1	STATE OF MISSOURI
2	PUBLIC SERVICE COMMISSION
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4	TRANSCRIPT OF PROCEEDINGS
	EVIDENTIARY HEARING
5	MARCH 5, 2018
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8	Jefferson City, Missouri
9	Volume 15
10	In the Matter of Missouri-)
11	American Water Company's) File No. WR-2017-0285, et al. Request for Authority to)
12	Implement General Rate) Increase for Water and)
13	Sewer Service Provided In) Missouri Service Areas.)
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17	KIM S. BURTON, Presiding, REGULATORY LAW JUDGE
18	DANIEL Y. HALL, Chairman, WILLIAM KENNEY,
19	SCOTT T. RUPP, MAIDA J. COLEMAN,
20	COMMISSIONERS
21	
22	REPORTED BY: REBECCA L. TUGGLE, CCR, RPR, CSR
23	ALARIS LITIGATION SERVICES
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1	JUDGE BURTON: Let's go ahead and go on the
2	record. Today is March 5, 2018. The time is
3	approximately 9:00 o'clock in the morning. The
4	Commission has set this time for presentations on two
5	stipulations and agreements that were submitted to the
6	Commission, as well as beginning of the remaining
7	issues in an evidentiary hearing in the matter of
8	Missouri-American Water Company's request for
9	authority to implement a general rate increase for the
10	water and sewer service provided in Missouri service
11	areas.
12	This is File No. WR-2017-0285, et al. My
13	name is Kim Burton and I am a regulatory law judge
14	with the Missouri Public Service Commission. At this
15	time, we will ask the parties to enter their
16	appearance for the record and we will begin with
17	Missouri-American Water Company.
18	MR. COOPER: Thank you, Your Honor.
19	Dean Cooper, William England, III, and Diana Carter
20	from the law firm of Brydon, Swearengen & England P.C.
21	on behalf of Missouri-American Water Company. Also,
22	Mr. Timothy Luft of Missouri-American Water Company on
23	behalf of the company. And the court reporter has the
24	addresses.
25	JUDGE BURTON: Okay. Thank you, Mr. Cooper.

1 Staff of the Missouri Public Service 2 Commission. 3 MR. WESTEN: Thank you, Judge. Good 4 morning. My name is Jacob Westen and along with 5 Ms. Casi Aslin, Ms. Whitney Payne, Ms. 6 Alexandra Klaus, we are representatives of Staff for 7 the Commission this morning. Our information has been 8 provided to the court reporter. 9 JUDGE BURTON: Thank you. Office of the Public Counsel. 10 11 MR. SMITH: Yes. Ryan Smith with the Office 12 of the Public Counsel. My information has also been 13 provided in advance. 14 JUDGE BURTON: Midwest Energy Consumers 15 Group. 16 Consumers Counsel of Missouri. 17 MR. COFFMAN: Yes. John B. Coffman 18 appearing on behalf of the Consumers Counsel of 19 Missouri. 20 JUDGE BURTON: Thank you. 21 Okay. And I was previously informed that 22 counsel for the City of St. Joseph would be 23 unavailable today, but he is expected to appear here 24 on Wednesday when we hear further discussions on the rate base issues. 25

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               Next, Triumph Foods, LLC.
               MR. HARDEN: Yes. Joshua Harden with the
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     law firm of Stinson Leonard Street, 1201 Walnut
 4
     Street, Suite 2900, Kansas City, Missouri 64106, on
 5
     behalf of Triumph Foods, LLC.
 6
               JUDGE BURTON: Thank you.
 7
               Missouri Industrial Energy Consumers.
 8
               MR. MILLS: On behalf of the Missouri
 9
     Industrial Energy Consumers, my name is Lewis Mills.
     My address is 221 Bolivar, Jefferson City, Missouri
10
     65101.
11
12
               JUDGE BURTON: Missouri Department of
    Economic Development, Division of Energy.
13
14
               MR. POSTON: Marc Poston appearing for the
15
    Missouri Division of Energy.
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               JUDGE BURTON: Now, we also have the City of
17
    Riverside.
18
               MR. BEDNAR: Yes. Joe Bednar and Keith
19
    Wenzel, Spencer Fane. We represent the City of
     Riverside. Previously provided the reporter with
20
21
     information.
                   Thank you.
22
               JUDGE BURTON: Public Water Supply Districts
23
    No. 1 of Andrew County and Public Supply Districts
24
     No. 2 of Andrew County.
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               MR. DORITY: Thank you, Judge. Larry Dority
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1	and James Fischer, Fischer & Dority PC, appearing on
2	behalf of Public Water Supply Districts No. 1 and 2 of
3	Andrew County. And the court reporter has our
4	information. Thank you.
5	JUDGE BURTON: Thank you.
6	City of Jefferson City, Missouri.
7	MR. COMLEY: Good morning, Judge Burton. On
8	behalf of the City of Jefferson, let the record
9	reflect the entry of Mark W. Comley of Newman, Comley
10	& Ruth P.C. Our business address has been given to
11	the reporter.
12	JUDGE BURTON: Thank you.
13	Now, certain parties have previously
14	requested to be excused from the entirety of the
15	evidentiary hearing but reserve the right to submit
16	briefs. That request was granted for the Empire
17	District Electric Company, Kansas City Power & Light
18	Company, KCP&L Greater Missouri Operations Company,
19	Union Electric Company, D/B/A Ameren Missouri, and
20	Utility Workers Union of America Local 335. In
21	addition, the City of Warrensburg had requested to be
22	excused from the presentation today, and I believe we
23	have one more. City of
24	MS. BELL: Joplin.
25	JUDGE BURTON: Joplin.

1 MS. BELL: Thank you. Stephanie Bell and Marc Ellinger on behalf of the City of Joplin and we 2 3 would likewise request to be excused, except for on 4 Wednesday with rate designs. 5 JUDGE BURTON: That request is granted. And 6 does the court reporter have your information? 7 MS. BELL: Yes. Thank you. 8 JUDGE BURTON: Thank you. 9 Now, are there any other parties that I may have missed? 10 11 Okay. Seeing no hands. 12 It's my understanding that since we do have 13 two stipulations and agreements that were presented 14 for the Commission's consideration, we'll begin with 15 one that was first filed, and I believe that one involves the issues concerning the City of Jefferson 16 17 City. So we'll go ahead and begin with Mr. Luft. Judge, Tim Luft, 18 MR. LUFT: 19 Missouri-American, petitioners. We have a stipulation 20 with the City of Jefferson, worked together with Mark 21 Comley, their counsel. They have some specific issues 22 that they intervened in this case and they wanted to 23 be addressed. 24 We enjoyed a good relationship with the City 25 of Jefferson, but there are a few things that they

1	wanted us to take a look at. That includes the
2	coordination on water main replacement, some private
3	fire service rates. We're going to have meetings with
4	regard to those. There's some pressure issues with
5	the Cedar City area, the area around the airport.
6	We're going to do some work before July of this year
7	to try and address those issues.
8	And then there's some smaller water mains
9	that both the City and the Company feel that need to
10	be replaced; so we've developed a timeline to replace
11	those.
12	JUDGE BURTON: Okay. Thank you. Any
13	questions for the bench?
14	CHAIRMAN HALL: No questions.
15	COMMISSIONER KENNEY: No, thank you.
16	JUDGE BURTON: Thank you, Mr. Luft.
17	MR. COMLEY: Judge Burton, would you give me
18	leave to address for just a moment?
19	JUDGE BURTON: Yes, absolutely, Mr. Comley.
20	MR. COMLEY: Pursuant to paragraph 7 of the
21	stipulation, the parties agreed that we could
22	conditionally offer our prefile testimony of
23	Chief Schofield and Britt Smith. And you've given the
24	assignments for us, or a block of numbers, and I have
25	premarked that testimony, and I've brought one copy
i	

1 for the court reporter. 2 What I'd like to do is offer that 3 conditionally to the Commission at this point. It's 4 on the condition that you would approve the 5 stipulation without any modifications. So it's 6 conditionally relevant, I'll say it that way. But I 7 would offer -- let me make sure I've got the numbers 8 right -- Exhibits 325, 326, 327, and 328 into the 9 record at this point. 10 JUDGE BURTON: And for the record, would you 11 identify whose testimony --12 MR. COMLEY: Yes. 13 JUDGE BURTON: -- goes with which number? 14 MR. COMLEY: Exhibit 325 is the direct 15 testimony of Chief Schofield. Exhibit 326 is the 16 surrebuttal. Exhibit 327 is the direct testimony of 17 Britt Smith, and 328 is Mr. Smith's surrebuttal. 18 JUDGE BURTON: Exhibits 325 through 328 have 19 been offered. Are there any objections to their admission to the record? 20 21 MR. WESTEN: No objection, Your Honor. 22 JUDGE BURTON: We'll go ahead and admit 23 those into the record. 24 (CITY OF JEFFERSON CITY EXHIBITS 325 THROUGH 25 328 WERE RECEIVED IN EVIDENCE.)

1	MR. COMLEY: Thank you very much. One more
2	thing. I know that Jefferson City, along with the
3	City of Warrensburg and St. Joseph, joined together to
4	sponsor the testimony of Mike McGarry and he is a rate
5	design witness. He is scheduled to testify before you
6	on Thursday. The attorneys for St. Joseph and
7	Warrensburg will be presenting the opening remarks on
8	that issue and they will also be conducting his
9	examination and the cross-examination of the opposing
10	witnesses from other parties.
11	Jefferson has no other issues in the case.
12	And like others, I'm going to ask you leave, if I
13	could be excused from the remainder of the hearing?
14	JUDGE BURTON: Well, let me first check to
15	see if there are any questions from the Commission.
16	CHAIRMAN HALL: No questions.
17	COMMISSIONER KENNEY: No.
18	JUDGE BURTON: Thank you. You're excused.
19	Did any other party wish to make a
20	presentation on a this first stipulation and
21	agreement concerning the City of Jefferson City's
22	issues?
23	All right. Seeing none, we will now move on
24	to the main stipulation and agreement. And,
25	Mr. Cooper, are you going to be making a presentation?

1 MR. COOPER: I will. Thank you, Judge. 2 As you're probably aware from the review of 3 the primary -- what I would call the primary 4 stipulation agreement that's been filed with the 5 Commission -- we have a stipulation and agreement before you that was signed by Missouri-American, the 6 7 Staff, the Office of the Public Counsel, MIEC, MECG, 8 Triumph Foods, and Division of Energy. And, further, 9 the remaining parties that are not signatories have 10 affirmatively stated that they have no objection to 11 that stipulation accordingly. 12 It certainly can be treated as a unanimous 13 stipulation in accordance with Commission Rule 14 4CSR240-2.115. You're also aware -- I'm sure that 15 you've seen the schedule -- the stipulation does not 16 settle all issues in this case. There remain several 17 issues that will require your attention this week. Most prominently, issues related to Missouri-Americans 18 19 lead service line replacement program and rate design 20 in this case. 21 However, this stipulation agreement goes a 22 long way towards resolving many, many issues in this 23 case that have been previously identified. In key 24 part, the stipulation addresses total revenue 25 requirement in conjunction with billing determinants

1	and the tax cut and jobs act of 2017.
2	From the Company's point of view, the
3	\$318-million revenue requirement identified in the
4	stipulation represents an 8 percent increase over
5	revenues authorized in the last rate case and a
6	14 percent increase over the Company's present rate
7	revenues, while also providing for recognition of
8	approximately \$18 million of customer savings
9	associated with the reduction in the corporate tax
10	rate.
11	The stipulation further
12	CHAIRMAN HALL: I'm sorry. What was that
13	number again, the last number?
14	MR. COOPER: 18 million, recognition of
15	18 million in customer savings for the reduction of
16	corporate tax rate.
17	The stipulation further specifies how ISRS
18	will be treated going forward, specifies treatment of
19	pensions and OPEPs going forward, provides for certain
20	reporting on the part of Missouri-American on an
21	annual basis. It establishes depreciation rates and
22	miscellaneous service charges for the Company.
23	Resolves the RSM affiliate transaction rule, tank
24	painting tracker, low income tariff, and special
25	contracts issues among the parties for this case, and

