 16
10	
11	
12	In the Matter of Missouri- ) American Water Company's )
13	Request for Authority to ) File No. Implement General Rate ) WR-2017-0285, et al. Increase for Water and )
15	Sewer Service Provided in ) Missouri Service Areas )
16	
17	KIM S. BURTON, Presiding, REGULATORY LAW JUDGE.
18	
19	DANIEL Y HALL, Chairman WILLIAM KENNEY,
20	MAIDA J. COLEMAN, RYAN A. SILVEY
21	COMMISSIONERS.
22	
23	REPORTED BY:
24	KELLENE K. FEDDERSEN, CSR, RPR, CCR NO. 838 ALARIS LITIGATION SERVICES
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## EVIDENTIARY HEARING - Vol. 16 3/6/2018

Page 431

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1	PROCEEDINGS
2	(WHEREUPON, the evidentiary hearing
3	began at 8:35 a.m.)
4	JUDGE BURTON: Let's go ahead and go
5	on the record for the second day of the evidentiary
6	hearing. Today is March 6, 2018. The time is
7	approximately 8:35 in the morning.
8	And before we begin with testimony
9	continuing on Staff's witnesses, I just wanted to
10	discuss some procedural matters. And I believe
11	that the parties have indicated that there might be
12	an adjustment to the schedule on some of the issues
13	that we had set for today and later this week.
14	MR. WESTEN: That's correct, Judge.
15	The parties have reached an agreement and have
16	currently circulating a Stipulation & Agreement on
17	allocations, which is scheduled for this afternoon,
18	as well as sewer rate design issues which are
19	scheduled for Thursday, and that same Stipulation &
20	Agreement also resolves one of the subissues within
21	rate design, the water rate design issue.
22	The parties who are planning on
23	signing the agreement have signed. There are some
24	parties who we're anticipating to state that they
25	are not planning on signing but not objecting.

1 We're still making sure we have those affirmative 2 confirmations from them. Our goal today, 3 hopefully, is to have something filed by noon at 4 the earliest if we can, certainly something filed 5 by the end of the day if possible. 6 JUDGE BURTON: So the Commission will 7 have an opportunity to review those later today? 8 MR. WESTEN: That is our hope and 9 goal, yes. 10 THE COURT: With that being said, I 11 know we did originally have lead service line 12 replacement and allocations set for today. So we 13 would just be completing the lead service line 14 testimony today? 15 MR. WESTEN: That's correct. And if 16 we finish early today, I think the parties would 17 appreciate that time to keep working on trying to 18 resolve the issue brought up yesterday by the 19 Chairman to see if we can continue discussing that. 20 JUDGE BURTON: Okay. That sounds 21 like a good plan. That being said, let's go ahead 22 and begin with our first witness of the day. 23 CHAIRMAN HALL: What is the rate 24 design issue that is also possibly subject to this stipulation? 25

MR. WESTEN: It would be the 1 2 bifurcation of Rate A, which had been proposed by the company to be split into residential and 3 4 non-residential. The resolution would be that that 5 remains simply Rate A, those rates. 6 CHAIRMAN HALL: Thank you. 7 JUDGE BURTON: Would you please raise 8 your right hand. 9 (Witness sworn.) JUDGE BURTON: You may be seated. 10 11 AMANDA McMELLEN testified as follows: 12 DIRECT EXAMINATION BY MS. ASLIN: 13 Q. Would you please state your name. 14 Α. It's Amanda McMellen, M-c-M-e-l-l-e-n. 15 16 Ο. And how are you employed? 17 I'm employed by the Staff of the Α. Missouri Public Service Commission as a Utility 18 19 Regulatory Auditor. 20 And did you prepare or cause to be 0. 21 prepared rebuttal testimony marked as Exhibit 107 22 and surrebuttal testimony marked as Exhibit 124? 23 Yes, I did. Α. 24 Do you have any changes or Q. 25 corrections to that testimony?

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1 Α. No, I do not. 2 Q. And are the answers contained in that 3 testimony true and correct to the best of your 4 knowledge and belief? Yes, they are. 5 Α. 6 If I were to ask you those same Ο. 7 questions today, would your answers be the same? 8 Α. Yes. 9 MS. ASLIN: Judge, I move for the admission of Exhibits 107 and 124. 10 JUDGE BURTON: 107 is the rebuttal 11 12 testimony of Ms. McMellen, and Exhibit 124 is the 13 surrebuttal testimony of Ms. McMellen. 14 MS. ASLIN: Correct. 15 JUDGE BURTON: Are there any 16 objections? 17 MR. SMITH: No objection. 18 JUDGE BURTON: Seeing no objections, 19 those exhibits are admitted. 20 (STAFF EXHIBITS 107 AND 124 WERE 21 MARKED AND RECEIVED INTO EVIDENCE.) 22 MS. ASLIN: I tender the witness for 23 cross. 24 JUDGE BURTON: And MIEC I believe is 25 first.

1 MR. MILLS: No questions. 2 THE COURT: Division of Energy? 3 MR. POSTON: No questions. 4 JUDGE BURTON: Consumers Counsel? 5 Office of the Public Counsel? 6 MR. SMITH: Was the company -- I 7 thought we had agreed to -- I think the company is going to go first. 8 9 JUDGE BURTON: I just had for Staff 10 witnesses this list, but if we're going in the 11 order of support? 12 MR. SMITH: Yes. 13 MR. COOPER: Yeah. I'll agree with 14 Mr. Smith. We had discussed that before. So I'll 15 be going before Mr. Smith on this. 16 MR. WESTEN: Staff has no objection 17 to that. 18 CROSS-EXAMINATION BY MR. COOPER: 19 Ms. McMellen, I want to talk first Q. 20 about your recommendation as to the costs that have 21 been deferred in accordance with the Accounting 22 Authority Order granted pursuant to WU-2017-0296. 23 Α. Okay. 24 Q. And if I understand your testimony, 25 and I think you reference this in your surrebuttal

- 1 and there you reference back to your rebuttal. As
- I read it, what you recommend in regard to those
- 3 costs is that they be amortized over a ten-year
- 4 period beginning with the effective date of the
- 5 Report and Order in this case and the unamortized
- 6 balance included in rate base; is that correct?
- 7 A. Yes, that's correct.
- 8 Q. Okay. And ultimately that would be,
- 9 what, the costs that have been deferred through
- 10 **December 31 of 2017?**
- 11 A. Once I can verify from June through
- 12 December.
- 13 Q. Now, the other aspect, I think, of
- 14 your recommendation has to do with what to do on a
- 15 going-forward basis; is that correct?
- 16 A. Correct.
- 17 Q. And on a going-forward basis, as I
- 18 understand your testimony, you would recommend that
- 19 these lead service line replacement costs for the
- 20 customer-owned lines continue to be booked to
- 21 Account 186; is that correct?
- 22 A. Yes, that's correct.
- 23 O. And I assume booked until the next
- 24 rate case; is that right?
- 25 A. Yes, that's correct.

1 Do you make any recommendation as to Q. 2 what should happen in that next rate case in terms 3 of recovery of those costs that would be deferred? 4 My recommendation is continue as the Α. 5 way we're doing it right now and amortize over ten 6 years and include the unamortized balance in rate 7 base. 8 And will we know what the result is Ο. 9 until we get to that next rate case ultimately if 10 we book them to 186? 11 Α. Not 100 percent, but that would be my 12 recommendation going forward. 13 And I assume Staff's recommendation Ο. 14 in this case? 15 Α. Correct. 16 MR. COOPER: That's all the questions 17 I have. 18 JUDGE BURTON: Thank you. Did the 19 public water supply districts have any questions? 20 MR. DORITY: We have no questions, 21 your Honor, and if I may be excused for the 22 remainder of the morning, and Mr. Steinmeier, 23 counsel for the City of Joseph, requests to be 24 excused as well. Thank you. 25 JUDGE BURTON: The request is

1 granted, and I guess we will see you tomorrow. 2 Mr. Smith, I believe you are up. 3 MR. SMITH: Thank you. 4 CROSS-EXAMINATION BY MR. SMITH: 5 As I understand it, the unamortized Ο. 6 balance would be included in rate base? 7 Α. Correct. 8 Does that mean the rate of return 0. 9 would be the weighted average cost of capital or 10 would it be the short-term debt rate, in your 11 opinion? 12 Α. For the total unamortized balance, it 13 would be the rate of return. 14 Okay. So Staff is recommending a 0. 15 weighted average cost, full weighted average cost 16 of capital? 17 Α. On the unamortized balance, but not in the actual inclusion of the balance that's in 18 19 the regulatory asset account. That's the carrying 20 costs that we -- that's the short-term debt. 21 What account would Staff put that Q. 22 into? 23 It would continue in 186. Α. 24 Q. So it would continue in 186, but it

would be treated as rate base, in your opinion?

25

1 Α. Correct. 2 Q. Okay. And what would be the, I 3 quess, depreciation period that you recommend? 4 Α. It would actually be an amortization period of ten years. 5 6 What about for the unamortized Ο. 7 amount? It's still the ten-year amortization 9 going forward. 10 Why did you develop ten years? Q. 11 Α. It's a shorter recovery period 12 than -- because these are extraordinary ex-- costs 13 that would normally be expensed, but with the AAO 14 they're considered extraordinary costs, and it's a 15 shorter recovery period than if it was booked in 16 plant. 17 Now, if they're normally expensed, Ο. 18 there's no return on? 19 Α. Correct. That would be a return of. 20 0. So what is the useful life of a 21 service line? 22 Based on the depreciation schedule Α. 23 that I've seen, it would be 65 years. 24 Q. So Staff -- you realize the company 25 is not advocating for a ten-year accelerated

1 recovery, correct? 2 Correct. But they're advocating they Α. 3 want to book it in plant and continue over 65 4 years. We don't want it in plant. We'd rather have it as a regulatory asset and amortized over 5 6 ten. 7 Well, I'm confused because I thought Ο. 8 you just said that you did want it in plant for the 9 unamortized balance. That's incorrect. We want it in 10 Α. No. 11 rate base, not in plant. 12 Ο. All right. So as I understand 13 Staff's proposal, it would be a short-term debt 14 rate applied, I quess, up until the next rate case? 15 If it stays in 186, correct, as 16 carrying costs. 17 And at that point all the unamortized Ο. 18 portion of that balance would be put into a 19 separate account and there would be a weighted 20 average cost of capital on that unamortized amount? 21 Α. As it's included in rate base. 22 MR. SMITH: Okay. No further 23 questions. Thank you. 24 JUDGE BURTON: Questions from the

Bench?

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1 QUESTIONS BY CHAIRMAN HALL: 2 Q. Good morning. 3 Α. Good morning. 4 How much is currently in Account 186 Q. 5 regarding the customer-owned lead service line 6 replacement? 7 Through what time period? Through Α. 8 December? 9 Tell me. 0. We verified through June of 2017 at a 10 Α. 11 little over a million, almost 1.1 million. 12 So through June 30 --Q. 13 Α. Through June 30th, uh-huh. 14 -- 2017 is how much? Ο. 15 It's in my testimony. One zero seven Α. 16 one --17 A little over a million? 0. 18 Α. Yeah. 19 Q. And then do you have a different 20 number for a different date? 21 Α. We have to verify it, but the company 22 gave us numbers through December 31st, 2017, and 23 that's what they referenced yesterday, the 24 1.4 million. But we still need to verify that 25 number.

1 Q. And Staff's proposal is that that 1.4 million be amortized over ten years? 2 3 Correct. Α. 4 With carrying costs? Q. 5 Α. Yes. 6 With short-term carrying costs? Q. 7 Correct. Α. Q. Which is a little under 1 percent? 9 Correct. Α. 10 Okay. So that means that the Q. 11 company, under Staff's proposal, would recover 12 roughly a tenth of that 1.4 million each year over 13 the next ten years? 14 Α. Correct. 15 That amount would not be in rate 0. 16 base? 17 Α. We're recommending that the 18 unamortized balance be included in rate base. 19 Q. I guess I don't understand. Maybe 20 it's just a terminology, because would the company 21 be getting a return on that amount in rate base? 22 Α. Correct. 23 Q. So they're getting carrying costs and 24 a return --25 A. Correct.