1	provides a working docket to further address inclining
2	block rates and includes specific subjects and
3	information to be addressed by that group.
4	Missouri-American believes that the
5	stipulation presents a just and reasonable resolution
6	of those issues addressed by this document and would
7	request that the Commission approve that stipulation
8	and agreement.
9	JUDGE BURTON: Thank you.
10	CHAIRMAN HALL: Good morning.
11	MR. COOPER: Good morning.
12	CHAIRMAN HALL: Were you counsel of record
13	in Missouri-American's last rate case?
14	MR. COOPER: One of them, yes.
15	CHAIRMAN HALL: Do you have the report and
16	order in that case available to you?
17	MR. COOPER: I may have. I don't have it at
18	the podium.
19	Yes, Chairman.
20	CHAIRMAN HALL: What did this Commission say
21	about inclining block rates in that order?
22	MR. COOPER: Well, without turning to it,
23	the Commission
24	CHAIRMAN HALL: Page 41.
25	MR. COOPER: In the next case, the

1 Commission asked the parties to file information on inclining block rates so the Commission can consider 2 the information in setting just and reasonable rates 3 4 in that case. 5 CHAIRMAN HALL: Do you believe the Company complied with that direct instruction in that order? 6 7 MR. COOPER: Well, we certainly do. We 8 filed information in the direct testimony and followed 9 it up with additional information in later rounds of 10 testimony. 11 CHAIRMAN HALL: What information did you 12 supply? Because from what I could tell, all you did 13 was explain why we shouldn't do it, when this 14 Commission very clearly said we are interested in 15 inclining block rates and we want you to provide us with the information that we need to make the policy 16 17 decision as to whether or not we want to establish 18 inclining block rates. 19 What we got from the Company, what we got 20 from Staff, what we got from all the parties, was 21 telling us why we shouldn't do it. I call that 22 flaunting the Commission. We directly asked for 23 information so we could make a policy decision. I 24 don't think you did that. 25 MR. COOPER: Certainly I understand your

1 position, Chairman. 2 CHAIRMAN HALL: My position is that we take 3 a recess, that you guys get together, talk about how 4 you could comply with this Commission's 5-0 order from 5 May 26 of 2016, when we asked you to provide us with 6 the information necessary to make the policy decision 7 as to whether or not inclining block rates are 8 appropriate. 9 I'll be back in a minute. JUDGE BURTON: Why don't we take a recess 10 11 and we'll go off the record and we'll see how much time is needed. 12 13 MR. COOPER: Thank you. 14 JUDGE BURTON: Thank you. 15 (Whereupon, a break was taken.) 16 JUDGE BURTON: Let's go ahead and go back on 17 the record. Is there anything that the parties would 18 19 like to address to the Commission? 20 MR. ENGLAND: Thank you, Judge. 21 Tripp England on behalf of Missouri-American Water 22 Company. Let me begin, first of all, by apologizing, 23 Chairman Hall and commissioners, for not having provided the information that you obviously wanted on 24 25 inclining block rates.

1 That information is, I don't think, readily available right now and certainly not in this record 2 3 that we believe -- and I let the parties speak for 4 themselves -- that's necessary to appropriately design 5 inclining block rates. 6 We worked very hard, as my partner 7 Dean Cooper said, to fashion this stipulation that has 8 a lot of different parts. And the inclining block 9 section was not easily arrived at, but the parties 10 believe that the best way to address it was to create 11 a working group on a going-forward basis to develop 12 more granular information as indicated in the 13 stipulation and agreement. 14 The inclining block issue also entails the 15 revenue stabilization mechanism; so it's a little bit like pulling a thread on your sweater. I'm not sure 16 17 how many other unintended consequences will result if we move down this -- down this avenue. 18 19 Nevertheless, we've kind of looked to you to 20 see if there's something we can do to -- in this case, 21 or as we've indicated here, we've got a collaborative 22 that we've during the break discussed. And not that 23 we were going to take a lot of time to do that anyway, 24 but we've recommitted to moving quickly with the 25 collaborative to determine or develop the granularity

1	of the information we think is necessary to make an
2	informed decision on inclining block rates.
3	So I look to you all as to what exactly it
4	is you would like either in this case or moving
5	forward.
6	CHAIRMAN HALL: This really isn't about
7	inclining block rates. This is not really about rate
8	design. What this is about is this Commission in a
9	5-0 vote approved an order instructing the parties to
10	do something. It doesn't matter what that was. You
11	guys didn't do it. You did not do what we
12	specifically asked you to do. I'm surprised that any
13	of you are surprised at our reaction.
14	Having said that, when we issued the order
15	back in 2016, what we intended for you to do was to
16	get together and put together billing determinants,
17	put together a plan so that at this rate case, you
18	have that at our disposal to make a policy
19	determination as to the appropriate rate structure.
20	And now, 18 months later, you're saying we didn't do
21	what you asked us to do but we will over the interim,
22	we will before the next rate case.
23	Let me ask you this. Mr. Jenkins, in some
24	of his written testimony, proposed a pilot project in
25	Joplin, I believe. And he had some rationale for why

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1	that would be the appropriate place to do such a
2	pilot. Would that blow up the stipulation?
3	MR. ENGLAND: I'll let Joplin's
4	representative speak for Joplin. So I know she has
5	feelings on that issue.
6	CHAIRMAN HALL: Let me ask you first. Would
7	it blow it up on behalf of Missouri-American?
8	MR. ENGLAND: Well, probably not. But it
9	was also coupled with the revenue stabilization
10	mechanism because the concern is, it's obvious with an
11	inclining block-rate structure, there's going to be a
12	customer response, we believe. We're afraid that the
13	response will be conservation. We won't achieve
14	the
15	CHAIRMAN HALL: We want the response to be
16	conservation.
17	MR. ENGLAND: I understand that. Other
18	parties are concerned that we're going to make too
19	much money, that the customers aren't going to be well
20	enough educated and they're actually going to use
21	water and end up with a terribly high bill, we're
22	going to have more revenues than we're entitled to.
23	So if the pilot, in our opinion, is tied inexorably to
24	some sort of revenue stabilization or tracker
25	mechanism to make sure we don't over-earn, if you

1	will, or under-earn in that situation.
2	Keep in mind, in our last case, we went in
3	Joplin and in the District 2, the St. Joseph area,
4	from a declining block-rate structure to a flat-rate
5	structure. So customers in those high-use,
6	residential customers in those districts have already
7	experienced a significantly greater increase in
8	their in their usage just based on moving to a
9	higher rate.
10	CHAIRMAN HALL: And how did that impact
11	consumption?
12	MR. ENGLAND: Well, it's the Company's
13	it didn't help our declining use. If anything, it
14	contributed to it.
15	CHAIRMAN HALL: So it did so it did
16	promote conservation?
17	MR. ENGLAND: I can't say that, Your Honor.
18	CHAIRMAN HALL: You can't have it both ways.
19	You can't say that it promotes instability and then at
20	the same time that it's not going to have any effect,
21	that it's going to promote a conservation and it's
22	going to cost us money but it's not going to work. I
23	mean, it's one or the other.
24	MR. ENGLAND: Well, I'm saying the Company
25	is concerned that it will have an impact and actually

1	reduce revenues. What I'm saying is other parties are
2	concerned that it will have an impact and it'll
3	increase revenues because people will not respond
4	quickly enough.
5	CHAIRMAN HALL: Let's hear from
6	MS. BELL: Commissioners, just on behalf of
7	the City of Joplin on the pilot program itself, I just
8	wanted to explain why Joplin cannot agree to the pilot
9	program at this point.
10	One, Mr. England already pointed out in the
11	last case there were differing rate structures in
12	different communities, and so we don't believe that
13	Joplin is the right place for the pilot program
14	because some communities were already at a flat rate.
15	They kept that flat rate. Joplin actually went from
16	declining block rates to the flat rate.
17	So just in the last case, there was a huge
18	rate shift there on customers who have who are high
19	users. And so implementing an inclining block in a
20	community that just went from declining to flat, we
21	feel like there are other communities, specifically
22	those with the flat rate before, that might be less
23	affected by that.
24	And the other point is just from the
25	projections that we're seeing based on the billing

1	determinants, Joplin, I think, rate A is looking at
2	approximately a 50 percent increase on the volume
3	metric charge. And when we look at that, Joplin
4	itself has almost a 300 percent increase since 2000.
5	And so on residential users, even those high-end
6	users, are already looking at a 50 percent increase,
7	adding inclining block on that would I mean, some
8	would call 50 percent a rate shock, but adding
9	inclining block on top of the 50 percent increase
10	would really be a hardship to the people of Joplin.
11	CHAIRMAN HALL: Thank you.
12	MS. BELL: Thank you.
13	CHAIRMAN HALL: Does Staff have a proposal?
14	MR. WESTEN: Morning, Commissioners. Good
15	morning, Chairman, Judge. Staff Staff again
16	apologizes for not having the information that was
17	sought. That is a failing of the parties to produce
18	that information to the Commission to make this
19	decision.
20	Staff doesn't have a separate proposal from
21	what Mr. Tripp discussed Mr. Tripp Mr. England
22	discussed. And the basis is essentially this. The
23	one point of consensus that all of the parties have on
24	this issue is that we do not have the information.
25	And, again, I understand it was the Commission's
1	

1	directive in the last case to have us get together to
2	provide that information and collect it. But it is a
3	true concern that without it, that we cannot put
4	forward a proposal or information for the Commission
5	to consider that would lead to just and reasonable
6	rates.
7	And so moving forward a working
8	collaborative as proposed by the parties that is
9	truncated in time so we can get the information
10	together quickly and present that to you, we think is
11	the best case to going forward at this point.
12	And understanding it's not ideal, not from
13	the Commission's perspective and we understand that.
14	And, again, we apologize for not having that
15	information for you, but when you talk about inclining
16	block rates, you're talking about trying to adjust
17	people's behavior. And it's not just standard
18	behavior. It's behavior that may have become
19	engrained in habit; when they do their laundry, how
20	often or frequently they shower, other uses that are
21	involved with residential use.
22	And even within a residential group, you
23	have low users and high users and middle users. And
-	
24	without a careful analysis of the different levels of

1	going to balance incorrectly the incentives and
2	disincentives for those customers.
3	And the best way to ensure that there is
4	less risk to those customers is to make sure that we
5	got all the data that we need and that we analyzed it
6	correctly and we can put forward something to the
7	Commission. In a collaborative matter with a work
8	group, we can discuss things when we're not focused on
9	trying to get certain issues resolved for hearing.
10	That way we can have an honest conversation about the
11	information as we're trying to present something.
12	CHAIRMAN HALL: Is there another community
13	that might provide a viable test pilot project?
14	MR. WESTEN: There has been I can tell
15	you that there's some discussion within the parties
16	for that. I don't know if we have a specific proposal
17	for a particular location at this time. Partly
18	because those potential service areas are not
19	necessarily represented in this proceeding, and we
20	would need to make sure that their interests are
21	properly represented and addressed. So we would need
22	to reach out to those groups and identify why we think
23	they're appropriate, and make sure that they have a
24	say in the matter.
25	MR. BEDNAR: Mr. Chairman, I've talked to

1	the parties about me talking to my client. I've got
2	kind of a unique set of circumstances because
3	Riverside just makes up a part of the Platte County
4	Water District. But I've offered to have a discussion
5	with the other mayors, but they need more information
6	as to the negative collateral consequences that
7	CHAIRMAN HALL: Or the positive collateral.
8	MR. BEDNAR: Right. Right. But, you know,
9	as elected officials, they're going to be sensitive to
10	whether or not it ends up further increasing their
11	rates. And they just need information, much as you
12	do, need information to determine they'll be making
13	a decision to go forward with inclining block rates
14	without the information that you don't have. So, I
15	mean, there's a risk. That's all I'm saying.
16	And for an intervener to do that is, you
17	know I mean, all the risk is on them. And we
18	certainly don't have the resources, you know, today to
19	be able to get them prepared for all that. So we need
20	some time to talk with the Company and Public Counsel
21	and Staff to talk to the mayor and the councilmen to
22	say, hey, is this something you'd be interested in,
23	and see what they say to make an informed decision.
24	CHAIRMAN HALL: Well, I would suggest that
25	some of those discussions should probably occur. The

1	Company should work with the rest of the parties to
2	look for a suitable location for such a pilot. And I
3	look forward to hearing what you guys come up with.
4	I'll also have one other just side comment
5	for Staff, and that is I was really surprised in your
6	class cost of service and rate design report to see
7	Professor Beecher cited for essentially opposition to
8	inclining block rates, when I have heard her speak on
9	multiple occasions and she's a strong proponent.
10	Went back and looked at the article that you
11	cited, and the article overall is quite supportive of
12	inclining block rates. And I find it inappropriate to
13	pull out a sentence from that article and cite it for
14	the proposition that inclining block rates don't work.
15	So I would I would request that Staff not make that
16	kind of mistake again in the future.
17	MR. WESTEN: Duly noted, Commissioner
18	Chairman.
19	COMMISSIONER KENNEY: Hey, Judge, what's the
20	operation of law date?
21	JUDGE BURTON: I believe it's May 28th.
22	COMMISSIONER RUPP: I have a proposal. I
23	suggest we just vote no on the stipulation, continue
24	to have this hearing, we all vote no, and then you
25	come back 11 months with a new rate case and you

include the information that you should have brought on this one. I'm sure the \$24-million rate increase, that people would love not to have that for another 11 months.

And I would say don't you ever come back and ignore one of our words because somebody read this and someone chose to ignore it. It wasn't like it was hidden in our order. Someone read it and said, yeah, you know, we don't have to do that.

10 How many times in agenda have you heard us 11 talk about kicking the can down the road? So on a 5-0 12 order, you purposely ignored it and your response was 13 to kick the can down the road. Well, let's have a --14 you know, let's have an interim committee. Let's have 15 a policy working group. And then to find out that, 16 Staff, you had your report and you manipulated it so 17 that you could get the policy you wanted.

We set the policy. If I -- if we could --18 19 if I could find a legal way to just cancel this whole 20 rate case hearing, that's what I would do. I mean, 21 it's like you guys want to play a game of chicken. 22 Come up there, well, what are they going to do if we 23 don't do it? What? Are they really going to say no? 24 I mean, my God, what would happen to our bond rating? 25 What would happen to our stuff if we -- if they said

1	no? So that's my proposal.
2	JUDGE BURTON: Do any other parties have any
3	presentations or statements they would like to make to
4	the Commission concerning this stipulation and
5	agreement?
6	Okay.
7	COMMISSIONER KENNEY: Judge, I think you
8	you've heard Chairman Hall and Commissioner Rupp. Why
9	don't you find out we'll just I mean, we'll just
10	pass on the stip right now. Why don't you find out on
11	the schedule going forward, if we don't accept the
12	stip, how many more days we need and see where it's
13	located. I think we're going to have a couple days
14	extra next week.
15	JUDGE BURTON: I believe that
16	COMMISSIONER KENNEY: Or why don't you look
17	into that and let us know?
18	JUDGE BURTON: I can do that. In the
19	meantime, why don't we take a brief five-minute
20	recess, and then we will begin with presentations
21	opening statements on the lead service line
22	replacement issues and we'll begin hearing testimony.
23	(Whereupon, a brief break was taken.)
24	JUDGE BURTON: Let's go ahead and go back on
25	the record. It's approximately 11:12 a.m., and the

1	parties will present opening statements on the issue
2	of the lead service line replacements. I would remind
3	everyone who's here to please silence your electronic
4	devices before we begin.
5	And you have the floor, Mr. Cooper.
6	MR. COOPER: Thank you, Your Honor.
7	OPENING STATEMENT BY MR. COOPER
8	MR. COOPER: It seems like not that long ago
9	that we were here discussing lead service line
10	replacement with the Commission in the course and
11	in fact, and on November 30th of last year, the
12	Commission issued an order in WU-2017-0296 where it
13	granted Missouri-American an accounting authority
14	order to allow it to defer and book to USOA Account
15	186 its costs associated with the replacement of
16	customer lead service lines that were completed
17	between January 1 of 2017 and May 31st, essentially,
18	of 2018 or May 28th, the operation of law date.
19	We're here today to kind of step forward
20	from that order and to address what to do, first, in
21	regard to the recovery in the amounts that have been
22	deferred pursuant to your order in that prior case, as
23	well as to address how Missouri-American should
24	proceed in regard to the lead service line replacement
25	program going forward and how the costs if it does

1	proceed with that program, how those costs they're
2	incurring on a going-forward basis should be recorded.
3	Now, as background and I think we have at
4	least one new commissioner who's not present in the
5	room today but who wasn't here when we did this last
6	case I've handed out a diagram that's included
7	in it's kind of a blow-up of a diagram that's
8	included in the testimony of Missouri-American witness
9	Gary Naumick. And just as I say, it's kind of a
10	refresher, you know, what portion of the service line
11	is owned by the customer differs within
12	Missouri-American's territory.
13	The top diagram is a diagram of what the
14	case is outside of St. Louis County. And in that
15	area, the customer owns the service line only from the
16	company meter or the property line to the premise.
17	Within St. Louis County, which is the bottom diagram,
18	the customer owns the entire service line from the
19	main to the premise.
20	Now, there are references in the testimony
21	to both full lead service line replacement and partial
22	lead service line replacement. In the the outside
23	of St. Louis County diagram, a partial replacement
24	would only include the part of the line between the
25	main and the property line or the meter, that sort of

I UASIIEU IIIE CIIELE.	1	dashed	line	there.
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2	In St. Louis County, the partial replacement
3	would really be just a function of operational
4	necessity related to the process of disconnecting the
5	service line from the main and reconnecting it to the
6	main. And a full replacement in both situations would
7	include everything from the main to the essentially
8	to the premise of the house in that diagram.
9	Missouri-American estimates, based on
10	existing data from the Company's tap cards and field
11	experience, that approximately 30,000 of the service
12	lines in its service territory are lead across the
13	state. Lead, of course, can enter drinking water when
14	pipes that contain lead corrode are disturbed, and a
15	removal of lead service lines in contact with drinking
16	water provides an opportunity to significantly reduce
17	the potential risk of exposure to the lead in drinking
18	water.
19	Lead service lines can be encountered on
20	either the utility side or the customer side during
21	water main construction and relocation projects or
22	service line repairs. Missouri-American's program
23	proposes to replace these lead service lines when

I think that removing lead service lines in

24 they're encountered during main replacements.

25

their entirety will complement the other mitigation work the Company performs, including providing stable water quality and treatment to minimize corrosion, compliance sampling, and following good management practices.

6 The Company's treatment and sampling efforts 7 have effectively reduced potential lead exposure from 8 drinking water. However, as the research regarding 9 potential exposure to lead has been further developed 10 and refined, the Company has determined that it should 11 take additional steps to further mitigate potential 12 customer exposure to lead in drinking water; hence, 13 the proposal here.

14 The growing body of research indicates that 15 partial lead service line replacement in the physical 16 disturbance of the lead service line have the 17 potential to increase lead levels following 18 replacement, not partial replacement. So now, when 19 the Company encounters the lead service line during 20 the course of its main replacement projects, the Company believes all segments of lead in the service 21 22 line should be replaced but -- both any lead portions 23 owned by the Company and the lead portions owned by 24 the customer or the property owner.

Now, the Company is proposing that going

25

forward, customer-owned lead service line replacements be considered to be a part of those restoration costs that are routinely incurred on infrastructure replacement. Doing so is appropriate for safety reasons when the service line is disturbed by the main replacement process.

7 Replacing such lead service lines in
8 conjunction with main replacements is cost efficient
9 or cost effective, efficient, and, again, the Company
10 believes a responsible way to address the health and
11 safety concerns associated with lead service lines.

12 Now, as to the existing deferral, as I 13 mentioned, is one of the questions for the Commission 14 in this case. The lead service line replacements that 15 have been performed from January 1, 2017, through 16 December 31 of 2018, and that are included in the 17 information -- the true-up information in -- the MAWC provided in this case total approximately 18 19 \$1.4 million.

If this program continues, of course, this number will ramp up as the weather warms and the construction season gets underway this year. But MAWC proposes that for the expenditures deferred pursuant to the existing AAO, that the unamortized balance of the deferral be included in rate base, and the balance

1	amortized over the average service life for service
2	lines consistent with what they would have been in
3	Account 345; so that that life rate is 65 years,
4	and the Company believes would agree with the last
5	depreciation study approved by the Commission.
6	The Company further recommends that the
7	what it would call the stub period, that period from
8	January 1st of this year through the essentially
9	the end of May of this year of the lead service line
10	AAO be transferred into Account 345 services and be
11	included in plant ineligible for potential recovery in
12	its next rate case.
13	On a going-forward basis, and that being
14	those expenditures or those costs after the end of May
15	of this year, MAWC proposes that the costs associated
16	with the replacement of customer-owned lead service
17	lines be recorded in uniform system of accounts,
18	Account Number 345, services account.
19	Again, going back to what I mentioned
20	before, the Company's position is that these costs are
21	a part of installation costs similar to other
22	restoration cost items, such as disturbed pavement,
23	pavement base, sidewalks, curbing, that are already
24	associated with main installation.
25	In this case, the customer-owned line is

1 restored or replaced with new materials for safety reasons to mitigate the potential that's been 2 increased by the risk of lead contamination following 3 4 physical disturbances related to that infrastructure 5 work. 6 OPC Witness Robinett offered comments at his 7 surrebuttal testimony suggesting as an alternative how 8 to treat depreciation expense should the Commission 9 agree with the Company's proposal to record customer-owned lead service line replacement costs 10 11 into Account 345. 12 He suggests that in that situation, the 13 Commission should establish a subaccount within 14 Account 345 to separately track the expenditures for 15 the replacement of customer-owned lead service lines and utilize the existing life rate of 65 years to 16 17 depreciate those costs. 18 The company agrees with this -- with this 19 alternative approach that the Commission agreed to and 20 allowed the Company book into the 345. Staff has 21 recommended that the lead service line replacement 22 costs associated with customer service or 23 customer-owned service lines be reported in Account 24 186 with the deferred amounts amortized over a 10-year 25 period and the unamortized balance included in rate

1 base.

2 MAWC appreciates the Staff. Company 3 believes was proposed a methodology that, in theory, 4 would include both a form of return of and return on 5 those -- those expenditures. However, the very nature of Account 186, deferrals, adds uncertainty to the 6 7 ultimate recovery of such amounts. It would make it 8 difficult for the Company to fully commit to the 9 necessary investment and, hence, the Company's proposal -- continuing proposal to book -- book these 10 items into Account 345. 11

12 It had come up in our prior case, but the 13 question about, well, what if -- what if we go a 14 different direction is present again in the testimony 15 in this case. And I think no surprise from what's 16 been said before, but if Missouri-American does not 17 receive a return of and on related to the investments, it's first choice would be to do its best to avoid 18 19 areas with lead service lines and postpone main 20 placement projects with where it thinks those lines 21 may exist to avoid the risk of potential exposure to 22 lead associated with the partial replacements. 23 Now, there's -- are, of course, several 24 downsides associated with this, to include the fact 25 that delaying main replacement projects can increase

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1	the number of main breaks and leaks over time, which
2	can be costly and disruptive to customers in the
3	community. But, you know, further, that if these main
4	replacements were to go forward in that fashion, you
5	know, a great opportunity for replacement of lead
6	service lines is missed because we would miss the cost
7	effective basis of or opportunity to get to those at
8	the same time as the Company is in the street and
9	doing work in those areas already.
10	COMMISSIONER KENNEY: Excuse me a minute.
11	MR. COOPER: Yes.
12	COMMISSIONER KENNEY: Did I hear you say
13	because I've always looked at this as the Company
14	doing a good service by going and replacing those
15	lines. Did I hear you say that if the Company was not
16	given a return on replacing lines that they do not
17	own, that the Company would shy away from replacing
18	those lines and go somewhere else?
19	MR. COOPER: That's absolutely correct,
20	Your Honor.
21	COMMISSIONER KENNEY: Thank you.
22	MR. COOPER: I think that no matter how you
23	look at it, it's money that would have to be expended
24	by the Company. It's money that if placed in a
25	different if invested in a different way would