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1 Q. -- under your proposal? 2 Α. Yes. 3 0. What is the rationale for the company 4 getting a return on that amount, the unamortized 5 amount? 6 Α. Typically with AAOs where the 7 Commission and the Staff agree it's a project the company needs to do, we typically include that in 9 rate base and give them the carrying costs and the 10 return on. 11 Q. I thought Staff was taking the 12 position that because the company did not own the 13 lines, that the costs should not be included in 14 plant in service? 15 Not in plant in service, but included Α. 16 in rate base. 17 Okay. What's the difference? Ο. 18 Α. It's just the accounting treatment. 19 The plant in service is going to be a longer time period. 20 21 So the dollars -- so we're just Q. 22 arguing about accounting treatment. The actual 23 dollars, it's irrelevant? 24 No. We are actually putting more in Α. 25 the case if you -- because we're amortizing over

- 1 ten years.
- 2 O. I don't understand the difference
- 3 between plant in service and rate base. Maybe you
- 4 can help me there.
- 5 A. Plant in service is, it's an asset
- 6 that is property that is owned either by person or
- 7 company that provides a future benefit to the
- 8 owner; where the regulatory asset is a deferral
- 9 that changes or the company cannot immediately
- 10 charge extraordinary expense.
- 11 Q. So if the -- so if the Commission
- were to determine that it was inappropriate for the
- 13 company to receive a return on the investment, just
- 14 a return of the investment, what would -- what
- would the Commission need to do concerning this
- 16 **1.4 million?**
- 17 A. Our recommendation would be to leave
- 18 it in --
- 19 **Q.** No.
- 20 A. Okay.
- Q. I'm asking you to help me if the
- 22 Commission were to determine that they should not
- get a return on that investment, just a return of
- 24 that investment.
- 25 A. Okay. Then you would leave it in

- 1 186, the deferral account, amortize it over ten
- 2 years, and not include it in rate base.
- 3 **Q.** Okay.
- 4 A. The deferral balance, unamortized
- 5 balance.
- 6 Q. Along with the carrying costs?
- 7 A. Correct.
- 8 Q. Okay. So then going forward, it is
- 9 Staff's recommendation that these expenses get
- 10 continued -- they are booked in 186 going forward?
- 11 A. Correct.
- 12 Q. With carrying costs?
- 13 A. Correct.
- 14 O. And then at the next rate case, the
- 15 Commission would determine whether to take those
- amounts from 186 and put them into rates?
- 17 A. Correct.
- 18 Q. So what is -- okay. So shifting
- 19 gears now.
- 20 A. Okay.
- Q. What is the monetary difference
- between Staff's position and the company's position
- 23 regarding the 1.4 million in 186?
- A. If you use Staff's recommendation to
- leave it in 186 and amortize it over ten years, it

- 1 would be an amortization, an increase of about
- 2 260,000.
- 3 Q. And that -- does that include --
- 4 okay. And so then what is the difference between
- 5 Staff's position and the proposal that I'm laying
- 6 out of not putting a -- giving a return on that
- investment, simply a return of that investment?
- 8 A. It would probably be about half,
- 9 about 130,000, if you do just the return of and do
- 10 the amortization, not the return on, and include it
- 11 in rate base.
- 12 Q. Would there be -- if the Commission
- were to determine that this approach is the
- 14 appropriate one, would there be some argument that
- 15 perhaps it should be amortized over five years as
- opposed to ten since it is essentially an interest-
- free loan and -- well, it's not interest-free
- 18 because there's carrying costs. But is there an
- 19 argument that we should speed up the recovery of
- 20 that investment?
- 21 A. There could be an argument.
- 22 Typically in my experience we do three to five
- 23 years on AAOs.
- Q. I'm sorry. You do what?
- 25 A. We typically do three to five years

- 1 on AAOs in the past.
- Q. Why did you propose ten here?
- 3 A. Because it's a bigger project than
- 4 most AAOs are, and it's such an extraordinary
- 5 project in nature that we decided to defer it for a
- 6 longer period of time.
- 7 CHAIRMAN HALL: Okay. I have no
- 8 further questions. Thank you.
- 9 QUESTIONS BY JUDGE BURTON:
- 10 Q. Could you describe what Account 186
- 11 is?
- 12 A. It's deferred debit, coming from a
- 13 regulatory asset that's been approved by the
- 14 Commission for an AAO.
- Q. Okay. So if the Commission approves
- 16 the program continuing in the future, would that
- 17 still be considered an AAO?
- 18 A. I believe it would be.
- 19 Q. Would it be -- is there another
- 20 terminology, like a tracker, or is it --
- 21 A. I don't -- tracker's a little
- 22 different, but I would still believe it would be a
- 23 deferred debit because there's a set time frame,
- and this is something the company's never done
- 25 before because they're lead lines and possibility

- 1 of them not doing it ever again. So to us it's
- 2 still extraordinary in nature and still should stay
- 3 in the 186 account.
- 4 Q. Are there any other accounts where
- 5 you could reasonably see these amounts going
- 6 forward being placed?
- 7 A. Not that I'm aware of.
- 8 Q. Now, is there a set amount or can you
- 9 estimate or are we certain of any amount on a
- 10 going-forward basis for a calendar year, let's say?
- 11 A. Well, based on the company, we have
- 12 estimates from the company, but as far as a
- 13 measurable amount at this time, no.
- 14 Q. And has there been any discussion
- 15 from Staff at least to say we believe it should
- only be this amount?
- 17 A. Not at this time.
- 18 Q. When would that happen?
- 19 A. We would track it through December
- 20 for the current, and then we would look at it going
- 21 forward in the next rate case.
- Q. Okay. So at that point, if the
- 23 company came back and they were continuing this
- 24 program and the costs were \$10 million one year,
- \$2 million another year, the Commission would

1 consider that those are reasonable costs at that 2 point? 3 Α. Correct. 4 JUDGE BURTON: Thank you. 5 FURTHER QUESTIONS BY CHAIRMAN HALL: 6 I have another question. Is there an Ο. 7 argument that there should be a different cost of debt associated with these amounts? In the AAO 9 order we, I think, put short-term debt as the 10 carrying cost. Is there an argument that if this 11 is going to be a ten-year-long program with this 12 amount of money at stake, that the Commission might 13 consider long-term debt or some other debt amount? 14 Α. That is not part of our proposal. 15 I know it's not part of your 0. 16 proposal. I'm asking you to speculate on a concept 17 that I'm raising right here, which is, is there an 18 argument that there should be a different cost of 19 debt? 20 Not at this time. Α. 21 Q. Why? 22 I actually haven't considered that. Α. 23 CHAIRMAN HALL: Okay. Thank you. 24 QUESTIONS BY COMMISSIONER KENNEY: 25 I have a question now. Good morning. Ο.

1 Α. Good morning. 2 Q. I understand the reasoning of not 3 putting it in plant in service in Staff's -- in 4 Staff's proposal. What is -- what would be the difference in the monetary, overall monetary return 5 6 versus company's proposal and Staff's proposal just 7 for that 1.1 million? 8 Well, I did my calculation based on 9 the 1.4 million. 10 Q. 1.4 million. Yeah. If we include it, if Staff's 11 Α. 12 recommendation is included in rate base to get the 13 amortization, my estimate is about 260,000 for this 14 project. 15 260,000 --Q. 16 Α. Recovery each year. 17 -- recovery each year? Q. 18 Yeah. And my estimate for the Α. 19 company is about 148,000. 20 Q. For how many --21 Α. Recovery, but their recovery is over 22 65 years. 23 Q. Okay. 24 I mean, there will still be Α. 25 depreciation or amortization involved.

1 Q. But the recovery time period. Okay. 2 Thank you. 3 You're welcome. Α. 4 JUDGE BURTON: Recross? 5 MR. COOPER: Yes, your Honor. RECROSS-EXAMINATION BY MR. COOPER: 6 7 You were discussing with the Chairman 0. 8 sort of the difference between the plant in service 9 and just plain rate base treatment. Would you 10 agree there are items other than just plant in 11 service that are normally typically included in 12 rate base? 13 Α. Correct, there are. 14 And examples of those would be, what, 0. 15 materials and supplies? 16 Α. Correct. 17 Cash working capital. Any others Q. 18 that come to mind? 19 Correct. Prepaid pension assets. Α. 20 Sometimes these deferral amounts on Q. 21 AAOs --22 Α. Correct. 23 -- as well, right? Q. 24 Α. Correct. 25 Or the unamortized balances of AAOs? 0.

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1 2

Correct.

- 0. You talked about a little bit there
- 3 near the end short-term debt rate. Would you agree
- 4 that a short-term debt rate generally refers to
- 5 loan periods of a year or less?
- 6 Α. Correct.

Α.

- 7 And in -- let's talk in terms of Ο.
- 8 construction. Ultimately is that as a typical
- 9 matter taken out by permanent financing at some
- 10 point or a combination of financing and equity?
- 11 Α. Yes, I believe so.
- 12 MR. COOPER: That's all the questions
- 13 I have.
- 14 RECROSS-EXAMINATION BY MR. SMITH:
- 15 I think I just wanted to clarify
- 16 something you and the Commission or you and the
- 17 Chairman had talked about. So does Staff believe
- 18 the company should not be allowed to earn a return
- 19 on investments they do not own?
- 20 Typically that would be our proposal, Α.
- but this is -- since it was granted the AAO, then 21
- 22 they should return -- get return on that
- 23 investment, those costs, but it shouldn't be booked
- 24 to plant.
- 25 Okay. So the standard practice is 0.

1 not to allow a return on investments the company 2 doesn't own? 3 Α. Typically, yes. 4 MR. SMITH: Okay. That's all the 5 questions I have. Thanks. 6 JUDGE BURTON: Redirect? 7 REDIRECT EXAMINATION BY MS. ASLIN: 8 Q. Ms. McMellen, you were asked some 9 questions about why Staff is recommending a 10 ten-year amortization period instead of the 11 65 years the company is recommending. Could you 12 explain why we've done that? 13 Just with deferral period, we want to Α. 14 give them a longer period of time. It's a -- when 15 they say it's a ten-year program, and we want to 16 amortize that for the length of the program over a 17 longer recovery period than we normally would. 18 Q. But why the ten years as opposed to 19 the 65 that the company is --20 Because we still feel it's not a true Α. 21 asset, that it should be amortized and not 22 depreciated.

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costs and receive a return on rate base

Okay. And under Staff's

recommendation, would the company accrue carrying

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Ο.

1 simultaneously? 2 Α. No. 3 0. So would they accrue the carrying 4 costs first? 5 Α. Correct. 6 And once the unamortized balance is Ο. 7 included in rate base, would accrual of carrying 8 costs stop? 9 Yes, they would. Α. 10 And Judge Burton had asked you about Q. 11 understanding how much the company could be 12 spending each year on this project. The annual 13 reports that Staff has recommended, those would 14 provide some of that information, correct? 15 Yes, they would. Α. 16 0. And would Staff review those and 17 investigate further if it felt that there were 18 imprudent costs included in that? 19 Α. Yes, we would. 20 And one last question. If these 0. 21 costs were booked in Account 345 as plant in 22 service, how would they be treated differently? 23 Our proposal would be do a subaccount Α. 24 at a different depreciation rate. 25 MS. ASLIN: Thank you.