1 return -- receive a return on. And so the absence of that return on would certainly influence the Company's 2 3 decision-making. 4 The issue of lawfulness of what the Company 5 has proposed has been raised by the Office of the 6 Public Counsel. I think, among other things, OPC has 7 arqued that Missouri-American's tariff does not permit 8 it to replace customer-owned service lines. In the 9 Company's view, none of the tariff sheets or none of 10 the tariff provisions cited by OPC prohibit 11 Missouri-American from replacing a customer water service line in this circumstance. 12 13 Now, this is for good reason. For example, 14 as I kind of alluded to before, in St. Louis County, 15 almost every main replacement, lead or not, it 16 requires some replacement of a portion of the customer 17 water service line in order to complete the main replacement because that customer-owned service line 18 19 goes right up to the main in the process of 20 disconnecting, reconnecting. It just drives some 21 level of repair and replacement that's necessary to 22 that process. 23 Those partial customer-owned service line 24 replacements are already treated as installation costs 25 under the USOA, as I believe was mentioned in Staff

1 witness Merciel's surrebuttal testimony. Now, while the Company does not own the property being restored 2 3 and others would be responsible on a going-forward 4 basis for their maintenance or repair, the Company 5 incurs and books those, what it would think of as also 6 restoration costs, as a part of its plan accounts. 7 Ultimately, the Company believes that the 8 lead service line replacements do not violate its 9 tariffs for these reasons and nor is it necessary for Missouri-American to change its tariffs to move 10 11 forward as proposed. 12 The Office of Public Counsel also renews in 13 its case this proposal for a pilot study associated 14 with the replacement of customer-owned lead service 15 The pilot study includes a cap on replacement lines. 16 costs and an AAO for only those going-forward costs incurred by the Company. Thus, suggesting that those 17 replacement costs already incurred and to be incurred 18 19 between now and the effective date of an order in this 20 case should be expensed and not recovered in rates. 21 The pilot study proposed by OPC is quite 22 extensive. It would involve -- it would be a two-year 23 pilot study to explore the feasibility, legality, and 24 associated policy implications of full-lead service 25 line replacement across Missouri-American's entire

1	service territory and the State of Missouri with the
2	results presented to the Missouri Public Service
3	Commission and the Missouri legislature and the
4	Missouri Governor's Office for consideration.
5	There are a variety of policy tracks
6	identified in that proposal, an advisory committee led
7	by a third-party consultant, scoping analysis, a
8	two-year lead service line replacement pilot program
9	with certain specified testing and modeling, a review
10	and summary of the advisory committee's thoughts and
11	various ancillary considerations, such as potential
12	job creation, lead paint soil abatement and potential
13	funding sources for all this.
14	Moreover, it's unclear to the Company what
15	would happen at the end of this pilot study process.
16	As I said before, OPC proposes that the results be
17	given to the Commission, to the legislature, to the
18	Governor's office. What would happen next and when
19	would be anybody's guess. And we just do not believe
20	there's any compelling reason for the Commission to
21	start an independent march down this this pilot
22	study path.
23	Missouri-American Witness Naumick has
24	detailed the extensive and detailed research and study
25	that has already been performed by many governmental

1	organizations, private foundations, and other groups
2	to include the lead service line replacement
3	collaborative. And he can speak to that if you have
4	additional interest in that. Hiring a third party to
5	essentially repeat this work makes little sense.
6	Further, Missouri-American, in conjunction
7	with American Water, has done substantial work to
8	develop its processes and procedures associated with
9	the lead service line replacement program. It just
10	again, this is a process that just doesn't need to
11	start over from scratch.
12	In the list of issues that was presented to
13	the Commission under LSLR activity, there were several
14	late added items for the Commission consideration that
15	were identified as little i through little xi. The
16	first the first 10 of those, little i through
17	little x, are items that have been considered by
18	Missouri-American in the development of its program or
19	are being considered as a part of its program.
20	And Missouri-American Witnesses Naumick and Aiton would be the
21	appropriate persons to ask about these items if there are
22	additional questions.
23	Item xi is a question in regard to
24	allocation of costs related to the lead service line
25	replacement program. Missouri-American Witnesses

1	Jenkins and Heppenstall can address this item or this
2	issue. And I would I would note that
3	Ms. Heppenstall will appear later in the week and
4	would be available at that time for questions to her
5	in regard to lead service line replacement
6	allocations.
7	However, at a high level, Missouri-American
8	believes that this issue would be adequately addressed
9	by the accounting process it has proposed. The
10	Company has proposed to record customer-owned lead
11	service line restoration costs in Account 345. And
12	it's our belief that in a cost-of-service study, this
13	account is allocated based upon something called
14	Factor 9 which allocates costs based on the relevant
15	cost of service by size and customer classification,
16	and resulting in allocation to the customer classes
17	for whom the work has has been performed. So,
18	again, I think the Factor 9 reference certainly is
19	something that Ms. Heppenstall can speak further to.
20	In conclusion, Missouri-American believes
21	its proposal is based on the following fact: That the
22	one pathway of human exposure that a water utility can
23	resolve is the removal of lead service lines, and
24	that's what the Company is proposing to do. The
25	Company is recommending the replacement of lead

1	service lines because of the potential risk of
2	elevated lead levels when a service line is disturbed.
3	And as testimony in this case explains, the
4	most cost effective way to address this potential risk
5	is to replace the lead service line at the time of the
6	disruption, in this case, as the Company is performing
7	its main replacements. Missouri-American asks that
8	the investment required to perform lead service line
9	replacements in this way be treated like any other
10	capital investment, and believes that doing so will
11	allow the proposed lead service line replacement
12	program to move forward in a responsible and efficient
13	manner.
14	That's all I have.
15	CHAIRMAN HALL: I have a couple of
16	questions. Let me start with this. Do you have a
17	witness who would be able to provide testimony on the
18	St. Louis County water service line repair program?
19	MR. COOPER: The program that's accomplished
20	by statute?
21	CHAIRMAN HALL: Yes.
22	MR. COOPER: I believe that we do have
23	witnesses that would be familiar with that. Probably
24	Mr. Aiton.
25	CHAIRMAN HALL: And would he also be able to

1 describe any interactions with the director of Public Works of St. Louis County with regard to the program? 2 3 MR. COOPER: I certainly believe he would be 4 the appropriate person to ask about that. 5 CHAIRMAN HALL: And what about the legality of covering some of the -- of these costs through that 6 7 program? Is that a legal issue for you as opposed to 8 your witness? 9 MR. COOPER: It probably is a legal issue 10 that should be addressed by me or someone from the --11 on the attorneys' side, yes. 12 CHAIRMAN HALL: Could you do so? 13 MR. COOPER: Well, what is the particular --14 CHAIRMAN HALL: I'm trying to understand --15 I mean, there's a fund there that St. Louis County 16 residents and ratepayers pay into that I'm wondering 17 if it could be accessed for some of these lead 18 customer-owned service line replacements. 19 MR. COOPER: Right. It's certainly 20 something that the Company has looked at and discussed 21 with the County. And as I alluded to before, I 22 believe that's a program that's established by 23 statute, and it is -- I think my memory is it was 24 required to be approved by a vote of people in the 25 County before it went into place.

I believe that there's a limit on the amount 1 that can be charged, essentially, to each customer for 2 3 the purposes of the program. And I think that the 4 amount being charged to the customers is at the high 5 end of what was allowed by the statute. 6 So one question that has come up is, you 7 know, setting aside whether they can do lead service 8 line replacements or in what circumstances they're 9 going to do lead service line replacements, you know, is there sufficient money in that fund to cover those 10 11 because it's going to come at an additional cost. And 12 if there's not, what's it going to take to ramp up the 13 funds. 14 And I think one of the impediments that 15 we've run into is what I described before, that I think probably to ramp up the funds, that you're going 16 17 to have to go back to the legislature and change the 18 statute and then go back to the people and get another 19 vote. So one level of issues. But having said that, 20 there is interaction going on with the County and, 21 again, I believe Mr. Aiton can describe how it's being 22 treated at this point in time. 23 CHAIRMAN HALL: So you don't believe that 24 there is any kind of prohibition on using that fund 25 for this purpose?

1	MR. COOPER: Well, there would be some
2	prohibition, but I hate to go much farther here. I
3	think that it is an easier question when you have a
4	leak in a service line and that service line is
5	discovered to be lead. It's an easier question. It's
6	an easier situation to use those funds for than if you
7	tried to use it as a blanket replacement just going
8	down down the street; so But we can explore that
9	more fully in briefing or in another form, if you'd
10	like to.
11	CHAIRMAN HALL: Okay. Thank you.
12	COMMISSIONER KENNEY: Just a couple
13	questions briefly.
14	St. Louis County, are the meters in the
15	house?
16	MR. COOPER: I think some are. Again,
17	Mr. Aiton would have a better feel for
18	COMMISSIONER KENNEY: You say there are
19	approximately 30,000 lead lines that need to be
20	replaced?
21	MR. COOPER: The Company is estimating right
22	now 30,000 statewide, and I believe half of which are
23	St. Louis County and half of which are outside of
24	St. Louis County.
25	COMMISSIONER KENNEY: So half would be in

1	St. Louis County; so, roughly, 15,000 lines. Okay.
2	All right. That's all I needed. Thank you.
3	JUDGE BURTON: Thank you, Mr. Cooper.
4	Now, I know the parties have indicated
5	that a list for opening statements, but there is
6	reference to if no witnesses were listed for a party,
7	they might jump in between Missouri-American and
8	Staff. I was going to follow the schedule with Staff,
9	MIEC, DE, and then OPC, and then any other remaining
10	parties that wish to make an opening statement, unless
11	the parties prefer another option.
12	That being said, I believe we are ready for
13	you, Mr. Westen.
14	OPENING STATEMENT BY MS. ASLIN
15	MS. ASLIN: Good morning. In addressing the
16	issues relating to lead service line replacements, I
17	will keep my comments brief as these issues were
18	argued at length when Missouri-American requested an
19	AAO in case WU-2017-0296.
20	While this is a new case where new
21	information about Missouri-American's lead service
22	line replacement practices will be presented, most of
23	the witnesses testifying on this issue today also
24	testified at the AAO hearing and make references to
25	that case in their prefiled testimony.

1	While the Commission's decision in the AAO
2	was limited to approval of deferral of cost, the
3	public policy concerns raised in that case are still
4	present. The report and order in that case issued on
5	November 30, 2017, states that the public policy
6	related to lead and drinking water and its adverse
7	health effects is particular particularly
8	persuasive in this case.
9	Missouri-American's lead service line
10	replacement program adheres to the recommended method
11	of lead removal and eliminates the risk of lead
12	contaminate that exists with partial lead service line
13	replacement. Missouri-American's lead service line
14	replacement practices continue to adhere to the same
15	standards that were discussed less than six months
16	ago, leading Staff to conclude that Missouri-American
17	should continue to replace customer-owned lead service
18	lines while performing broader main repair and
19	replacement work.
20	There are also 11 subissues which were
21	proposed after the filing of surrebuttal in this case
22	relating to the issue of if and how lead service line
23	replacement should continue. Staff takes no position
24	on these issues. However, to the extent that they may
0 5	

25 relate to OPC's proposed pilot program, Staff is

1 opposed to potential limitation being placed on 2 Missouri-American's current practices. 3 Conceptually, Staff has no issue with 4 reasonable restrictions placed on Missouri-American's 5 lead service line replacement practices. However, it 6 is not clear at this time how these potential 7 restrictions would actually cut costs or improve the 8 Company's current practices. Staff is also concerned 9 that OPC's proposed pilot program with these subissues 10 could be overreaching to the extent that it may affect 11 the Company from a management perspective. 12 Lastly, you will hear different views today 13 on what recovery approach, if proven, should be 14 adopted from the AAO amount from the previous case, 15 and what the Commission should authorize in this case 16 for the recovery of future lead service line 17 replacements. 18 Staff's position is that the Commission 19 should adopt Staff's proposal to amortize the AAO 20 balance over 10 years. The amount should not be 21 treated as a Missouri-American-owned plant and 22 service, as these costs are associated with customer 23 property that Missouri-American will neither own nor 24 maintain in the future. These costs should continue 25 to be reported in NARUC USOA Account 186.

1	Going forward, the Commission should
2	authorize Missouri-American to record future lead
3	service line replacements with the same accounting
4	treatment as stated above and approved in the AAO
5	case. Replacements taking place after May of 2018
6	should continue to be reported in Account 186 with
7	recovery addressed in future rate cases.
8	Staff also recommends that Missouri-American
9	be required to submit annual plans detailing the
10	status of the program with updates as necessary.
11	Staff witnesses Jim Merciel and Amanda McMellen will
12	be testifying on these issues today. If you have any
13	questions, I'd be happy to answer them.
14	CHAIRMAN HALL: What is Staff's position on
15	whether there should be carrying costs associated with
16	the Account 186 going forward?
17	MS. ASLIN: Off the top of my head, I'm not
18	sure of that, but I believe Amanda McMellen would be
19	able to answer that.
20	CHAIRMAN HALL: Okay. Thank you.
21	JUDGE BURTON: Thank you.
22	OPENING STATEMENT BY MR. MILLS
23	MR. MILLS: Good morning. May it please the
24	Commission. Lewis Mills on behalf of Missouri
25	Industrial Energy Consumers.

1	Our position on this issue is limited to the
2	question of allocation or assignment of the costs.
3	There are only two parties that have proposed a
4	solution to the question. One is the MIEC, and we
5	have proposed that those costs should be directly
6	assigned to the classes in which the to which the
7	service lines relate.
8	The other proposal is the Company's proposal
9	which they then would be allocated according to the
10	Factor 9, as you heard from Mr. Cooper, which would
11	follow the allocation that those sorts of plan
12	accounts would follow.
13	In general, from a rate-making standpoint,
14	when possible, costs should always be directly
15	assigned rather than allocated because direct
16	assignment is the most accurate way to assign the
17	costs to the cost causers. Allocations are
18	necessarily and, by definition, a second best and in a
19	way to try to approximate the assignment. So it's our
20	position that direct assignment is the best and is the
21	way it should be done in this case.
22	I'd be happy to answer any questions.
23	JUDGE BURTON: Thank you.
24	Mr. Poston.
25	OPENING STATEMENT BY MR. POSTON

1	MR. POSTON: Please the Commission.
2	My name is Marc Poston. I represent
3	Missouri Division of Energy. And continuing the lead
4	line replacement program is the most important outcome
5	that we hope to see from this case on this issue
6	because the risks of not addressing this issue are too
7	severe. Evidence in the case indicates the Company
8	has 30,000 lead service lines, as you've heard.
9	Evidence in the case also shows there are children in
10	the Company service with elevated levels of blood
11	of lead in their blood. And evidence in this case
12	shows that there is no safe level of lead content in a
13	child's blood. Zero.
14	So we would agree that a lead service line
15	may not be the only cause of lead poisoning, but we
16	also know it's possibly the largest contributor of
17	lead in Missouri's drinking water. The best path
18	forward is to continue replacing lead lines when
19	found, but we would suggest a better path may also
20	include prioritizing lead line replacements in a way
21	that focuses on at-risk populations and those
22	low-income customers without the means to incur the
23	cost necessary to replace their service lines
24	themselves. This could occur in addition to the
25	program where the lead lines are discovered during

1	main replacement and replaced.
2	We all know that the crisis in Flint,
3	Michigan, has been the source for an increased focus
4	on lead contamination in water. And we recognize the
5	issues in Flint are different than the issues that we
6	have here. But one thing we may want to learn from
7	Michigan is the liability concern of doing little when
8	problems are known. There were multiple class-action
9	lawsuits filed in Michigan regarding the Flint water
10	against the City, against state officials and the
11	Governor. There's 21 different law firms involved in
12	those cases. And the lawsuits claimed the officials
13	knew of the problem but failed to act.
14	So we encourage you to order the water
15	Company to continue with its program. We also support
16	further study in collaboration on this issue to
17	determine best practices moving forward.
18	JUDGE BURTON: I have a question. Did any
19	of those lawsuits involve issues with partial
20	replacements?
21	MR. POSTON: I do not know. In the lead AAO
22	case, the Department of Economic Development, Attorney
23	Mr. Brian Bear (phonetic) explained to you a concern
24	that the department has with lead service line issues
25	and the impacts that it could have on economic

1	development.
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2	A major infrastructure issue such as
3	potential lead contamination in the water system is
4	not something that would encourage economic
5	development in the water company service area and
6	could discourage development. We doubt Flint saw an
7	increase in economic development after the negative
8	publicity that it received regarding its water.
9	In conclusion, the Division of Energy
10	encourages you to order the Company to continue
11	replacing lead service lines. We have one witness,
12	Mr. Martin Hyman, with testimony supporting the
13	program. Mr. Hyman also testified in the lead line
14	AAO case and maintains a consistent opinion in this
15	case. He'll be taking the witness stand hopefully
16	today if you have any questions for him.
17	That concludes my prepared remarks. And I
18	thank you for your time.
19	CHAIRMAN HALL: Thank you.
20	JUDGE BURTON: Thank you. I believe Office
21	of Public Counsel has a presentation, or someone else?
22	OPENING STATEMENT BY MR. SMITH
23	MR. SMITH: Commissioners, Judge, all
24	counselors, OPC, as you know, represents the
25	ratepayers of Missouri. This issue is about truth.

1	This issue is about that truth cannot harm a cause
2	that is just. Fear can feed falsehoods. My hope is
3	for the truth to be revealed in this proceeding
4	through your review of the testimony, through asking
5	good questions, through reviewing the parties' briefs.
6	And my hope is that you'll keep an open mind. OPC has
7	hope that you also reject imprudent expenditures of
8	past and present. And we hope that the Commission
9	considers alternatives for the future.
10	To be more specific, OPC believes the
11	Company's several hundred replacements of lead service
12	lines performed, in our opinion, in violation of the
13	Company's tariffs should be denied. The Company's
14	current proposal should also be denied. If the
15	Commission is uncomfortable with denying all aspects
16	of lead service line replacement, OPC proposes at
17	least at the very least, this issue deserves more
18	attention than the parties have given it.
19	So throughout our testimony, I guess you'd
20	say we're one of the only parties who I feel is
21	is has the courage to ask questions. And it's
22	confusing and it's troubling to me personally, and to
23	the ratepayers, I think it is also. They want to know
24	why for the last 30 years of perfect compliance with
25	the lead and conner rule why does this company need

25 the lead and copper rule, why does this company need

1 to replace customer-owned lines for a subclass of 2 customers. This is a bias in favor of one customer 3 4 class. We know that there is nothing that mandates 5 the utility's action. But let us assume it is a desired action. Are the costs worth it? 6 The 7 ratepayers want to know if the costs are worth it. 8 But don't be mistaken, costs are not the 9 only issue, and that's what I want to stress. We should not be afraid to talk about things other than 10 11 accounting treatment, other than a strict engineering 12 exercise. There are multiple policies issues at stake 13 and there are stakeholders that are absent who we 14 desperately need and the Company desperately needs but 15 refuses to engage with. 16 I have several points. I'd like to discuss 17 six in detail. The first of which is the costs; the second of which is the benefits; the third is 18 19 perceived delays; the fourth is perceived redundant 20 information; the fifth, stakeholder input; the sixth, 21 I'll discuss further unknowns. So we've got cost and 22 benefits, perceived delays, redundant info, 23 stakeholder input, and unknowns. It's a lot of 24 information, but OPC really believes this issue deserves attention. 25

1	As I said before, this case is about truth.
2	Let's not be afraid of the truth. And what's the
3	truth about the cost? The truth is that the Company's
4	proposal is high. It's very high. In fact, OPC
5	estimates that the cost could be as high as
6	\$210 million right now. Why \$210 million? Well,
7	here's why. Company witness Mr. Bruce Aiton has
8	produced evolving cost estimates. In fact, we're on
9	his third strike now.
10	Initially, in his first strike, he projected
11	that the estimates for a lead line replacement might
12	be between \$3,000 and \$5,500. That was in the WU case
13	or the AAO case. Now, \$1,500 is a wide margin of
14	error for a company, and so even with that wide margin
15	of error, his cost estimates changed.
16	In his surrebuttal testimony of the WU case,
17	the cost changed to \$6,000. So that's about double
18	the low end of his cost estimate. Now, in the
19	surrebuttal in this case and keep in mind not much
20	testimony was provided until the very end by the
21	Company on surrebuttal. So OPC didn't have, you know,
22	really an opportunity to respond to that. But at the
23	time of the surrebuttal, the Company said, well, we
24	spent about 1.75 million for 250 lines, but they dare
25	did not speak the quotient. The quotient gives you

1 the \$7,000 cost estimate.

2	So \$7,000 is I think the Company uses the
3	term, quote, refined, end quote, number. 7,000
4	lines we still aren't sure that 30,000 line
5	\$7,000 per line, excuse me, we're still basing 30,000
6	lines on an estimate. So \$210 million are the cost to
7	be borne by this project. But wait a second,
8	Mr. Jenkins also would like the company to earn a
9	profit. So \$210 million is actually lower than the
10	overall cost. And about that profit, Mr. Jenkins
11	claims that the NARUC USOA provides capitalization of
12	restoration cost.
13	Well, Mr. John Robinett, an OPC witness, in
14	his testimony talked about that account. And if you
15	look at the black ink of part A of Account 345, what
16	you will see is those costs shall include costs
17	leading up to the customer premise. So they lead up
18	to the customer premise, like the sidewalk. They keep
19	talking about this sidewalk, how it's the best example
20	of a non-company-owned asset they earn a return on.
21	Well, that's because 345 says that you can do that.
22	But they have a limitation up to the customer premise.
23	So I assume the Company will be requesting
24	30,000 or so various waivers of the NARUC USOA, which,
25	I guess, the Commission consider. And keep in mind,

1	the USOA under Account 101, the general principle is
2	that companies don't earn a return on property that
3	they don't own. So the account Mr. Jenkins is also
4	referring to is specifically an exception, and as I
5	explained earlier, that exception doesn't apply.
6	There's also a legal question. 393.270.5
7	allows for a reasonable average return upon the value
8	the property actually used in the public service. Is
9	property of a customer's line for the exclusive
10	benefit of a customer, is that in the public service
11	or is that just for the exclusive benefit of a
12	customer?
13	So those issues also don't go to the tariff
14	violations, which OPC has alleged. And I heard today
15	that the Company has no plan to change their tariff.
16	I mean, even out of an abundance of caution, wouldn't
17	you want to change the tariff? I mean, if you're
18	really doing this right, wouldn't you want to put
19	questions aside and add more certainty?
20	Well, that the Company doesn't feel they
21	need to do that. So the costs are becoming perhaps
22	more certain, but they're still out there. So let's
23	also be truthful about the benefits. Let's talk about
24	the benefits. So from OPC's perspective, what we
25	understand the benefit to be is that these lead lines

1	would be eradicated; right? So what is the benefit
2	associated with that? Well, it's important to have
3	context, right, when we talk about lead issue. We
4	need to understand the benefits.
5	So in the 1980s, motor vehicles were the
6	main source of excuse me of lead particulates in
7	lead exposure by humans. We used gasoline that
8	contained lead and the motor vehicle emissions caused
9	a lot of lead. It wasn't good. And in around the
10	1980s, that began to be phased out. And in about
11	1996, there was an outright ban and leaded gasoline
12	caused that that reduction was huge. It was
13	hugely significant.
14	So today what is the most common source? Is
15	it a lead service line? No. That isn't what the
16	evidence suggests. The most common source is actually
17	lead contaminated dust from deteriorated lead paint.
18	And I thought this was pretty interesting in
19	Dr. Marke's testimony. Apparently, on warmer days,
20	you have kids that go out into the yard and they play,
21	just like we all did, and actually their blood lead
22	levels excuse me are correlated with that
23	because they're outside and they're you know, in
24	that there's dust and there's soil contamination, and
25	so you actually see a correlation there. And so I

1 found that to be an interesting part of the context. 2 And is my slide show --3 JUDGE BURTON: It is. It's showing behind 4 you. 5 MR. SMITH: Okay. So this slide -- and I 6 realize it's always troubling to see. Does everyone 7 have a copy? Okay. This gives you, in OPC's opinion, 8 some perspective on lead blood levels throughout 9 history and the different events that have significantly been successful in reducing lead 10 contamination. 11 12 Many of the parties to this case have 13 discussed the City of Flint, Michigan. Now, prior to 14 this case, I'll admit, I was -- I was one of those 15 people who didn't know a lot about Flint, Michigan, 16 other than what I had heard in the press. I had heard 17 something about lead. I had heard that it had become a criminal situation, and I had heard that there was a 18 19 crisis and I knew it had to do with the water. 20 Well, through this case, I learned a lot 21 more. Flint should not be used as fear. Flint should 22 be used as a source of truth. Here's what I learned 23 about Flint by reading Dr. Marke's testimony. In 24 April 2013, city officials in Flint, Michigan, switched water sources from Lake Huron to the Flint 25

1	River to save money. And when they did it, that
2	different water source was not treated. It was more
3	corrosive. Now, I don't think the Company's alleging
4	that that's going to happen, but it presents sort of a
5	worst case scenario.
6	Now, there are lots of details about, I
7	guess, how the Flint story broke, and I'll leave those
8	details to Dr. Marke's testimony, or if you have
9	questions, I invite you to ask him directly. But what
10	I was interested in was the aftermath. If one were to
11	have taken the Flint case at face value, one would
12	have expected kind of a large bump in blood lead
13	levels.
14	So this is another slide here, and you'll
15	see a small uptick, right, as between when Flint
16	switched, and you'll notice that's under 90 percent
17	of of the individuals there. The Commission should
18	also know that the percentage of children with
19	elevated blood lead levels in the City of Flint were
20	far less than the State of Michigan, as a whole,
21	during the water crisis.
22	Did you hear that? So the Commission should
23	know that the percentage of children with elevated
24	blood lead levels in the City of Flint is far less
25	than the State of Michigan, as a whole, during the

1		
1	water	crisis.