1 JUDGE BURTON: Thank you. You're 2 excused. 3 I believe the next witness we have 4 today is DE's Hyman. Raise your right hand. 5 (Witness sworn.) 6 JUDGE BURTON: You may be seated. 7 MARTIN HYMAN testified as follows: 8 DIRECT EXAMINATION BY MR. POSTON: 9 Would you please state your name for Q. 10 the court reporter. 11 Α. Martin Hyman, H-y-m-a-n. 12 Are you the same Martin Hyman that 0. 13 caused to be prepared and filed testimony that's 14 been premarked as Exhibit 600, 601, 602 and 603? 15 Α. I am. 16 And do you have any changes or 0. 17 corrections to that testimony? 18 Α. I do not. 19 If I were to ask you the questions Q. 20 that appear in your testimony today, would your 21 answers be the same? 22 Α. Yes. 23 MR. POSTON: Your Honor, I move for 24 the admission of 600, 601, 602 and 603. 25 JUDGE BURTON: Exhibit 600, which is

- 1 the direct testimony of Martin Hyman on rates, 601,
- 2 the rebuttal testimony of Martin Hyman on revenue,
- 3 Exhibit 602, rebuttal testimony of Martin Hyman on
- 4 rates, and 603, surrebuttal testimony of Martin
- 5 Hyman, have been offered. Are there any
- 6 objections?
- 7 (No response.)
- JUDGE BURTON: Seeing none, they are
- 9 received.
- 10 (DE EXHIBITS 600, 601, 602 AND 603
- 11 WERE MARKED AND RECEIVED INTO EVIDENCE.)
- MR. POSTON: Tender the witness for
- 13 cross. Thank you.
- 14 JUDGE BURTON: Did we want to start
- 15 with Staff on this? I have down on the schedule
- 16 that we would be going with OPC first.
- 17 MR. WESTEN: Staff has no cross for
- 18 Mr. Hyman.
- MR. COOPER: Nor does the company.
- MR. MILLS: I have no questions.
- JUDGE BURTON: OPC.
- MR. SMITH: Thanks.
- 23 CROSS-EXAMINATION BY MR. SMITH:
- Q. So, Mr. Hyman, as I understand it,
- you may be one of the few parties that think there

- 1 could be some value in doing some sort of
- 2 collaboration or study?
- 3 A. Under certain conditions, yes.
- 4 Q. And one of the things, as I
- 5 understand it, you think could be valuable to study
- 6 would be sort of a prioritization to make sure that
- 7 the company's approach is really the right
- 8 approach; is that fair?
- 9 A. Sort of. I think it's more looking
- 10 at such things as how you do it in terms of
- 11 financing and who pays, prioritization of at-risk
- 12 populations, those sorts of things.
- 13 Q. So in terms of prioritization of
- 14 at-risk populations, would you want to look into
- 15 the idea of whether low-income should be
- 16 prioritized?
- 17 A. I think that could be part of it,
- 18 along with, you know, if you look at which
- 19 customers are in most need of having the lines
- 20 replaced at cost to the company and ratepayers and
- 21 shareholders, more so along the lines of, you know,
- 22 the low-income customers will get priority for that
- 23 funding. And then the rest, you could look at
- 24 other scenarios, such as an on-bill setup if
- 25 possible.

1 Q. What about beyond low-income 2 customers, what about hospitals or schools or 3 daycares? 4 Α. I would agree those would be areas 5 you'd probably want to prioritize as well as 6 possible with main replacement projects. 7 You were here in the hearing room Q. 8 yesterday? 9 Α. I was. 10 Did you hear testimony from Mr. Aiton Q. 11 about the recordkeeping practices in St. Louis 12 County? 13 Α. Yes. 14 What was your reaction to that? Ο. 15 I don't know that I have a reaction Α. 16 offhand, to be quite honest. 17 So it didn't -- there was no -- you Ο. 18 didn't have any thought about whether the company 19 should have been updating their tap records when 20 they were replacing mains in St. Louis County? 21 Α. I think in hindsight it's easy to say 22 that, and I think going forward I would certainly 23 hope they would keep reasonable records. But the 24 historical context also has to be kept in mind 25 where the issue lead line replacement was not

- 1 prioritized until recently, as I understand the
- 2 testimony yesterday. So to that extent, that kind
- 3 of limits what we can say in hindsight should have
- 4 been done.
- 5 Q. Well, based on that, do you think the
- 6 company considered lead service lines to be a
- 7 health risk for the last 15 years?
- 8 A. I would only be able to go off of
- 9 what I heard yesterday. I would probably defer to
- 10 the company as to what they thought.
- 11 Q. But you don't draw any inferences
- 12 based on the fact that they didn't keep any
- 13 documents?
- MR. COOPER: Objection, your Honor.
- 15 I believe he said he doesn't know anything
- 16 personally about this subject matter, and anything
- 17 he would say would be hearsay at this point.
- JUDGE BURTON: I'll go ahead and
- 19 allow him to answer to as much as he knows.
- 20 THE WITNESS: Yeah. I think -- I
- 21 really can't speak for what the company thought.
- 22 Again, I think, you know, hindsight is 20/20 as
- 23 they say, and going forward I would certainly hope
- 24 that there would be better recordkeeping.
- 25 BY MR. SMITH:

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1 Q. Were you here during my opening 2 statement? 3 Α. I was. 4 You're talking about hindsight. Ο. 5 you aware that in the 1980s lead was sort of a big 6 issue with leaded gasoline? 7 I was, with the caveat that I was 8 born in '87. 9 I was born in '86, so... 0. 10 What about, you know, lead paint, has 11 that been an issue? 12 Oh, yeah. I mean, there have been a Α. 13 lot of different sources of lead historically. Ι 14 think the issue is not so much what is the biggest 15 source but, you know, reduction of all sources if 16 possible, because there's no safe blood level for 17 children. 18 Ο. So you weren't -- I guess the 19 community wasn't blind to this issue for the last 20 15 years, correct? 21 Overall, I would say so, but I can't Α. 22 speak to each and every community member certainly. 23 Ο. In terms of DE's perspective on what 24 a collaborative might involve, what are your 25 thoughts on disclosure?

1 Α. Can you clarify what you mean by 2 disclosure? 3 Ο. Yeah. Disclosure of known lead 4 service lines. 5 Α. I think that's an important issue that could be looked at, I mean, within reason. 6 7 Again, one of our primary concerns with the 8 original collaborative proposal was that it might 9 be too broad in scope for something that would be paid for by Missouri-American ratepayers. 10 11 within reason, I think it's something that could be 12 looked at. 13 And you think if the scope were Ο. 14 narrowed to, say, include just Missouri-American 15 ratepayers, that would be something that the 16 Division of Energy might be more comfortable with? 17 Along with some other conditions or Α. considerations, I would say that would be one of 18 19 them. 20 And so would you say there are other 0. 21 relevant stakeholders that might have other 22 opinions about conditions that they would want to 23 consider? 24 I mean, it depends what stakeholders Α. 25 you get, but I would assume they would be

- 1 interested in certain other considerations. I
- 2 should probably clarify what I mean by conditions
- 3 and considerations. I was speaking more to, for
- 4 example, the funding level of the collaborative,
- 5 the -- to what extent, you know, allowing the
- 6 company's program to continue until such time as,
- 7 you know, we determined if there is a suitable
- 8 alternative. Those are the kinds of things I was
- 9 talking about as conditions and considerations.
- 10 Q. And you're aware that Dr. Marke in
- 11 his testimony, based on his proposed pilot, would
- 12 allow the company's lead service line replacement
- 13 to continue concurrent with the pilot? Did you see
- 14 that in his testimony?
- 15 A. I don't entirely agree with that
- 16 characterization.
- 17 Q. You would agree, though, that there
- 18 would be lead service line replacement occurring up
- 19 to a certain amount during the collaborative,
- 20 correct?
- 21 A. That's the characterization that I
- 22 would agree with. I think the -- one of the issues
- 23 with the collaborative was that it would limit how
- 24 many lead service lines could be replaced. I mean,
- 25 the two possible adverse outcomes from that are,

- 1 one, that they do -- the company does main
- 2 replacements and doesn't replace lead service
- 3 lines; therefore, you end up with potential lead
- 4 contamination. The other possibility being that
- 5 the company avoids areas with lead service lines
- 6 when they reach that cap for those one or two
- 7 years, and then you have mains that need to be
- 8 replaced that aren't being replaced. So that's my
- 9 concern with capping the amount.
- 10 Q. Well, this wouldn't, I guess -- do
- 11 you agree that ten years is the right time horizon
- or do you think that might be something the
- 13 collaborative would consider?
- 14 A. While the collaborative could
- 15 consider it, I think that does get into some
- 16 questions about the company's operational practices
- 17 and to what extent we can micromanage, if you will.
- 18 I certainly think if you could extend the period it
- 19 might be good, but there's also the question of,
- 20 you know, what are the risks we're taking with
- 21 leaving the lead service lines in the ground.
- 22 Q. So yesterday Mr. Aiton was talking
- about how these replacements are married to main
- 24 replacements, correct?
- 25 A. Right.

1 Ο. And so it was also discussed that in 2 St. Louis County a lot of those mains are new, 3 right? 4 That -- yes, that sounds Α. Yes. 5 familiar. 6 And so those lead service lines Ο. 7 wouldn't realistically be able to be repaired in 8 the ten-year time period unless those mains were 9 taken out early; is that your understanding? 10 Α. I'd say that that makes sense, with 11 the caveat that I think a lot of the concern that 12 we're going through and why we're going through the 13 replacements, my understanding is it's in response 14 to avoiding partial replacements and avoid -- and 15 work that would have -- avoiding impacts from 16 underground construction work that could impact --17 that could disturb the lead service lines. 18 And to the extent you're not 19 replacing the mains in an area, that takes away 20 some of the risk of disturbance. I mean, of course 21 there are other projects that could come through, 22 but you're at least re-- that's at least one risk 23 you don't have to worry as much about. 24 Do you agree there might be some 0. 25 value in making sure the company coordinates

- 1 with -- so the company has knowledge through these
- 2 tap cards of its lead service lines to some extent;
- 3 you'd agree?
- 4 A. To some extent is my understanding.
- 5 O. And so when there's construction
- 6 projects, the city's aware of those construction
- 7 projects. Do you think it might make sense for the
- 8 cities and the companies to coordinate on that?
- 9 A. I would think so, and my
- 10 understanding is that there is some coordination
- 11 already. I mean, I don't really speak much to
- 12 the -- I don't think I speak to the coordination
- issue really in testimony that I can recall, but I
- 14 would certainly hope that there would be
- 15 coordination.
- 16 Q. You would agree that Dr. Marke
- 17 covered that issue related to Jefferson City in his
- 18 testimony?
- 19 A. Do you have a copy and page number,
- 20 line number that I could look at to refresh my
- 21 memory?
- 22 Q. Sure. It is confidential, though.
- A. Oh. I mean, I'll go ahead and say
- 24 that broadly, yes, I recall that he did discuss
- 25 that issue. I wasn't honestly as focused on that

- 1 portion of his testimony.
- Q. Do you think that's something that
- 3 might merit some discussion?
- 4 A. Certainly I think it could be
- 5 discussed. Again, you have to be careful not to go
- 6 too far into the weeds of micromanaging the
- 7 company's day-to-day operations, but I think it is
- 8 something that could be a reasonable topic.
- 9 Q. You were talking about 20/20. If in
- 10 four years the company hasn't done a lot of these
- 11 things that could have been done, such as
- 12 prioritization or maybe the benefit isn't there, I
- mean, don't we want to address this right now
- 14 rather than --
- 15 A. Can you clarify what you mean by
- 16 20 -- talking about 20/20?
- Q. Well, I think you were saying that
- 18 St. Louis County, the fact that they didn't keep
- 19 records, well, it's easy to look back and see what
- 20 they should have been doing, right?
- 21 A. Right.
- 22 Q. So in a future rate case, when this
- issue comes up again, do we want to be saying in
- that rate case here's what you should have been
- doing or do we want to address that in this rate

1	case?
2	A. I think you can if necessary, some
3	of it can be addressed in this case. I don't know
4	that I have a sense of, you know, what I would
5	suggest should be ordered with respect to that in
6	this case, but I think it is something that could
7	be addressed in this case and future cases.
8	I did want to get to another point
9	you talked about, which is the benefits. And I
10	guess I'm struggling with the concept of
11	quantifying benefits from avoiding lead poisoning.
12	I'm struggling with how you put a dollar value on
13	avoiding adverse impacts on children and pregnant
14	people.
15	Q. Well, have you looked at the
16	research?
17	A. To which research are you referring?
18	Q. Do you have any medical background?
19	A. No, but I
20	Q. Did you look at Dr. Marke's testimony
21	regarding the research he did do relating to lead
22	poisoning?
23	A. I did, but my understanding is that
24	it's pretty unequivocal that you don't want lead
25	poisoning from a health perspective, and you don't

- 1 really have to be a doctor to know that.
- Q. But I guess isn't it true that today
- 3 lead paint is the primary source of concern?
- 4 A. I would agree that lead pipes may not
- 5 be the primary source, but they are a source.
- 6 Again, if there's no safe blood level in children,
- 7 then it makes sense to reduce your potential
- 8 sources of exposure.
- 9 Q. Well, by no safe level, I mean, let's
- 10 draw that out because I think Dr. Marke has various
- 11 recommendations from the CDC and for different
- 12 blood levels; is that correct? Do you recall that?
- 13 A. I recall that, and I think the
- 14 distinction here is between action levels and
- 15 levels from the perspective of health policy, and
- 16 it's right on the CDC website that the safest level
- 17 is zero.
- 18 Q. Well, the safest level is zero,
- 19 that's true, I think, but do you believe that there
- 20 is any -- is there a cost ceiling that you have to
- 21 eradication?
- 22 A. I would certainly expect reasonable
- 23 costs, and I think that's one thing that the
- 24 Commission can look at, but I think portraying it
- 25 as a cost/benefit analysis kind of misses the point

- 1 of reducing public health risks.
- 2 Q. But if you don't know what those
- 3 health risks are, doesn't that muddy the cost/
- 4 benefit analysis?
- 5 A. I guess I would disagree with the
- 6 premise that we don't know what the health risks
- 7 are of lead.
- 8 Q. Are you personally aware of any
- 9 waterborne lead poisoning that occurred in a
- 10 Missouri-American Water customer?
- 11 A. While I'm not aware of that, I think
- 12 the issue here is more what could happen without
- 13 action. I think it's not an issue of past
- 14 performance; it's an issue of what could happen in
- 15 the event that there is potentially a partial line
- 16 replacement or disturbance of the line due to
- 17 infrastructure work. I think that is the real
- 18 issue that we're looking at.
- 19 Q. Well, if that is the real issue, you
- 20 would agree that a line can be returned to
- 21 stability in a short period of time, correct, a
- 22 lead service line?
- 23 A. My understanding from the testimony
- 24 yesterday is that that's a pretty variable time
- 25 span, and I think the question then becomes so what

- 1 do you expect the customer to do while you're
- 2 waiting for it to return to stability? Do you
- 3 expect them to not use any water and to stay in a
- 4 hotel? Do you expect them to do constant sampling?
- 5 Do you expect them to run their water for 30
- 6 seconds every time they get up at night to take a
- 7 drink?
- 8 Q. What about a filter?
- 9 A. The filter I think is a bit of a
- 10 problematic solution. I mean, it's going to
- 11 depend -- my understanding is it's going to depend
- on the setup and upkeep of the filter. It's not
- 13 clear exactly how long you're going to have to have
- 14 the filter. And fundamentally, it doesn't really
- 15 get rid of the source of the problem.
- 16 Q. So during the last 15 years under
- 17 ISRS, were those partial replacements or were they
- 18 whole replacements?
- 19 A. I can't really speak to that, except
- 20 for what I heard yesterday. My understanding is
- 21 that there may have been some partial replacements,
- 22 but again, I can't really speak to that too well,
- 23 other than what I heard yesterday.
- Q. I thought I heard you say earlier
- something about how on-bill financing or some sort

- of other low interest loan might be something that
- 2 could be studied in the collaborative; is that
- 3 correct?
- 4 A. I think so, yeah, with the caveat
- 5 that, again, you know, if you're a low-income
- 6 customer, then you're not going to have much of an
- 7 ability to take out any sort of loan. You're going
- 8 to be pretty stretched as it is.
- 9 So I think it would be for certain
- 10 groups of customers that that kind of solution
- 11 could be appropriate, depending upon, you know,
- 12 other factors like the company's billing system and
- 13 so on.
- Q. Are you familiar with what happened
- in Madison, how they treated that?
- 16 A. Just mostly, you know, like what I've
- 17 heard yesterday. I'm not too familiar with the
- 18 Madison situation, to be quite honest.
- 19 Q. Are you familiar with it to the
- 20 extent it would have been contained in Dr. Marke's
- 21 testimony?
- 22 A. Can you point me to a specific round?
- Q. Well, let me ask you, are you
- familiar with the loan part of that, that -- and
- 25 the money part of it, that there was a certain

- amount paid to defray the cost of the loan for a
- 2 customer?
- 3 A. I'm not as familiar with that. It's
- 4 been a little while since I've looked at his
- 5 testimony.
- 6 Q. If you're not familiar with that, I
- 7 don't think I'll ask you any more questions about
- 8 that.
- 9 A. Okay.
- 10 MR. SMITH: I have no further
- 11 questions. Thank you.
- 12 THE WITNESS: Thank you.
- 13 CHAIRMAN HALL: I have no questions.
- 14 Thank you.
- 15 COMMISSIONER KENNEY: No questions.
- 16 QUESTIONS BY JUDGE BURTON:
- 17 Q. Although he's not here with us in
- 18 person, he is here with us in spirit and through
- 19 the power of the Internet, and Commissioner Rupp
- 20 had some questions for you.
- 21 A. Hello, Commissioner Rupp.
- 22 Q. In your surrebuttal testimony you
- 23 recommended several conditions on the
- 24 implementation of inclining block rates in this
- 25 case. You stated that inclining block rates

- 1 should be delayed if the Commission orders further
- 2 district consolidation in this case. Is there any
- 3 scenario in which the Commission ordered further
- 4 district consolidation that you would be
- 5 comfortable recommending moving to an inclining
- 6 block rate?
- 7 A. I think we would have to look at the
- 8 potential bill impacts of specific inclining block
- 9 rates, which gets a little complicated because
- 10 obviously you have to know what the specific
- 11 proposal is that you're looking at, but it's going
- 12 to vary by case.
- In this case we're looking at some
- 14 pretty high bill impacts, for example, on the
- 15 Joplin area, looking at those preliminary numbers.
- 16 So if you were to add -- I guess if you add
- 17 consolidation, it would probably lower the bill
- 18 impacts in Joplin, but then, of course, the problem
- 19 is you end up with a change in bill impacts in,
- 20 say, St. Louis. So it's, for lack of a better
- 21 term, messy.
- Q. Okay. You stated the pilot inclining
- 23 block rate should be applied to a broader
- 24 geographic area than Joplin. Is there one of the
- 25 three water districts that stands out as a clear

1	candidate for the pilot program?
2	A. Well, my understanding is that
3	Joplin, the Joplin area does have some water
4	some issues with water supply, both from this case
5	and from some recent discussions with DNR
6	Q. Can you explain?
7	A Department of Natural Resources.
8	I'm sorry?
9	Q. Can you explain what you mean by
10	issues with water supply?
11	A. Not precisely. I just know that
12	there have been some issues with just getting an
13	adequate supply of water. It's just my broad
14	understanding. So if it weren't for the increases
15	that we're looking at in this case, the Joplin
16	district would probably have been a good candidate
17	to start with, but again, given those impacts, we
18	have to be a bit cautious and gradual.
19	Q. So would there be other
20	characteristics other than water supply issues when
21	you gave that example for Joplin that you think the
22	Commission should use in deciding?
23	A. I certainly think you could come up
24	with some other ones. I mean, fundamentally I
25	remember in the last Report and Order that the

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1 Commission's point was that it wasn't just about 2 water scarcity; it was about the so-called energy/ 3 water nexus and, you know, saving energy while 4 you're saving water. 5 So I think you could look on a district-specific basis to see if there are other 6 7 candidates, but I think part of that consideration 8 has to be the potential bill impacts, which is --9 I think that's part of why we've gotten into the collaborative proposal is, you know, we recognize 10 11 that while maybe there should have been information 12 in this case, there wasn't. And this is a way to 13 make sure that we have that information on a 14 going-forward basis, so in the next rate case 15 anybody who wants to propose an inclining block has 16 the tools and the means to do so. 17 Other than the examples you've Ο. 18 provided as far as rate impacts, water supply, 19 electric costs, are there any other considerations 20 the Commission should have when deciding on a 21 district or a subdistrict for a pilot program? 22 I mean, you could look at consumer 23 acceptance of the proposal because, I mean, another 24 possibility is if you just implement an inclining block rate without going through all of the 25

- 1 necessary work to think about it, then you could
- 2 have blowback, and that could limit the
- 3 palatability, if you will, of inclining blocks in
- 4 the water. But I honestly cannot think of all of
- 5 the things you would need to look at off the top of
- 6 my head.
- 7 O. You also recommended that customers
- 8 on a pilot inclining block rate should be presented
- 9 with shadow billing that compares their bills under
- 10 single block volumetric rate. Have you had any
- 11 response from your testimony from Missouri-American
- 12 Water Company on that?
- 13 A. I have had some response. I don't
- 14 know that I can get into it because it was in the
- 15 context of a settlement discussion, but yes.
- 16 Q. And Missouri-American Water Company's
- 17 last rate case hearing, the Commission ordered the
- 18 company at Division of Energy's recommendation and
- any other party who had the resources to file bill
- 20 impact analysis using stipulated revenue
- 21 requirement to show its impact on each district
- 22 under the various consolidation proposals.
- Do you think a similar bill impact
- 24 analysis would be helpful in this proceeding to
- determine bill impacts and stipulated revenue

1 requirement on each of the three water districts 2 under Missouri-American's proposed inclining block 3 rate? 4 I absolutely think that's a good Α. 5 idea, especially, you know, since we still have these outstanding -- the outstanding question of 6 7 consolidation. Customer charge is still 8 outstanding to some extent. So I think there are a 9 lot of good reasons to look at this. 10 JUDGE BURTON: Okay. Commissioner 11 Rupp thanks you for your answers. 12 THE WITNESS: You're welcome. 13 JUDGE BURTON: Any recross from 14 Public Counsel? 15 MR. SMITH: No, thank you. 16 JUDGE BURTON: Redirect? I 17 believe --18 MR. COOPER: No questions from the 19 company. 20 REDIRECT EXAMINATION BY MR. POSTON: 21 There was discussion with Mr. Smith 0. 22 about if the company were not to continue with this 23 program and they were to identify a main that had 24 lead, that they would potentially just leave that

in the ground and move on.

25

1 Do you think if they did that, just 2 left the lead line in the ground, that they would 3 be fulfilling their obligation to provide safe and 4 adequate service? No, I don't think they would be. 5 Α. 6 I mean, part of that would be the lead line itself, 7 but there would also be the issue of leaving a main in the ground that would otherwise have needed 9 replacing. 10 MR. POSTON: Thank you. That's all I 11 have. 12 JUDGE BURTON: Okay. Thank you. 13 You're excused. 14 Public Counsel, are you ready to call 15 your first witness? MR. SMITH: Yes. Just a second. 16 17 (Witness sworn.) 18 JUDGE BURTON: You may be seated. 19 KERI ROTH testified as follows: 20 DIRECT EXAMINATION BY MR. SMITH: 21 Would you please state and spell your Q. 22 name for the court reporter. 23 Keri Roth, K-e-r-i, R-o-t-h. Α. 24 Q. And by whom are you employed? 25 Missouri Office of the Public Α.

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1 Counsel. 2 Did you prepare or cause to be 3 prepared in this case direct testimony, rebuttal 4 testimony, rebuttal confidential testimony and 5 surrebuttal testimony? Α. 6 Yes. 7 Ο. And do you have any corrections to 8 make to those? 9 Α. No, I do not. 10 MR. SMITH: OPC has marked those as 11 Exhibits 210, 211, 212 and 213, and at this time 12 would offer those exhibits into evidence. 13 JUDGE BURTON: Exhibit 210, which is 14 the direct testimony of Keri Roth, 211, which is the rebuttal testimony of Keri Roth public version, 15 16 Exhibit 212, which is the confidential version of the rebuttal testimony of Keri Roth, and 213, which 17 is the public version of the surrebuttal testimony 18 19 of Keri Roth have been offered. Are there any 20 objections? 21 (No response.) 22 JUDGE BURTON: Seeing none, they are 23 received. 24 (OPC EXHIBITS 210, 211, 212 AND 213 WERE MARKED AND RECEIVED INTO EVIDENCE.) 25

1 MR. SMITH: OPC would tender Ms. Roth 2 for cross-examination. 3 JUDGE BURTON: Division of Energy? 4 MR. POSTON: No questions. 5 JUDGE BURTON: Staff? 6 MS. ASLIN: Thank you. 7 CROSS-EXAMINATION BY MS. ASLIN: 8 Q. Good morning, Ms. Roth. 9 Α. Good morning. 10 I just have a couple of questions for Q. 11 Do you agree with Staff witnesses McMellen 12 and Merciel that the costs associated with the lead 13 service line replacement program should not be 14 booked in Account 345 as recommended by the 15 company? Yes, I would agree with that. 16 17 Would you agree that those costs Ο. 18 should be booked in Account 186? 19 Α. OPC's position is that we're opposed 20 to the costs altogether. So I would say no, we 21 don't agree with being booked in Account 186. 22 In the event that the Commission were Q. 23 to approve the recovery of lead service main costs, 24 what would be OPC's recommendation? 25 Α. I would recommend putting into

1 Account 186 if the Commission were to approve the 2 costs. 3 MS. ASLIN: Thank you. No further 4 questions. 5 MR. COOPER: No questions, your 6 Honor. 7 JUDGE BURTON: Any questions from the 8 Bench? 9 CHAIRMAN HALL: No questions. Thank 10 you. 11 COMMISSIONER KENNEY: No questions. 12 Thank you. 13 JUDGE BURTON: Thank you. You're 14 excused. 15 Please raise your right hand. 16 (Witness sworn.) 17 JUDGE BURTON: You may be seated. 18 JOHN A. ROBINETT testified as follows: 19 DIRECT EXAMINATION BY MR. SMITH: 20 Mr. Robinett, would you please state Q. 21 and spell your name for the court reporter.