2	The CDC has some recommendations and they
3	give what I just told you some context because what
4	is what is what are these numbers, five, ten,
5	15? To me, I didn't really know that until I looked
6	at this. And I understand that 15 that 15 is sort
7	of the UPA action level. And then below that,
8	everyone is right, that no amount of lead in the water
9	is safe.
10	But what does the CDC recommend based on
11	different levels of blood lead blood lead levels?
12	And here's what it says: It's basically nutritional
13	counseling. You want to follow up and monitor calcium
14	and iron intake. So that's for the vast majority of
15	people in Flint, that's what was there. And keep in
16	mind, even with Flint, do we really know it was the
17	result of the lead service lines? I mean, no, we
18	don't actually. There's a lot more to learn there.
19	So I would ask you to consider all those
20	things when you're considering the benefits. Right?
21	When you consider the benefits, consider the context.
22	OPC also notes that the Staff of the
23	Missouri Public Service Commission presented to this
24	Commission a report on lead levels in the State of
25	Missouri. Apparently, they contacted the Department

1 of Natural Resources, who OPC thinks should be a stakeholder in this discussion, but is not in this 2 3 case. 4 And do you know our representatives informed 5 Staff that quote: "Lead contamination is, in general, 6 not a problem in Missouri because utilities are 7 following the lead and copper rule and produce 8 non-corrosive water"? 9 In other words, they're treating their water 10 just like they have for 30 years. 11 Mr. Bruce Aiton, in his own testimony, has 12 talked about perfect compliance with the lead and 13 copper rule. Given the uncertain benefits, let's be 14 open to the idea that maybe these benefits are not 15 exceeding the cost despite OPC being the only party with the courage to raise this issue. Maybe we might 16 17 consider doing a cost benefit study to figuring out more specifics. The Company hasn't done such a study, 18 19 not that OPC has seen. 20 Third, let's be truthful about what is being 21 delayed exactly. There's a lot of talk about we don't 22 want to delay health benefits. Now, this is an 23 interesting statement considering for the last 30 24 years, the Company's sterling record but lack of action, but all of the sudden, this is an immediate 25

1 problem that must not be delayed. This needs to be rammed through right here, right now, and this is 2 3 confusing for me. 4 Missouri-American says that OPC's pilot 5 would unduly delay. Staff thinks that OPC's pilot would unduly delay. Well, I'm not sure those 6 7 parties -- maybe they read the testimony, but that's 8 not what OPC's testimony says. OPC's pilot project 9 would actually provide a way to continue replacements but cap it at an amount. That amount is double, more 10 11 than double, the expenditures that were incurred by 12 the Company in the 2017 calendar year. 13 So OPC's pilot is very generous. And rather 14 than discussing this or being open to the idea, the 15 Company talks about delay. Now, 10 years is what the 16 Company says. And the Company hasn't really explained 17 how they're going to replace 30,000 lines in 10 years. I mean, is that itself an appropriate metric? They're 18 19 going to replace tens of thousand of service lines in 20 this time period? Other states haves set longer 21 periods. 22 Indiana, I believe, has set around 24 years 23 maybe. I'll defer you to Dr. Marke for specifically 24 the time period. But as I understand it, the Company 25 ties the replacement of lead service lines to the

1 replacement of water mains. If they're tied together,
2 how can you possibly replace 30,000 lines in 10 years
3 unless you're prematurely retiring water lines? And
4 that hasn't been addressed by the Company.

5 Fourth, let's be truthful about the 6 Company's claim that OPC purports to seek redundant 7 information. I believe Staff makes a similar claim. 8 Well, look, Dr. Marke will be the first to admit he 9 does not have all the answers. The nation is admitting as much. They don't have all the answers. 10 11 But, apparently, the Company thinks that we don't need 12 to study this. And had OPC only looked at the lead 13 service line replacement collaborative like they 14 looked at, they would know that everything OPC is 15 suggesting here really isn't anything different than 16 what's being done nationally.

17 Well, OPC did look at what they're doing. And, actually, on the lead service line replacement 18 19 collaborative, it's interesting. On their website, 20 for getting started, what do they recommend utilities 21 to do? There it says: Water utilities in the process 22 of planning a proactive lead service line replacement 23 should consider an initiative of reviewing ways to 24 accelerate an existing initiative, will find it useful 25 to engage local leaders, state agencies, and others

early to get perspectives. And you can form an
 advisory group to discuss options and/or an internal
 team to help coordinate the planning process. People
 won't always agree.

5 What else does it say? It talks about the 6 collaborative process. Hey, look, what the Company 7 says OPC ignored is starting to look exactly like 8 what -- it's starting to look exactly like what OPC 9 looked at. So the lead service line collaborative also talks about a process of engaging all voices, 10 11 doing scoping, identifying partners, building 12 consensus, making decisions.

You know, I get the sense that the Company just thinks this is -- you know, they don't need to do this. You know, we consider -- we're considering this. Well, if you're considering it, be serious about it. Put it into test mode. Give us a plan. Show us your findings. They haven't done that.

And the Company should be okay with admitting they don't know all the answers. That's okay. A lot of the utilities are in the same situation.

Now, Missouri-American has the unique
perspective of being able to control the narrative
somewhat because they are owned by American Water.

1	And what happens at American Water does, in some
2	sense, control the narrative nationwide. So they can
3	use that to their advantage, but it doesn't always
4	work. So you do have different states at varying
5	levels of progress; Pennsylvania, Indiana, New Jersey.
6	So, fifth And I'm wrapping up. I realize
7	I've been long. I'm not sure if I'll beat Tim Tim
8	Opitz who gave a what I've been calling it the
9	Magnum Opitz or
10	But, fifth, let's talk about the diverse
11	stakeholders. The diverse stakeholders are simply not
12	here. They're not here. DNR is not here. The
13	Department of Health and Senior Services aren't here.
14	Real estate professionals aren't here. Federal
15	agencies aren't here. Environmental groups aren't
16	here. Nonprofits aren't here. Local and elected
17	officials are here to some degree. And I guess you
18	have Missouri-American, Staff, OPC sorry,
19	Missouri-American, Staff, OPC, MIEC, and MECG, and
20	some of the other cities, and that's good. I'm sure I
21	left other people off. I apologize.
22	But let's engage the stakeholders. Let's do
23	this meaningfully. If we're going to do it, let's do
24	it right. And it may be helpful to even look outside
25	the state. Like look at Indiana. Indiana just passed

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1	a new legislation on lead service line replacements.
2	It requires a number of customer safeguards that
3	include a plan that is more detailed, much more
4	detailed, than what the Company has presented.
5	The plan includes such things as
6	availability of grants or low-interest loans.
7	Description of how the replacement of the
8	customer-owned service line will be accomplished.
9	Estimated savings and costs per service line, that
10	would be realized. There's scoping discussions.
11	There's 10 or so, and at the end of this, I'll have
12	Dr. Marke pass out, to those who are interested,
13	copies of this legislation.
14	At the conclusion of the plan, then it goes
15	to the Commission and the Commission decides is this
16	reasonable? Is this prudent? And, you know, you
17	might want to have a local public hearing thrown in
18	there so people in the public can voice their
19	concerns.
20	So I'm on my last issue here that I want to
21	discuss, and that's in the actual list of issues. A
22	lot of people said these were added at the last
23	minute. Well, I don't think there was any you
24	know, these seem to be, to us, to have been filed
25	concurrent with the list of issues; so I'm not sure

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1	these were added toward the end. But to the extent
2	they were, I mean, don't you think they deserve merit?
3	Don't you think we ought to be asking these questions?
4	Shouldn't a prudent utility be asking these questions?
5	And I know the utility said, well, we're considering
6	it. Put that in the testimony. Put that in your
7	plan. Show us that you're considering this. Show us
8	your findings.
9	Those issues I'll let you look at them.
10	OPC really takes the position that these are the sorts
11	of issues we absolutely need to be discussing in
12	this you can call it collaborative, you can call it
13	a pilot study, but these are the sorts of issues, and
14	I'm sure there are others, that need to be looked at.
15	And let's also get sort of a supervisor to
16	make sure all these stakeholders follow some semblance
17	of a structure. Let's get an independent third party
18	to give direction to these parties and seriously look
19	at this. Ratepayers deserve it. This Commission
20	deserves it. Ratepayers want to know that these costs
21	are worth it.
22	Thank you.
23	COMMISSIONER KENNEY: Briefly. Just
24	briefly. I've got a question for you. I think those
25	are all good ideas. It would be nice if other

1	stakeholders were involved, but they aren't.
2	JUDGE BURTON: Is your microphone on?
3	COMMISSIONER KENNEY: Yes, it's on.
4	But they aren't involved in it at their
5	choice; right? I mean, anybody can anybody can
6	intervene in this case. So But my question to you
7	is: What do you do tomorrow? Do we just stop
8	replacing lines? Or what do you do tomorrow when we
9	know that if we have lead service line and it's
10	disrupted, that it can corrode and lead gets into the
11	water? We know that through study. So what is your
12	suggestion when we get to that situation? Just cap it
13	and don't do anything?
14	MR. SMITH: Well, the end "don't do
15	anything" presumes a conclusion that may not be may
16	or may not be true; so
17	COMMISSIONER KENNEY: What may or may not be
18	true?
19	MR. SMITH: Well, the do nothing part of it.
20	COMMISSIONER KENNEY: Well, that the line
21	would corrode or that the line may when the lead
22	when the service line gets disturbed, studies show
23	that that that causes lead to be released into the
24	water; correct?
25	MR. SMITH: And you know what would be one

1	thing that's complementary, and this is no longer an
2	issue in the case, but we had an issue that dealt with
3	coordination of local municipalities. And when there
4	are construction projects and, actually, I think
5	this is in Dr. Marke's testimony there was
6	construction around here and there were some
7	consequences of that construction. You know, whenever
8	there's construction that could disrupt lines and I
9	don't want to get into that here because it is
10	confidential, but
11	COMMISSIONER KENNEY: Okay. You're
12	talking are we talking Jefferson City; so but
13	I'm not talking about Jefferson City.
14	MR. SMITH: Yeah, we think better
15	coordination with municipalities is something that
16	COMMISSIONER KENNEY: But that's so what
17	does that have to do better coordination, what does
18	that have do with the lead service line that's
19	disturbed? Whatever even if there's coordination,
20	what does that have I mean, Dr. Marke, in his
21	testimony, said that, you know, poverty or lead
22	lead in children are more based on poverty than
23	anything else.
24	MR. SMITH: Well, I think he discussed a few
25	options. One is you can have a map. I know other

1 American Water subsidiaries have like a map of 2 construction and --3 COMMISSIONER KENNEY: Okay. But -- so 4 you're saying only -- but that doesn't have to do with 5 anything with the service line that's being disturbed. 6 Even if you go with the City and you work with the map and you work with it, you're in St. Louis County, that 7 8 line gets -- gets replaced, it's going to be 9 disturbed, whether you work with the City, whether you 10 have a plan with the County, whether you work in 11 coordination, it still gets disturbed. 12 MR. SMITH: Is your question should 13 customers be notified? 14 COMMISSIONER KENNEY: Yeah, sure we should 15 notify them. But you say leave that service line. 16 Just hook it back up and don't do anything and take 17 chances that no lead gets put into the water? Or 18 should -- or when we know lead's probably going to be 19 dispersed into the water? What's OPC's position then? 20 Just don't replace it? 21 MR. SMITH: Well, I think our position is we 22 need to be shown that the cost and benefits match 23 Okay. But also, our position is that this is first. exactly what you're talking about, the questions 24 25 you're having. These are the things that could be

1	fleshed out. And within that project
2	COMMISSIONER KENNEY: Those things have
3	already been fleshed out. This is a this is a
4	direct line that's going to be replaced, whether it
5	costs 3,000 or 6,000. And there's anybody that's
6	been in construction realizes that there are many
7	different facets that take effect in that, that it
8	changes the cost of things. Rock, anything. It's
9	just like tree limbs, you name it, other utilities.
10	But what about that line that's disturbed no
11	matter what the circumstances is, no matter who you
12	work with, even if you take into effect all your
13	different issues, what about that service line? Are
14	you saying don't replace it at any at any cost? Or
15	just hook it back up, or what? That's my question to
16	you.
17	MR. SMITH: Well, when you say, "hook it
18	back up" and you're also talking about construction,
19	are you assuming
20	COMMISSIONER KENNEY: You replace the main
21	out front, you have a service line that needs to be
22	reconnected. You can either reconnect it and allow
23	lead to be dispersed into the line or you replace it.
24	OPC's position on that situation is what? Or do you
25	not have a position?

1 MR. SMITH: So I think our entire position 2 is to let's get good practices around this. 3 COMMISSIONER KENNEY: Okay. So you're just 4 not going to answer my question. 5 MR. SMITH: Well, the pilot project itself --6 7 COMMISSIONER KENNEY: I'm not talking about 8 a pilot project. 9 MR. SMITH: Okay. 10 COMMISSIONER KENNEY: I've been very clear. 11 We have -- we're replacing lines. Here's lines that 12 get -- Okay. I'll put it this way. There's a leak in a main, okay? And we have to replace that, and it's 13 14 an old main. We dig it up and we see where we have to 15 replace it. There's a service line connected to it 16 and we know that service line is going to be -- going 17 to be disturbed and that main gets replaced. Is OPC's 18 position we should just reconnect that service line 19 with a "patch it" right there or to replace it? 20 MR. SMITH: Well, when you say -- you use the word "just" as a qualification; right? So I don't 21 22 think our position --23 COMMISSIONER KENNEY: I'm not an attorney; 24 so I -- yeah, my two kids are. 25 MR. SMITH: Our position is to just -- just

1 to do that. One thing that might consider if you don't do the main replacement --2 3 COMMISSIONER KENNEY: You're going to have 4 to replace it because of the leak. 5 MR. SMITH: Or the line. I'm sorry. The 6 line replacement. 7 COMMISSIONER KENNEY: You don't have to 8 replace the line --9 MR. SMITH: Right. 10 COMMISSIONER KENNEY: -- because you hook it 11 back up. 12 MR. SMITH: You could hook it back up. And 13 what you could also do, if you were concerned about 14 those particulates, you could create a filter. As I 15 understand from the transcript of the last case -- I think it was Mr. Naumick, but I'll ask him again, 16 17 about how long it takes the line to be cleared. And I 18 understand it's -- research ranges, it can be a few 19 hours, it can be a few days, but that line gets --20 gets cleared from what I understand. COMMISSIONER KENNEY: Gets cleared from 21 22 what? 23 MR. SMITH: From the lead particulates that 24 25 COMMISSIONER KENNEY: You're saying once

1 it's disturbed, the inner -- inner pipe does not begin 2 to deteriorate? 3 MR. SMITH: When you say "begin to 4 deteriorate," do you --5 COMMISSIONER KENNEY: When you disturb that 6 pipe, oftentimes it starts to -- you're going to have 7 a deterioration. It's just going to continue to leach 8 out lead. 9 MR. SMITH: No, that's not true. It won't 10 leach lead into perpetuity after --11 COMMISSIONER KENNEY: I'm not saying --12 MR. SMITH: Okay. 13 COMMISSIONER KENNEY: Okay. But it --14 it's going -- it can do it for a lot longer than a few 15 days. 16 MR. SMITH: Commissioner, would it be okay 17 with you --18 COMMISSIONER KENNEY: Do you want me to talk 19 to Dr. Marke? 20 MR. SMITH: -- if I deferred this to Dr. 21 Marke? He is an expert on this. 22 COMMISSIONER KENNEY: All right. That's 23 okay. 24 MR. SMITH: I, unfortunately, am a mere 25 attorney.

1	COMMISSIONER KENNEY: Thank you.
2	JUDGE BURTON: Thank you. Are there any
3	other parties that wish to make opening statements on
4	the lead service line replacement issues?
5	MR. COMLEY: Your Honor, on behalf of the
6	Public Water Supply Districts and in the interest of
7	time, I would waive an opening, and with your
8	permission simply indicate that we would our
9	position would be that we would endorse the positions
10	espoused by Mr. Mills. And we don't have a witness on
11	this particular issue, but I may have some questions
12	for Ms. Heppenstall and Mr. Collins, and it's my
13	understanding that they will be appearing later this
14	week.
15	JUDGE BURTON: Yes, sir.
16	Anyone else?
17	OPENING STATEMENT BY MR. COFFMAN
18	MR. COFFMAN: Just briefly. On behalf of
19	Consumers Council of Missouri, we support the Office
20	of Public Counsel, and I believe that they have a lot
21	of helpful data and information on this. We are
22	also if there is going to be a use of public funds
23	to address what is a very important health matter, we
24	also think that there should be an investigation of
25	the interaction with the St. Louis County main line

1	replacement program. We think that is the type of
2	program that would be really well-suited to this
3	public health problem.
4	Rather than having rates based on
5	investments that the utility doesn't own and dealing
6	with the main replacements, we think it's a much more
7	comprehensive approach and one that is similar to that
8	successful program that's going on now in St. Louis
9	County.
10	That's all we have.
11	JUDGE BURTON: Thank you.
12	Anyone else?
13	Then what I would like to do is take a
14	recess for lunch and then we will return to have
15	testimony on this. But I would ask the parties to
16	remain after we go off the record just to discuss
17	procedural issues with scheduling potential other days
18	for hearings, okay?
19	That being said, we will take a break until
20	1:30.
21	(Whereupon, a lunch break was taken.)
22	JUDGE BURTON: Let's go ahead and go back on
23	the record, and I believe we are ready for
24	Missouri-American to call their first witness.
25	MR. COOPER: We would call

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1	Mr. James Jenkins.
2	JUDGE BURTON: Okay.
3	JAMES JENKINS,
4	having been duly sworn, testifies as follows:
5	JUDGE BURTON: You may be seated.
6	EXAMINATION
7	DIRECT EXAMINATION BY MR. COOPER:
8	Q Would you please state your name.
9	A James Jenkins.
10	Q By whom are you employed, in what capacity?
11	A I'm employed by American Water Works Service
12	Company. I'm vice president of regulatory services.
13	Q Have you cause to be prepared for the
14	purposes of this proceeding certain direct rebuttal
15	testimony, revenue requirement rebuttal testimony,
16	rate design and surrebuttal testimony in
17	question-and-answer form?
18	A Yes.
19	Q Is it your understanding that that testimony
20	has been marked as Exhibits 18, 19, 20P for public,
21	20C for confidential and 21 respectively?
22	A Yes.
23	Q Do you have any changes that you would like
24	to make to that testimony at this time?
25	A I do not.

1	Q If I were to ask you the questions which are
2	contained in Exhibits 18, 19, 20P, 20C, 21 today,
3	would your answers be the same?
4	A They would.
5	Q Are those answers true and correct to the
6	best of your information, knowledge, and belief?
7	A Yes.
8	MR. COOPER: Your Honor, we would offer the
9	exhibits referenced, 18, 19, 20P, 20C, 21, into
10	evidence and tender Mr. Jenkins for cross-examination.
11	JUDGE BURTON: Okay. Exhibits 18, 19, 20
12	and the P and C version and 21 have been offered. Are
13	there any objections?
14	Seeing none, those exhibits are admitted.
15	(COMPANY'S EXHIBITS 18, 19, 20P, 20C and 21
16	WERE RECEIVED IN EVIDENCE.)
17	JUDGE BURTON: And I believe Triumph has
18	asked to be excused for the remainder of today's
19	testimony. So I believe we have the Public Water
20	Supply Districts.
21	MR. COMLEY: No questions, Judge.
22	Thank you.
23	JUDGE BURTON: Division of Energy?
24	MR. LUFT: No questions.
25	JUDGE BURTON: MIEC?

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1	MR. MILLS: No questions. Thank you.
2	JUDGE BURTON: City of Riverside?
3	MR. BEDNAR: No questions, Your Honor.
4	JUDGE BURTON: Jefferson City?
5	City of Joplin?
6	Consumer Councils?
7	Staff?
8	MS. ASLIN: Thank you.
9	EXAMINATION
10	CROSS-EXAMINATION BY MS. ASLIN:
11	Q Good afternoon. In various places in your
12	testimony, specifically in your revenue requirement
13	rebuttal and in your surrebuttal, you refer to
14	replacing customer-owned lead service lines as similar
15	to restoration or incidental costs; is that correct?
16	A I did.
17	Q All right. So how is replacing
18	customer-owned lead service lines similar to
19	restoration or incidental costs associated with
20	Account 345?
21	A Yeah. The uniform system of accounts
22	provides guidance within Account 345 that speaks to
23	the disturbance of pavement which then links into
24	in initiating a public health concern. In essence,
25	the service line is damaged. In order to restore that

1	and the costs related to that, those are the costs
2	that you incur and are eligible for capitalization.
3	Q So would it be would it be fair to
4	characterize these incidental or restoration costs
5	would you say that they're associated with normal
6	day-to-day repair activities that the Company
7	undertakes?
8	A They're associated with our infrastructure
9	program as we encounter and disturb service lines.
10	JUDGE BURTON: Mr. Jenkins, could I ask you
11	to please move the microphone closer to you.
12	THE WITNESS: Sorry.
13	As we encounter and we disturb service
14	lines, then the relative costs associated with that
15	would be capitalized to Account 34.
16	Q (By Ms. Aslin) All right. Could I get you
17	to do you have your surrebuttal testimony with you?
18	A I do.
19	Q All right. Could I get you to turn to page
20	48?
21	A Yes.
22	Q And on that page starting at line 9 to the
23	question: "Do you agree with Staff's recommendation
24	to defer collection of current lead service line
25	replacement costs?"

1	You answered: "No. There is no basis for a
2	continuing deferral of these known costs. They're
3	recoverable costs in this case and should be collected
4	as a current expenditure. The denial of current cost
5	recovery for these expenses, which the Commission has
6	acknowledged are necessary and desirable, would simply
7	increase costs and safety risks for customers."
8	Is that correct? The first paragraph of
9	that answer is
10	A Yes.
11	Q states that? So based on your testimony,
12	are these costs considered expenses and not plant?
13	A These costs, we'd classify them as
14	restoration costs. And they're costs associated with
15	restoring the service line to a safe condition. So
16	the relative expenditures with it in those categories
17	we believe should be capitalized consistent with the
18	uniform system accounts application and Account 345.
19	Q So you would not consider those to be plant
20	expenses, those expenses to be plant?
21	A I would consider them to be a restoration
22	cost which is eligible for capital treatment pursuant
23	to the uniform system accounts.
24	Q Do you believe that Staff is recommending
25	denial of current cost recovery?