John A. Robinett, and it's

Q. And by whom are you employed,

22

23

24

25

Α.

R-o-b-i-n-e-t-t.

Mr. Robinett?

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The Missouri Office of the Public 1 Α. 2 Counsel. 3 And did you prepare or cause to be Ο. 4 prepared in this case direct testimony, rebuttal 5 testimony, confidential rebuttal testimony, and 6 surrebuttal testimony that's been marked as 7 Exhibits 214 through 217? 8 Α. I did. 9 Do you have any corrections to make Q. 10 to that testimony? I do not. 11 Α. 12 And if I were to ask you those 0. 13 questions again today, would your answers be the 14 same or substantially the same? 15 They would. Α. 16 MR. SMITH: At this time I would 17 offer Exhibits 214 through 217. 18 JUDGE BURTON: Exhibits 214 through 19 217 have been offered. Are there any objections? 20 (No response.) 21 JUDGE BURTON: Seeing none, they are 22 admitted. 23 (OPC EXHIBITS 214, 215, 216 AND 217 24 WERE MARKED AND RECEIVED INTO EVIDENCE.) 25 MR. SMITH: OPC would tender

Mr. Robinett for cross-examination. 1 2 MR. COOPER: No questions. 3 MS. ASLIN: No questions. 4 JUDGE BURTON: Any questions from the Commissioners? 5 6 CHAIRMAN HALL: I have no questions. 7 Thank you. 8 COMMISSIONER KENNEY: No questions. 9 JUDGE BURTON: Thank you. 10 THE WITNESS: Thank you. 11 (Witness sworn.) 12 JUDGE BURTON: You may be seated. 13 GEOFF MARKE testified as follows: 14 DIRECT EXAMINATION BY MR. SMITH: 15 Dr. Marke, would you please state and 0. 16 spell your name for the court reporter. 17 It's Geoff, G-e-o-f-f, Marke, Α. 18 M-a-r-k-e. 19 Q. And by whom are you employed? 20 Missouri Office of Public Counsel. Α. 21 Q. Did you prepare or cause to be 22 prepared direct testimony, direct confidential 23 testimony, rate design direct testimony, rate 24 design confidential direct testimony, rebuttal 25 testimony, confidential rebuttal testimony, rate

1 design rebuttal testimony, and surrebuttal 2 testimony in this case? 3 Α. Yes. 4 Do you have any corrections to make Q. 5 to those exhibits? 6 I do have one correction. Α. 7 Q. Okay. 8 A. On my surrebuttal testimony -- I 9 apologize. This is my rebuttal testimony. 10 JUDGE BURTON: Could you please identify which exhibit number? 11 12 BY MR. SMITH: 13 Q. Yes. So is this your rate design 14 rebuttal testimony or your --15 Α. It's the one on January 17th. 16 Q. Okay. 17 Α. No. This is revenue requirement 18 rebuttal. 19 So would this be the confidential Q. 20 portion? 21 This would not be the confidential Α. 22 portion, no. 23 So Exhibit 204. Ο. 24 In my rebuttal testimony I reference Α. 25 a statute section. I put down on page 9, Table 1,

I've got 382, 382 and 381. I think those are 1 2 actually statutes for insurance. It should be 386 all the way down, and then 386 again referenced on 3 4 that page 9. I was not referring to insurance. 5 So the testimony should read in each Ο. of those tables --6 7 386 and then the following numbers. Α. 8 0. Okay. And would that -- that change 9 would be made between lines 1 through 8? 10 That's correct. Α. 11 Q. Okay. Do you have any other 12 corrections to be made? 13 Α. I do not. 14 Subject to those corrections, if I 0. 15 were to ask you the same questions that appear in 16 your prefiled testimony, would your answers be the 17 same or substantially the same? 18 Α. Yes, they would. 19 MR. SMITH: I would move to offer 20 Exhibits 200 through 207. 21 JUDGE BURTON: Any objections? 22 (No response.) 23 JUDGE BURTON: Exhibits 200 through 24 207 are admitted. 25 (OPC EXHIBITS 200 THROUGH 207 WERE

1 MARKED AND RECEIVED INTO EVIDENCE.) 2 MR. SMITH: I tender Dr. Marke for 3 cross-examination. 4 JUDGE BURTON: Staff? 5 CROSS-EXAMINATION BY MS. ASLIN: 6 Good morning, Dr. Marke. 0. 7 Good morning. Α. 8 Q. At various points in your testimony, 9 you question the legality of Missouri-American's 10 lead service line replacement program. Do you 11 recall that? 12 Α. I do. 13 Q. Does this refer to anything other 14 than OPC's argument that the company's current 15 practice is a tariff violation? That's my understanding. 16 Α. 17 So in your view, would a tariff Ο. change theoretically correct this problem? 18 19 Α. I can't speak to that. 20 And in your view, would OPC's pilot 0. 21 program require a change in the company's tariff 22 for the pilot program to be lawful? 23 MR. SMITH: Objection. Calls for a 24 legal conclusion. 25 THE WITNESS: I don't think I can

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1 speak to that either. 2 MS. ASLIN: At this time I would like 3 to mark an exhibit. It's a portion of the 4 transcript from the AAO hearing that we will mark 5 as Exhibit 135. We can offer the entire transcript 6 as an exhibit, but at this time we just have two 7 pages. 8 JUDGE BURTON: I would prefer if we 9 just go ahead and include the actual transcript as an exhibit and reference to that rather than 10 11 piecemeal it by pages. 12 MS. ASLIN: Okay. We can provide 13 that. 14 MR. WESTEN: All we have at the 15 moment is the one page, but we can provide the 16 entire transcript as an exhibit. 17 MR. COOPER: Your Honor, the one item 18 about including the transcript in total, which I 19 generally am in favor of, but it seems like it 20 would be appropriate to include that portion of the 21 transcript that involves the testimony of witnesses 22 as opposed to that portion that's just opening, 23 opening statement that would precede the testimony 24 of a witness. 25 JUDGE BURTON: So the company is

1 requesting that the portion of the transcript 2 that's the opening statements and any responses that the attorneys might make would be stricken 3 4 from the record? 5 MR. COOPER: That's where I'm 6 thinking. I guess I'm starting with the opening 7 statements of course are not evidence, and I wouldn't think that those would be cited by the 9 Commission in its decision ultimately. 10 Responses to the Commission 11 statements is probably a little different than 12 something I'd given consideration to previously. 13 JUDGE BURTON: For charity's sake, I 14 would overrule that objection and just have 15 everything in. Any comments if anyone were to 16 attempt to reference statements made by any of the 17 attorneys in opening statements could be discussed 18 and countered in any briefing. 19 But for clarity for the record, let's 20 go ahead and identify which exhibit the transcript 21 would be marked as. 22 MS. ASLIN: It will be 135. 23 JUDGE BURTON: And that would be the 24 transcript that's Volume 2 from the September 27, 2017 evidentiary hearing? 25

1 MS. ASLIN: That's correct. 2 JUDGE BURTON: And that's in File No. 3 WU-2017-0296? 4 MS. ASLIN: Yes. 5 JUDGE BURTON: Okay. BY MS. ASLIN: 6 7 All right. Dr. Marke, starting on 0. 8 page, says 293 at the top, do you recognize these 9 question and answers as part of redirect of you by 10 Mr. Tim Opitz? 11 Α. Would you like me to read them? 12 Ο. Well, just at this moment I'm --13 They look familiar. Α. 14 Okay. And at the AAO hearing, 0. 15 starting at line 16, you were asked the question, 16 is there anything that the Commission should know 17 about past practice and future -- guaranteeing 18 future compliance, correct? 19 Α. Correct. 20 And if you could just read your 0. 21 answer to that question. The first two paragraphs 22 will be sufficient. 23 When Public Counsel sat back and Α. 24 looked at sort of a worst case scenario here, we 25 tried to figure out, you know, how much risk

- 1 exposure our ratepayers are looking at in terms of
- 2 public health. The default answer when other
- 3 parties have pointed to this was Flint, Michigan.
- 4 I was shocked going through the Flint information
- 5 to the point where, you know, I contacted -- I
- 6 contacted Flint, Michigan and asked, is this really
- 7 what I'm seeing?
- 8 Q. So my question for you is, who did
- 9 you contact in Michigan?
- 10 A. That information is listed in the WU
- 11 case. I have a list of contacts that I made
- 12 throughout my investigation. I have it here, in
- 13 fact. I've got it listed here as GM-1. I don't
- 14 know which version of the testimony is --
- 15 Q. Do you recall -- if you don't know
- 16 the name of the person that you contacted, do you
- 17 know what -- who were they? What do they -- are
- 18 they in the government?
- 19 A. Yes.
- 20 **Q.** Okay.
- 21 A. And it is listed as an unnamed
- 22 representative on my list. But yes, I contacted
- 23 Michigan Department of Environmental Quality. I
- 24 also contacted the University of Michigan. I
- 25 contacted Mark Edwards, who was the Virginia Tech

- 1 researcher that first investigated --
- 2 Q. Did you contact anyone specifically
- 3 in Flint?
- 4 A. Yes.
- 5 Q. Okay. And what sort of conversation
- 6 did you have with them?
- 7 A. So my focus was on Flint -- and I
- 8 contacted the CDC in regards to their blood lead
- 9 levels. The discussion that I had with Flint was
- 10 to verify that the blood lead levels of the
- 11 children during the Flint crisis, if the elevated
- 12 levels were consistent with what I was -- what I
- 13 had put in for exhibits, which did not show an
- 14 abnormal spike.
- 15 MS. ASLIN: I would move for the
- 16 admission of Exhibit 135 at this time.
- 17 THE COURT: Okay. Exhibit 135 is the
- 18 transcript that we've been discussing from the
- 19 prior evidentiary hearing. Subject to Mr. Cooper's
- 20 objection, which I'll overrule, it will be
- 21 admitted.
- 22 (STAFF EXHIBIT 135 WAS RECEIVED INTO
- 23 EVIDENCE.)
- 24 BY MS. ASLIN:
- Q. I just have a couple more questions.

1 Α. If I may, I might have misspoke when 2 I said I spoke directly with the Flint 3 environmental. It's the county. It's Genesee 4 County. 5 Thank you. Do you have any 0. Okay. 6 medical background? 7 I don't. Α. 8 And we've heard a lot of talk the 0. 9 past couple days about various sources of lead 10 contamination, including lead paint. Would you 11 agree that the only source of lead contamination 12 that Missouri-American could reasonably control 13 would be exposure through lead pipes, as a water 14 company? 15 Yes. Can I qualify that statement? Α. 16 0. I'll let your counsel redirect you on 17 that. 18 Α. Okay. 19 MS. ASLIN: Thank you. No further 20 questions. 21 MR. MILLS: No questions. 22 JUDGE BURTON: Mr. Cooper? 23 Thank you, your Honor. MR. COOPER: 24 CROSS-EXAMINATION BY MR. COOPER: 25 In your direct testimony on rate Ο.

- 1 design, I believe you suggest that approval of
- 2 Missouri-American's proposed lead service line
- 3 replacement program, and this part's a quote from
- 4 your testimony, would essentially lead to a
- 5 complete privatization of water service in
- 6 Missouri. Is that a correct -- did I quote you
- 7 correctly?
- 8 A. I believe so.
- 9 Q. And I would first note that you use
- 10 the word would, not could. So apparently you're
- 11 testifying that that's a certainty, that approval
- of this lead service line replacement program would
- 13 result in the complete privatization of water
- service in the state of Missouri; is that correct?
- 15 A. Yes.
- 16 Q. And do you know how many municipal
- owned water systems there are in the state of
- 18 Missouri?
- 19 A. A lot. I couldn't tell you an exact
- 20 number, no.
- Q. Hundreds maybe?
- 22 A. Hundreds.
- Q. So going back to the fact that you
- 24 say it would result, how quickly before all those
- 25 hundreds of municipal systems in Missouri are

1 privatized if the Commission would approve this 2 program in this case? 3 I think context is important. You Α. 4 know, when I made that comment, it was in reference 5 to both -- two issues, both single-tariff pricing as well as the lead line replacement. So it's the 6 7 combination of those two. I think that would spur that activity and incentivize the privatization of 9 utilities. 10 Have you given any consideration to, Q. 11 just as a basic matter, how many dollars would be 12 required to purchase those hundreds of municipal 13 systems? 14 Α. Quite a lot. 15 MR. COOPER: That's all the questions 16 I have. 17 JUDGE BURTON: Any questions from the Commission? 18 19 CHAIRMAN HALL: Yeah. 20 OUESTIONS BY CHAIRMAN HALL: 21 Good morning. Q. 22 Α. Good morning. 23 0. Were you in the hearing room 24 yesterday? 25 Α. I was.

1 Ο. Did you hear Mr. Aiton on behalf of 2 Missouri-American describe the company's main 3 replacement program and how it prioritizes those 4 projects? 5 Α. I did hear that. 6 Did you have any concerns about that 0. 7 program as described yesterday? 8 Α. Yes, I did. 9 Q. Please explain. 10 Α. If I may, I'd reference back to Staff 11 witness Merciel. When he was crossed and asked 12 about if he was familiar with the main replacement 13 program, he suggested to us he was back in the 14 1990s. It's 2018 now. 15 I haven't seen a main replacement 16 In the last case, as part of our 17 condition to move toward zonal pricing, there was a 18 condition that the company would go ahead and 19 deliver their capital expenditures, their future 20 five-year capital expenditures to parties on an 21 annual basis. That was an Excel spreadsheet. 22 was essentially it. 23 But as far as the actual detail, as 24 far as where the mains were going to take place, 25 I've got no clue. So there's a lot of things that

- 1 I find troubling just from an oversight perspective
- 2 that we just don't know what's going on.
- 3 Q. Let me stop you there. In terms of
- 4 the criteria for prioritizing the projects --
- 5 A. Right.
- 6 Q. -- that were identified in
- 7 Mr. Aiton's testimony, do you have concerns about
- 8 those?
- 9 A. Yes.
- 10 Q. What are those concerns?
- 11 A. That there isn't a prioritization;
- 12 that right now it's -- as I understand it, the
- 13 company has put forward that their plan is to do
- 14 this on an ad hoc basis. As they move forward with
- 15 their main replacements, they have a cursory idea
- 16 of where there are existing leads. I've seen the
- 17 GIS map. I've got a visual of what -- essentially
- 18 what the company believes is there.
- 19 JUDGE BURTON: Could you clarify for
- 20 the record what GIS stands for?
- 21 THE WITNESS: Geographical
- 22 information system, I believe is the acronym that
- 23 it stands for. Those are based off of historical
- 24 tap records, and it's wildly different for
- 25 districts. You'll look at, say, another zone and

- 1 it looks like a shotgun shell. There's no rhyme or
- 2 reason as to why things are where they're at;
- 3 whereas, others might be heavily concentrated.
- In St. Louis this is a problem
- 5 because we've had an ISRS for 15-plus years that's
- 6 moved forward. So my concern on a prioritization
- 7 level, and a lot of testimony and a lot of people
- 8 have come up here and really based their opinion on
- 9 the health risk.
- 10 Right now, if we were to move forward
- 11 with what the company's prioritizing, we're not
- 12 prioritizing those most susceptible to elevated
- 13 blood levels, schools, daycares, pregnant women,
- 14 children, any of that.
- There's other issues that I've got,
- 16 but at a very high level it's a lack of
- 17 transparency right now, and that's -- that's what
- 18 we echoed in every testimony: Where's the
- 19 company's plan? Where's the company's plan?
- 20 Where's the company's plan? It wasn't until
- 21 surrebuttal that we got a page and a half of
- 22 testimony from witness Aiton.
- You can contrast that with any other
- 24 state, with any other commission. It's night and
- 25 day.

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1 BY CHAIRMAN HALL: 2 0. So if the Commission were to believe 3 that the lead service line replacement program is 4 important and should be authorized and also 5 believes that the main replacement program is 6 important and should continue, what would you 7 recommend to the Commission in terms of what types 8 of -- what type of reporting requirements we should 9 require? 10 Α. First, we are recommending 11 replacement, to a question that --12 Q. Okay. Please. What reporting 13 requirements would you recommend that we require? 14 At a very, very high level, we need Α. 15 to record what we discover. Right now that doesn't 16 exist. We say, what about the past lead lines? 17 That wasn't a priority for us. We have no clue what's under ground. Moving forward just at a 18 19 very, very, very high level, just recording 20 everything that we see, so in the future --21 Who are we? Q. 22 The utility have it flown back in 23 terms of part of the plan. If I'm making 24 suggestions here, then it's something that is 25 reported or it is included in the next rate case or

- 1 it is done on an annual basis. But absent that,
- 2 nobody's going to look at this.
- Q. Okay. I'm -- we're kind of going in
- 4 circles here.
- 5 A. Okay.
- 6 O. Let me start over. The main
- 7 replacement program as described by Mr. Aiton
- 9 yesterday in terms of how they prioritize it,
- 9 specifically concerning the main replacement
- 10 program, does OPC have any recommendations going
- 11 forward as to what type of reporting the company
- should be required to comply with?
- 13 A. Where they plan on excavating, moving
- 14 forward on a month-to-month basis, on an annual
- 15 basis, this goes -- this reinforces our points as
- 16 far as --
- 17 Q. Okay. So you would recommend that
- 18 they on a month-to-month basis set forth the
- 19 projects that they are completing and that they are
- starting, that they're spending money on? What,
- 21 all three?
- 22 A. This is similar to the practice that
- 23 the company is putting forward in West Virginia
- 24 where --
- O. Okay. So then what about a criteria

- 1 for prioritization, should that be set forth in
- writing and supplied to the Commission and
- 3 interested parties?
- 4 A. I think so.
- 5 Q. Okay. Moving on to the lead service
- 6 line replacement component of this larger program,
- 7 what type of reporting would OPC recommend the
- 8 Commission require? And I understand that you've
- 9 got concerns with how they're operating the program
- 10 now. You've got an alternative. Putting that
- 11 aside, what type of reporting would it be in the
- 12 public interest for the company to provide on an
- ongoing basis on this program from your
- 14 perspective?
- 15 A. Post test results I think would be a
- 16 good start. Right now the company's proposing to
- 17 do two post test results following a lead service
- 18 line replacement, so one several hours after, after
- 19 they go through a flushing, and then again 72 hours
- 20 later.
- 21 I would -- in my discussions with
- 22 Washington University, they had some more nuanced
- 23 perspective on that, but I would say that the
- 24 testing results would be helpful, if this is
- 25 indeed, you know, a fear as it's being portrayed.

- 1 If I could have just a second.
- Q. Well, if you would prefer, maybe in
- 3 your post-hearing briefs and any party that was
- 4 interested could provide that information, what
- 5 type of reporting requirements the Commission
- 6 should require if this program is authorized.
- 7 A. I mean, unusual construction would be
- 8 one right off the bat, and what we're going to do
- 9 with vacant properties.
- 10 **Q.** Okay.
- 11 A. So yes, we can provide that
- 12 information.
- 13 CHAIRMAN HALL: Okay. Thank you.
- 14 QUESTIONS BY COMMISSIONER KENNEY:
- 15 Q. Good morning.
- A. Good morning.
- 17 Q. I believe you were here yesterday --
- 18 A. I was.
- 19 Q. -- with your counsel when I just
- 20 asked him a couple questions.
- 21 A. Uh-huh.
- Q. Going back to that, what's your
- 23 position if we -- regarding the customer service
- line, if the company is replacing a main, they come
- 25 upon a -- and they have to disturb a customer's

- 1 service line and they do so, is it OPC's position
- 2 that the company should be reimbursed for the
- 3 replacement of that service line or that OPC
- 4 should -- is it your position they should not
- 5 replace that service line? What's your position?
- 6 A. So the answer that we put forward was
- 7 yes, they should be reimbursed. That's why we
- 8 proposed the pilot, because we feel like, by just
- 9 looking at that question, we're putting the cart in
- 10 front of the horse.
- 11 Q. I know, but I'm not asking about the
- 12 pilot. You answered that question. So there
- should be -- your belief is that that line should
- 14 be replaced and the company should be reimbursed in
- some form or some manner?
- 16 A. Within the context of the pilot.
- Q. Well, let's say we don't do a pilot.
- 18 We're not going to do a pilot. We decide as a
- 19 condition we don't do that. Should that line be --
- if the company comes upon that line, should they
- just reconnect it or should they replace it?
- 22 A. I don't think I can give you the yes
- or no question or response that you're probably
- 24 seeking here.
- Q. Why is that? I mean, it's either

- 1 you've got to hook it back up or you've got to
- 2 replace it, one of the two. It's really yes or no.
- 3 It is a yes or no answer. I guess there could be
- 4 some extenuating circumstances.
- 5 A. I quess right now I don't think
- 6 it's -- what I've been advised is that it's not
- 7 legal, that it is a customer-owned property.
- 8 Q. Well, the legality of it, if they ask
- 9 the question would you like us to replace your
- 10 line, that you have lead in the line, we're going
- 11 to do it for free, that's -- I think it's legal.
- 12 A. Well, I don't think they're doing it
- 13 for free.
- Q. Well, free to the customer. Telling
- 15 the customer you don't have to pay for it because
- 16 we have -- we get reimbursed by the Public Service
- 17 Commission. The Public Service Commission wants us
- 18 to protect you as a customer. We don't want you to
- 19 have lead in your lines for many reasons that you
- 20 don't want them to. So --
- 21 A. Then I guess I've got to say, where
- 22 do we draw the line here as to what's appropriate?
- 23 If the company doesn't want to take responsibility
- 24 of these lines after the fact but they want to get
- 25 a return of and on it moving forward.

- 1 Simultaneously keep in mind they've got an
- 2 unregulated affiliate that's trying to sell
- 3 insurance on these service lines.
- Q. Okay. I'm not asking that question.
- 5 And I understand your position, but -- and I'm not
- 6 even talking about how they get reimbursed or how
- 7 much money they get or anything. But I remember
- 8 when -- and I do give you credit, when you talked
- 9 about an AAO in your testimony about pointing out
- 10 several of the homes that were being replaced and,
- 11 you know, very high-dollar homes.
- 12 A. Right.
- 13 Q. And it appears someone living in an
- \$800,000 house, they'd have the money to spend the
- 15 \$4,000 to replace the lines themselves. I can
- 16 understand that. But there has to be a point --
- 17 let's go back to those places you pointed out in
- 18 your testimony where the majority of individuals,
- young or old, who have higher lead levels is
- 20 poverty related.
- 21 A. Right.
- Q. For a lot of different reasons. Lead
- 23 **paint --**
- 24 A. Right.
- 25 O. -- in the old homes --

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1 Α. Right. 2 Q. -- and the dust. But regardless of 3 any of that, come upon a line, it's got to be 4 either spliced or replaced. Should the company 5 replace it or should the company splice it, not 6 taking into account any factor of the value of the 7 home, the wealth of the individual, because that --8 in a situation when you come upon that line, you 9 replace that line, there's going to be -- I mean 10 the main, it's what do we do now? I've wrestled with this a lot. 11 Α. 12 not trying to be hyperbolic here. A lot of 13 sleepless nights trying to wrestle with this. Ι 14 live in an old home. Right? What would happen in 15 this sort of situation? And that's why I went out, 16 I made an active effort to speak with experts, 17 including the company that conducted tests on this in terms of does it make -- the question I had was, 18 19 the analogy I made is if you looked at it like a 20 straw, and if you broke -- the straw isn't probably 21 the best analogy. If it's just a line -- chalk is 22 what we said, yes, a piece of chalk. If you broke 23 a piece of chalk, the current practice is a partial 24 replacement, that chalk gets everywhere. 25 essentially what we're talking about with the lead.

- 1 The question I had is, whether we
- 2 break it in the middle, we break it at the end,
- 3 you're still breaking it. We're still disturbing
- 4 lead at some point. Isn't there a chance that
- 5 there's heightened lead at least temporary right
- 6 there? Essentially the answer I got was yes,
- 7 maybe, we don't know.
- 8 Q. I think the evidence shows that when
- 9 you break a lead line or you disturb it or cut it,
- 10 you're going to have some corrosion. As your
- 11 counsel said, it's temporary.
- 12 A. Right.
- 13 Q. And depending on how long that
- 14 temporary could -- it could -- on different lead
- lines it could be. My question is, though, should
- 16 it be replaced or not? What's your thought? It's
- just a simple question, yes or no. Regardless of
- 18 how much is replaced or how much it is.
- 19 A. So I don't think it's a simple
- 20 question, and I quess that's where I'm struggling
- 21 with this.
- 22 Q. You and your counsel are pretty good
- at getting together and not saying yes or no.
- 24 A. That's -- you know, again, I think we
- 25 could have taken a hard line stance and said no,

- 1 you can't do this. That's not the position we
- 2 took. I know it might come across that way here.
- 3 Q. No. I understand you're not taking a
- 4 position, it seems like. You're not going to say a
- 5 yes or a no.
- 6 A. We wanted to have it evidence based.
- 7 We wanted to have some support.
- 8 Q. We have a pilot program, that's
- 9 your -- I was just trying to see what you -- what
- 10 your answer is. I'm not going to get there, and
- 11 that's okay.
- 12 A. Okay.
- 13 COMMISSIONER KENNEY: All right.
- 14 Thank you.
- 15 QUESTIONS BY JUDGE BURTON:
- 16 Q. How long does it usually take
- whenever they decide we need to replace this main?
- 18 Have you reviewed that information?
- 19 A. A main or a service line?
- Q. A main that has -- that they find
- 21 out, that the company finds out is connected to a
- 22 lead service line.
- 23 A. It's going to vary. The excavation
- 24 process isn't simple. So in Indiana they passed a
- 25 statute, and part of that statute, we passed it

- 1 around and it has a series of questions to go ahead
- 2 and answer. One of them was the company had to
- 3 submit a plan to the Public Service Commission
- 4 there. They had to answer all of these questions,
- 5 and they did. They submitted it in January, real
- 6 detailed plan.
- Gary Verdot, we actually -- he's in
- 8 the exact same building as the witnesses that have
- 9 come up here and testified. And in that plan they
- 10 said that we're essentially guessing. It could be
- 11 anywhere from -- for us to go ahead and finish
- 12 these lines that we think are out there could take
- 13 excess of 24 years or more.
- 14 Q. That's not the question I had. When
- 15 the company says, okay, we need to replace this
- 16 main, it could be either part of their strategic
- 17 plan --
- 18 A. Right.
- 19 Q. -- it could be this main is leaking,
- it's an emergency situation, right?
- 21 A. Right.
- Q. So if that happens, how long do they
- have to decide whether or not to replace the lead
- 24 service line?
- 25 A. I don't think I could offer an exact

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1 time. I think it would vary. It would be speculative on my part. 2 3 0. Okay. Would you support part of a 4 requirement, if the Commission was to recommend requirements of reporting, that the company have to 5 6 inform customers we're going to change your line in 7 a certain time frame or we're going to replace the main and that might cause some damage and lead 9 leaking in your customer-owned service line? So I raised that, and that to me is a 10 Α. 11 real challenge here because in Missouri we're a 12 home ruled state. So there isn't any -- in terms 13 of actually what impact that might have on home 14 value, if you were to disclose to somebody that 15 they had a lead service line or if this became a 16 public issue and it became pressworthy, that's 17 essentially what happened in Flint. Flint got categorically devalued. Their homes, everything 18 19 dropped. Right? Putting aside the water crisis 20 and everything else, whether valid or not, the 21 homes and the property, the businesses, everything 22 went down. That's our concern. 23 On the same token, if I had lead 24 service line, I think I would want to know. I 25 don't personally think I'm in a position to answer

- 1 that, and that's what -- that's what our hope was
- 2 with the pilot study is that that would get fleshed
- 3 out. We ultimately suggested that's a reason why
- 4 it should be part of -- in front of the Legislature
- 5 and the Governor.
- 6 Q. Do you think the company should try
- 7 to approach third parties, either customer owners,
- 8 insurance programs, non-profits, grants, when they
- 9 go through this main and lead service line
- 10 replacement to see about alternative sources of
- 11 funding?
- 12 A. It's going to be tough to get that.
- 13 I spoke with the Wealth Accumulation Center, which
- 14 is St. Louis Community Credit. It's a low-income
- 15 funding. I mean, there are ways that we could set
- 16 it up to make -- to target just at-risk homes or
- 17 low-income homes, and I think we would absolutely
- 18 be in support of that. That is worthwhile.
- 19 Again, to Commissioner Kenney's
- 20 point, whether or not we need to be subsidizing
- 21 million dollar homes in Ladue I've got less of an
- 22 appetite for.
- 23 Again, just pointing to Flint, the
- 24 problem with the contractors there is, as soon as
- 25 that became a national issue, what they estimated,

- 1 well, let's say \$3,000 a line, became a supply/
- 2 demand thing. As soon as this became public, your
- 3 contractors were able to bid up the price, and all
- 4 of a sudden 5,000, 6,000, 7,000, \$8,000.
- 5 Q. So would you agree with the testimony
- 6 that the company has offered that using their
- 7 service providers, their contractors, or them being
- 8 able to negotiate on these contracts would offer a
- 9 cheaper price?
- 10 A. You know, that's what the company
- 11 puts forward. I think that would be something that
- would be appropriate to be included in a plan to
- 13 show here we've locked in those contractors at this
- 14 price, this is what we're planning on doing.
- I mean, the problem with that is it
- 16 becomes an issue of scale and speed. How quickly
- 17 do you want this program, this lead problem
- 18 eradicated? It's not easy. It's not quick. This
- 19 is going to -- this problem will be continuing long
- 20 after we're all gone, even under the best of
- 21 circumstances.
- Q. Well, basing it off of the ten-year
- 23 plan that the company has put forward?
- A. I mean, I would say I have no faith
- 25 in the ten-year plan, none. These are -- they're

estimates and for what estimates are worth. 1 2 will get bigger and they will get larger. 3 JUDGE BURTON: Okay. Thank you. 4 That's all the questions I have. Any recross by 5 Staff? 6 MS. ASLIN: No questions. JUDGE BURTON: Mr. Cooper? 7 8 MR. COOPER: Yes, your Honor. 9 RECROSS-EXAMINATION BY MR. COOPER: 10 Q. In response to a question about the 11 reporting requirements, I think you cited to 12 West Virginia as a sort of reporting requirement 13 model. Are you aware that the American Water sub 14 in West Virginia gets ISRS-like recovery for future 15 line replacements in West Virginia? 16 Α. It would not surprise me. 17 MR. COOPER: That's all the questions 18 I have. 19 JUDGE BURTON: Redirect? 20 MR. SMITH: Yes. Thank vou. 21 REDIRECT EXAMINATION BY MR. SMITH: 22 Counsel for the company just asked Q. 23 about West Virginia. Can you explain why 24 West Virginia was referenced? 25 West Virginia was referenced because Α.

- 1 I included a caption in my direct testimony of a
- 2 service map from West Virginia that essentially
- 3 shows here's where American Water, West Virginia
- 4 American Water is moving forward with projects,
- 5 showing you how ratepayer dollars are being spent.
- 6 We think that is a good message. It is good
- 7 transparency.
- 8 Q. Does that happen in real time?
- 9 A. I don't believe so. I think I made
- 10 the caveat in my testimony that no doubt that there
- 11 would probably be improvements that we could make
- 12 with that.
- 13 Q. And so can anyone see this map or --
- 14 A. I'm assuming so. I was able to find
- 15 it on Google, so I would venture to say that
- 16 anybody that has access to the Internet.
- 17 Q. Judge Burton had asked you some
- 18 questions about the ten-year plan. Why does the
- 19 ten-year plan give you pause?
- 20 A. I guess again for reasons that I
- 21 stated earlier, and this was underscored I think in
- 22 the testimony of the witnesses that spoke
- 23 yesterday. The common theme that you kept hearing
- 24 was, we haven't done this before, this is new
- 25 terrain, we're going out, we don't know. I

- 1 affirmatively agree with all of that. Cutting into
- 2 somebody's property, potentially even into their
- 3 home, unfinished basements, there's grounding with
- 4 electric -- with the electric system, there are a
- 5 lot of variables that can drive the cost up.
- If I may just -- and this is the
- 7 company's -- again, this is Indiana saying this,
- 8 but these costs do not include company personnel
- 9 time for engineering, planning, construction,
- 10 supervision or water quality testing. Contractor
- 11 cost isn't included in replacing the service line
- 12 into -- inside the house basement for most of the
- 13 services because most of the buildings thus far
- 14 have unfinished businesses (sic). Factors
- 15 impacting cost could include local codes and
- 16 requirements, changes in laws and standards, local
- 17 competitive market prices. The list goes on and
- 18 on.
- 19 And this is all public information.
- 20 You can -- you can access this today. I think the
- 21 docket, it's Cause No. 45043 in Indiana.
- Q. Do you believe that the ten-year plan
- 23 will replace all customer-owned lead service lines,
- 24 including the ones that were placed under ISRS?
- 25 A. No. I think the company has put

- 1 forward that they don't intend to go back
- 2 retrospectively on the 15-plus years of ISRS
- 3 replacement where they have passed over lead lines.
- 4 This raises other equity issues in
- 5 terms of if we were to move towards single-tariff
- 6 pricing, because you're putting all of this cost on
- 7 St. Louis customers who aren't going to see any of
- 8 that benefit.
- 9 Q. There were some questions also from
- 10 the Bench about other financing options. Can you
- 11 add to that? Were there any other financing
- 12 options you explored?
- 13 A. I reached out to the National
- 14 Governors Association. This was probably about ten
- 15 months ago at this point. At the time the Trump
- 16 administration had put forward that they were
- 17 planning on moving forward with a large-scale
- 18 infrastructure investment. I reached out to the
- 19 National Governors Association with the hope of
- 20 essentially teeing up our pilot program as a
- 21 shovel-ready project to go ahead and attract future
- 22 funds.
- 23 There was a lot of -- again, the
- 24 response I got was very positive, and I was even
- 25 given reference in context to the White House

- 1 itself. Ultimately, because of my position here in
- 2 the office, it was judged not to jump the chain of
- 3 command. There's a larger process that needed to
- 4 take place.
- 5 So whether or not that could be
- 6 explored again, my understanding is that that plan,
- 7 potentially public-private partnership, which again
- 8 would be perfect for what American Water, what
- 9 we're talking about here is, I think it could be
- 10 explored.
- 11 Q. So you think more public-private
- 12 partnerships could be explored for lead service
- 13 lines?
- 14 A. Yes.
- 15 Q. Commissioner Kenney had asked you a
- 16 question, and he asked me the same question. Both
- struggled with it. Can you explain why you think
- 18 you struggled with it?
- 19 A. I struggled with it because of all of
- 20 the issues that I raised beforehand. We're
- 21 presupposing that this is the best use of ratepayer
- 22 dollars in moving forward and that we're not going
- 23 to go ahead and cause more harm than we otherwise
- 24 would by not doing this process.
- 25 Right now it's not entirely clear to

- 1 me that we are. I don't want to be in a position
- 2 where ten years from now we're digging up holes
- 3 again because we didn't record the stuff right the
- 4 first time, or that we passed over something
- 5 because we didn't have a plan in place over homes
- 6 that are vacant today.
- 7 These are just very simple questions
- 8 that it shouldn't -- it shouldn't come to this
- 9 point a year later where we're still struggling
- 10 with it.
- 11 Q. Who are the relevant stakeholders
- 12 that you think could help create an objective
- 13 answer?
- 14 A. I had a very meaningful discussion
- 15 with the state's epidemiologist, and I think we
- 16 even included reference to OSHA laws. Her point to
- 17 that, and she's the one that brought that to my
- 18 attention, was that it's not just a matter of
- 19 removing that lead line. It's a hazardous
- 20 material.
- 21 If you're breaking it off -- and
- 22 we've got a DR response where we asked for
- 23 different excavation methods. How does the company
- 24 remove the line? There's a lot of different ways
- 25 you can remove the line, including a hacksaw. If

you're using a hacksaw, there's -- your lead's 1 2 getting everywhere. If you're using a pipe cutter, 3 it's going to be a cleaner cut. 4 Obviously it's going to vary between 5 sites, but the problem from an epidemiologist, from Health and Human Services' perspective is that 6 7 essentially you're getting lead into the soil. 8 Based off of my discussions with experts in this 9 field, the two largest factors, overwhelmingly the largest factors for lead exposure for children or 10 11 pregnant women, which is really who we should be 12 focusing on, is lead paint and lead in the soil. 13 I think we have a lot to learn. Ι 14 think there's -- HUD went through this experience 15 back in the '80s. HUD decided that they were going 16 to go ahead and remove all the lead paint out of 17 all of their own homes, government-owned homes. Essentially that practice was stopped because it 18 19 became cost prohibitive and because they were 20 making things worse. By messing with the paint, 21 they were essentially getting it everywhere. 22 were getting these finite particles everywhere. 23 To suggest that this is above 24 reproach, that we shouldn't have some measured 25 questions just seems inappropriate.

1 There was some discussion with the Q. 2 Bench about Indiana. Are you aware of any other 3 states' approach to this issue? 4 Wisconsin has passed a statute for Α. 5 municipals. Michigan is still struggling with 6 this. We are several years removed from Flint. 7 There's information that you can glean from that. In Pennsylvania, York, who's in violation of lead 9 and copper rule, is not getting a return on and of that investment and is footing some of the bill for 10 11 those lead replacements. Again, it's a very local 12 phenomenon. They were in violations, what took 13 place. 14 In the AAO case I referenced Madison, 15 Wisconsin. Madison, Wisconsin was unique to me 16 because that was a company that was very -- a city 17 that was proactive in taking out lead lines. Several years later they found elevated levels of 18 19 lead again. 20 I mean, at the heart of it, I think 21 most people would agree the lead and copper rule is 22 flawed by itself, that it's an imperfect 23 measurement tool to move forward. But right now, 24 there is no -- there is -- the company is not in violation, and there's nobody telling the utility 25

- 1 that these need to be removed. In fact, 15 years
- 2 ago the very same company argued in front of
- 3 federal courts to be abdicated this responsibility.
- 4 American Waterworks is a larger entity within that
- 5 conglomerate.
- 6 Q. Are you aware of any commission who
- 7 has approved a project like this?
- 8 A. No. It would be unprecedented, and
- 9 certainly one that for lack of the information to
- 10 substantiate it.
- 11 Q. I think the Commission had asked you
- 12 about some reporting requirements. I know you've
- 13 had a very little bit of time, but are there
- 14 anything else you would add to that?
- 15 A. I think it's imperative that we have
- 16 a dialog. I think that's the thing that's missing
- 17 at best here. I've tried to raise issues and
- 18 concerns through testimony and to the extent of
- 19 sort of abridged one offs here in the confines of a
- 20 regulatory hearing, but this isn't probably the
- 21 best way to handle this. Yes, there should be
- 22 other actors involved that don't know about this.
- O. Who would those other actors be?
- 24 A. I would refer back to the Lead
- 25 Service Replacement Collaborative, which is really

- 1 where we modeled every point in our pilot program
- 2 is based off of best practices, which basically
- 3 essentially engage stakeholders early on in this
- 4 process, get buy in and prioritize.
- 5 I don't think that has happened
- 6 today. Instead, we've got a 250-word application
- 7 in the AAO case and very, very, very little
- 8 testimony in this case.
- 9 Q. That Lead Service Line Replacement
- 10 Collaborative, is that the same collaborative that
- 11 Mr. Naumick had referred to?
- 12 A. Mr. Naumick, yes.
- 13 Q. And what is the Lead Service Line
- 14 Replacement Collaborative?
- 15 A. So the Lead Service Line
- 16 Collaborative is essentially that. It is a
- 17 collaborative of interested entities about this on
- 18 a macro scale. Essentially what we would be
- 19 talking about is implementing something like this
- 20 on a Missouri-specific level, which is what the
- 21 collaborative advocates.
- 22 Q. Counsel for the company had asked you
- 23 about privatization. Can you put -- kind of put
- 24 some context around that statement that you made in
- your testimony?

1 Α. In -- I would say OPC is indifferent 2 to privatization. I mean, we're not saying we're for it or against it. We're making an observation 3 4 that moving towards single-tariff pricing, moving 5 towards socializing lead service line replacements and the associated fear with that, the two of those 6 7 factors would have an overwhelming impact on not only just distressed systems but the greater, 9 broader public dialog I think over lead replacement. 10 11 Our -- I said this in the AAO case, 12 but I think St. Louis would be the next -- the City 13 of St. Louis would be a prime candidate at that 14 point to go ahead and be absorbed by American 15 Water. And again, that might be the best case. 16 But the fact that we're not talking about that, 17 we're sort of collectively pretending like that's not an option, I think is discouraging. 18 19 Q. Why is it discouraging? 20 Because when we say \$1 million or 21 \$1.4 million that was spent in fiscal year or 22 calendar year 2017, I think that minimizes the 23 impact that we're talking about here. And I put in 24 numbers that if we were to just go off of the lead 25 lines in the state, the estimated lead lines, we

- 1 would essentially be talking about and the
- 2 company's numbers there would be several billion
- 3 dollars. That's orders of magnitude greater than
- 4 what their rate base is today. This would be huge.
- 5 That's just the lead lines. That doesn't include
- 6 what their -- what the capital cost of their
- 7 associated systems would be as well.
- 8 Q. So you're saying acquisition growth
- 9 could impact this issue?
- 10 A. I think it -- I mean, if I was the
- 11 company, I would absolutely be in favor of this. I
- mean, it puts them in a very, very attractive
- 13 position.
- 14 Q. And so when you were talking about
- privatization, you were talking about the larger
- 16 public systems, correct?
- 17 A. Primarily, yes. To Mr. Cooper's
- 18 point, yes, there's hundreds of small water
- 19 systems, but they pale in comparison to the
- 20 St. Louis, the Kansas City, the Springfield, those
- 21 sort of entities.
- 22 Q. I think Staff asked you a question
- about whether the only thing that Missouri-American
- Water can control is lead pipes, something to that
- effect. And you asked if he could clarify your

1 response. Do you recall that? The response, and I think I 2 I do. answered it earlier, but it really did have to 3 4 go -- refer to potentially contaminating the soil 5 with that excavation. 6 I'm by no means an expert on this, 7 but my cursory understanding with OSHA regulations is that precautions need to be made for those 9 workers that are handling hazardous material, and there's also the issue of what you're doing with 10 11 that material after the fact, where are you going 12 to dispose of it, how are you dealing with that. 13 Ο. And the company is treating the 14 water, true? 15 Α. They are. 16 And how does that impact the pipes? 0. 17 They're in compliance with the lead Α. and copper rule. My understanding is the company 18 19 does a very, very good job of their job. 20 There was also reference by Staff Ο. 21 counsel relating to Flint, Michigan. Could you 22 provide some context about what happened in Flint 23 beyond what was explored through cross? 24 Yeah. You know, I mean, Flint, there Α. 25 were a variety of things that happened in Flint

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1 that I don't think are -- it's not an apples to 2 apples comparison. It's more of an apples to milk 3 comparison or meat. It's something completely 4 different with what took place in Flint, and it was 5 a systemic issue. 6 But to the issue of lead lines, 7 there's essentially two ways of judging whether 8 there's lead present. There's the water lead 9 levels, is there lead in the water, and is there the blood lead levels. Right? And we're still 10 11 gathering knowledge. Like any discipline, I think 12 all disciplines reserve the right to get better, 13 and in part that's why we advocated for, you know, 14 encouraging different universities to be a part of 15 this research, really just an opportunity. 16 But my testimony included, you know, 17 empirical data to support essentially not only what took place in Flint, not only what took place in 18 19 that county, not only what took place in Michigan 20 during that time, but also other states. 21 And I believe counsel for Staff also Ο. 22 specifically pointed to a part of the transcript 23 where -- or I quess you contacted Flint, Michigan 24 or officials in the county to verify what it is 25 that you were observing in the data. Do you recall

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1	that?
2	A. I do.
3	Q. And why did you do that?
4	A. I did it because I couldn't believe
5	what I saw. Based off of the press, everything
6	that I saw about Flint, Michigan, I expected to see
7	I guess what I expected to see, I mean, just huge
8	elevated spikes, a tragedy. And what the blood
9	lead levels showed was that they weren't there. To
10	the extent that there was a bump, the bump was
11	consistent with CDC recommendations to keep an eye
12	on them, but not to actually do anything or not to
13	actually do any measures.
14	I can confidently say, you know, that
15	if you're of a certain age in this room, you were
16	probably exposed to much more lead in your
17	developmental years than anybody, any child was in
18	the Flint area just because of the leaded gasoline
19	that was present, was being pumped.
20	I mean, we talk about the lead
21	tragedy or the lead crisis. I think it's a little
22	misplaced. What we've done as far as eradicating
23	lead in this country is nothing short of amazing.
24	Q. How did Flint at the time of them
25	using the Flint River water as opposed to the Lake

1 Huron water, how did that -- during that time 2 period, how did Flint compare to the rest of the 3 state of Michigan? 4 The Flint water quality or the Α. 5 Flint --6 Either/or. 0. 7 I mean, all of Michigan, you know, Α. experienced a crisis in terms of both the housing 9 and associated impact with the automobile industry in Flint. It's well document the sort of struggles 10 11 they've gone, and it was essentially a cost-cutting 12 measure to go ahead and use water from Flint River 13 as opposed to getting water from Detroit or from 14 the lakes. 15 The biggest factor with that, I mean, 16 there were a couple of different factors, but 17 essentially they just didn't have the money, and --18 Q. And how did the blood levels compare? 19 MR. WESTEN: I'm sorry. I'm going to 20 just object. I think actually --21 JUDGE BURTON: I'm going to sustain 22 that. 23 MR. WESTEN: -- previously put in the 24 record either by Mr. Marke himself in the direct 25 testimony or by other witnesses.

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1 JUDGE BURTON: Let's move it along. 2 MR. SMITH: I have no further 3 questions. Thank you. 4 JUDGE BURTON: That being said, I 5 believe we have two more witnesses who will be 6 addressing this issue who will be appearing either 7 tomorrow or Thursday. So that should conclude the testimony on the lead service line, which is the 9 only issue we have left scheduled for today. 10 I did see that we have a copy of the 11 Stipulation & Agreement that was filed in EFIS, 12 electronic filing information system for the 13 Commission, concerning the issues that we had 14 discussed, and that was also including the sewer 15 rate design settlement tariff proposal. 16 We'll have the Commission review that 17 and we can discuss after we go off the record when the parties would like to make any presentations 18 19 that they feel is necessary on those issues. 20 Is there anything else that we need 21 to address before we adjourn for the day and 22 continue tomorrow at 8:30? 23 MR. WESTEN: Nothing from Staff. 24 Thank you, everyone. JUDGE BURTON: 25 We will go ahead and end today's testimony. Thank

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1	you.
2	(WHEREUPON, the evidentiary hearing
3	was recessed at 10:30 a.m.)
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                    CERTIFICATE
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    STATE OF MISSOURI
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                            SS.
    COUNTY OF COLE
4
                  I, Kellene K. Feddersen, Certified
5
     Shorthand Reporter with the firm of Alaris
6
    Litigation Services, do hereby certify that I was
 7
    personally present at the proceedings had in the
 8
    above-entitled cause at the time and place set
 9
     forth in the caption sheet thereof; that I then and
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     there took down in Stenotype the proceedings had;
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     and that the foregoing is a full, true and correct
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     transcript of such Stenotype notes so made at such
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15
     Jefferson, County of Cole, State of Missouri.
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                  Kellene K. Feddersen, RPR, CSR, CCR
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