1	A Can you define what "current cost recovery"
2	means?
3	Q Current cost recovery. The current costs
4	that are being expended for the lead service line
5	replacement program.
6	A I'm uncertain entirely what Staff is
7	recommending for current costs. The Staff is allowed,
8	through the true-up mechanism, approximately
9	\$1.4 million, the cost that we've incurred in the
10	past. But in terms of going-forward position, that's
11	where I'm a little uncertain in terms of the clarity
12	around what Staff's recommendation is for that.
13	Q Okay. And back to that question on page
14	question and answer on page 48 of your surrebuttal,
15	you mention safety risks for customers. How would
16	denial of current cost recovery increase costs and
17	safety risks for customers?
18	A Could you repeat that question?
19	Q So in your surrebuttal, it says: "The
20	denial of current cost recovery for these expenses,
21	which the Commission has acknowledged are necessary
22	and desirable, would simply increase costs and safety
23	risks for customers."
24	How would that increase safety risks for
25	customers?

1	A Well, if you were to deny the costs, then we
2	wouldn't be in a position to actually offer that
3	service and restore those facilities.
4	Q Okay. How is the Company currently booking
5	the costs associated with the lead service line
6	replacement program?
7	A Currently we're recording it into Account
8	186.
9	Q So just a moment. And if we could go back
10	to page 48 of your surrebuttal testimony. So starting
11	at line 16 continuing through the next page, line 7,
12	you mentioned the possible Company requests for
13	ongoing deferral or AAO. Has any witness in this case
14	specifically recommended that the Company request an
15	additional ongoing deferral or AAO for future of lead
16	service line related costs?
17	A I am not aware of any witness that has done
18	that.
19	Q And if the lead service line costs are
20	allowed to be booked in 345, are carrying costs
21	included in that?
22	A No. If they're recorded in Account 345,
23	what would happen is when the construction is
24	completed and a relative cost associated with that
25	would be recorded into plant, it would begin to be

1 depreci	ated. And then in the next subsequent rate
2 case, t	he cost of that plant reduced from depreciation
3 would b	e included in rate base and get a return on a
4 going-f	orward basis and that's when the carrying costs
5 would b	e allowed
6 Q	Thank you.
7 A	or recommended.
8	MS. ASLIN: No further questions.
9	JUDGE BURTON: OPC?
10	MR. SMITH: Thank you, Judge.
11	EXAMINATION
12 CROSS-E	XAMINATION BY MR. SMITH:
13 Q	You were here for my opening?
14 A	I was.
15 Q	And you've read through the testimony of OPC
16 Witness	Robinett; correct?
17 A	I have.
18 Q	And you saw the part of Account 345, that
19 part A	that says: "Leading up to the customer
20 premise	"?
21 A	I'm familiar with that testimony, yes.
22 Q	Okay. And would you agree that that would
23 be a li	mitation on that account?
24 A	No.
25 Q	Okay. You don't agree to that?

1 А No. 2 Q Do you agree the plain black ink of part A 3 says: Costs shall include -- some of -- costs shall 4 include followed by leading up to the customers' 5 premise. You don't think that's a limitation? 6 7 That -- that is included in the first А 8 section of 345. 9 Q I'm just asking is it a limitation? I don't believe it's a limitation, given how 10 А 11 the uniform system of accounts works, given the --12 Q Just yes or no. 13 А No. 14 Okay. Does Missouri-American Water Company Q 15 own service line that they install? 16 Α On the customers' side? 17 On the customers' side, correct. 0 No. Our recommendation is not to own the 18 А 19 customers' side lead service lines. 20 Is there any sort of an ownership, like an Q 21 easement or something else like that? 22 I'm not aware of any. А 23 Are you aware of the phenomenon of customers Q 24 who have already replaced a lead service line? 25 А No.

1 Q So do you think that some customers have replaced their own lead service line? 2 I don't know. 3 А 4 Do you think it's probable that some of the Q 5 customers replaced their own lead service line? 6 I don't know. А 7 Let's assume they have. 0 8 А Okay. 9 The Company isn't planning to reimburse 0 10 those customer with ratepayer proceeds or with 11 shareholder proceeds; correct? 12 А Correct. 13 0 And so those customers are stuck with the 14 cost? 15 Yes. They would have incurred the cost А 16 themselves. 17 0 Do you think it's unfair to treat customers 18 differently in that respect? 19 Α The way that -- I wouldn't say we're treating customers differently. We've identified an 20 21 issue. We've identified a safety issue, and on a 22 going-forward basis we're working to treat all 23 customers the same. 24 Q For years, hasn't Missouri-American 25 communicated with its customers that the service lines

1	are the responsibility of the customers? The
2	customer-owned service lines are their responsibility?
3	A I don't know specifically. We have somebody
4	in operations that's here, Bruce Aiton, that could
5	address our communication with the customers in the
6	past.
7	Q Let me clarify what you don't know. You
8	don't know whether the Company has ever communicated
9	whose responsibility it is for the customer-owned
10	portion of the service line?
11	A No, the customer I do know that.
12	Q Okay. And has the Company ever stated that
13	to your knowledge?
14	A Stated that the customers are responsible
15	for their portion of the service line?
16	Q Yes.
17	A Yes, I'm sure they have.
18	Q Okay. You stated that with some confidence?
19	A Yes.
20	Q And, you know, 30 years would you say
21	they've been doing that? More?
22	A I've been in the business for 30 years, 25
23	to be exact, but and that's the way that's my
24	understanding, yes.
25	Q So during your entire career, the

1 communication from the utility to the customer was, "That line is your responsibility"? 2 3 А Yes. 4 Q So, in that sense, this would represent a 5 departure from the practice that's occurred throughout 6 your entire career? 7 I think it's --А 8 Q I'm sorry. Yes or no? 9 А Yes. 10 Does the Company have a plan for customers Q 11 with copper or iron service lines? 12 I'm sure we have a plan, but that would be А best addressed through our operational witness, 13 14 Mr. Aiton. 15 When you say, "I'm sure we have a plan," 0 16 have you seen a plan? 17 Α Let me rephrase it. How we address copper lines should be referred to Mr. Aiton. 18 19 What about iron lines? Q 20 А The same, yes. 21 Q Okay. Galvanized? 22 А Yes. 23 Worn out and depreciated lines? Q 24 Pardon me? А 25 Worn out and depreciated customer service Q

1	lines.
2	A I don't understand what you mean by that.
3	Q If there's a line that's worn out and
4	depreciated, the Company isn't planning to replace
5	that line for the customer, are they, to your
6	knowledge?
7	A No. Only if we disrupt their service line
8	through the operation of infrastructure replacement.
9	Q Does American Water have a nonregulated
10	service Company that offers insurance coverage for
11	customer service lines?
12	A Yes.
13	Q And what is the name of that nonregulated
14	company?
15	A Homeowners Services.
16	Q And that's an affiliate?
17	A Yes.
18	Q And what type of insurance do they offer?
19	A I don't know.
20	Q But you do know that it offers insurance for
21	service lines?
22	A I'm aware of the program, but I've not been
23	involved in the development of that insurance
24	offering, nor have I ever read anything specifically
25	on it.

1 Q To your knowledge, does the Company conduct 2 any pretesting of the water prior to removal of the 3 lead service line? 4 А That I don't know, and that would be best 5 addressed by Company Witness Aiton. 6 0 As I understand it for Account 345, those 7 restoration costs are related to main replacements; is 8 that correct? 9 Primarily aging infrastructure replacements, А 10 yes. 11 Q What about main repairs? Is that it for 12 Account 345? 13 No. No. А 14 Okay. So if the Company encounters a lead Q service line in the course of a repair, unless that 15 16 main needs to be replaced, it wouldn't be proper to book it in that account; right? 17 18 А No. So with respect to an emergency 19 situation in which repairs -- repairs are generally 20 expensed; right? 21 Right. Q 22 But with respect to if we ran into a Α 23 emergency situation which disrupted the service line, 24 then, in my opinion, that would be eligible for those 25 restoration costs to be capitalized.

1	Q I'm sorry. An emergency expense?
2	A If there was an emergency repair and part of
3	that repair disrupted a service line, in my opinion,
4	the expenditures associated with that service line
5	completing that service line or fixing the service
6	line, restoring it to a safe condition, I do think
7	that would be eligible.
8	Q Can you cite to your authority for that
9	opinion?
10	A Just the uniform system of accounts.
11	Q Just generally?
12	A Yeah, generally. If you look at
13	Q The entire thing?
14	A Well, no. Specifically, the uniform system
15	of accounts does address components of construction.
16	And within components of construction, there's
17	instructions with respect to damages. And when a
18	utility damages third parties' assets, those costs are
19	eligible to be capitalized. And you find that within
20	the 345 account. You also find that within the 343
21	account. So I think that's where just from my
22	professional experience of how that's been treated.
23	Q So only in that discrete situation would
24	in your opinion, only for that discrete situation;
25	correct? To your knowledge, on the stand right now.

1	A Well, it would it would address I'm
2	having trouble with the word "discrete."
3	Q Okay.
4	A But in terms of that example, for an
5	emergency main repair, that I think that would be
6	eligible to be included in Account 345 services.
7	Q But only if it caused damage to the customer
8	on the service line?
9	A If you were to disrupt disrupt the
10	customer-owned service line and, in essence, damage
11	the service line, then yes.
12	MR. SMITH: Okay. No further questions.
13	Thank you.
14	JUDGE BURTON: Question from the bench?
15	CHAIRMAN HALL: Yeah.
16	EXAMINATION
17	QUESTIONS BY CHAIRMAN HALL:
18	Q Good afternoon.
19	A Good afternoon.
20	Q I have a question about the stipulation and
21	agreement that includes \$318 million as a total
22	revenue requirement. And I'm trying to understand,
23	does that include some component of lead service line
24	replacement?
25	A My understanding, no.

1 0 So whatever decision the Commission makes on this issue would add to that revenue requirement? 2 Correct. It would add to the revenue 3 А 4 requirement. Or if the Commission decided that that 5 wasn't a recoverable item, there'd be no change to the 6 revenue requirement. 7 So expenses related to this program 0 Okav. 8 are currently being booked in Account 186; is that 9 correct? 10 А Yes. 11 Q And that will be trued up as to what date? 12 Right now it's trued up through 12/31/2017. А 13 Approximates about \$1.4 million. And then the amount 14 from January 1st, '18, up and to the effective date of 15 the rate order. 16 0 5/31? 17 5/31. Our recommendation is that we would А 18 stop any -- any of the carrying cost interest on 19 that -- on those items or amounts, and then record 20 that into plant service 345 and then we would carry 21 that and start depreciating those asset --22 I'm sorry. I need to move a little Q 23 slower --24 Α Okay. Yeah. 25 -- the way your brain works. Okay. Q

1	So from January 1st to May 31st, the costs
2	for this program would go into 345 and you would
3	according to the Company's position, you would start
4	getting a return on that investment as well?
5	A No. I'll be happy to explain.
6	Q Please.
7	A Okay. What would happen is right now the
8	Commission's authority has allowed us to record
9	amounts into 186 and include a carrying cost at a
10	short-term debt rate from in this example, January
11	through May 31st. And then what we're recommending is
12	that we close that account, the total amount that was
13	in that balance at 5/31/2018, we would recommend
14	putting that into a plant service account, Account
15	345, begin amortizing that over 65 years. That
16	amortization would have no carrying cost.
17	Q I'm going to just stop you there. You
18	really mean "depreciate," don't you?
19	A I mean "depreciate." Thank you.
20	Q Okay. Keep going.
21	A So what would happen is when it got into the
22	plant account, is it would start depreciating over 65
23	years. And, in effect, we would carry that until the
24	next rate filing and the net or undepreciated balance
25	we would be recommending, like we do with any other

1 plant investment, putting that into the rate base and seeking a return on it. 2 3 So you would -- you would not be getting in Q 4 this case a return on the investment up through 5 May 31st? A short-term interest return on the 6 Α 7 investment between January 1st through May 31, 2018, 8 yes, we would not. And we'd stop carrying costs. In 9 essence, those charges would be with an asset that's in service. We'd start depreciating over 65 years. 10 11 And then the undepreciated balance at the next rate 12 case, we would seek recovery like any other plant, the 13 balance, and seek a return on and... 14 So the only part that impacts us with the 15 settlement is through 12/31/17. That -- that impacts 16 the settlement -- settlement numbers, whatever the 17 Commission decides with that amortization. We've 18 recommended a 65-year amortization on that to help 19 spread the costs across a longer period to help with 20 just the overall revenue requirement impact. 21 If the Commission were to determine 0 Okay. 22 that it was appropriate to get a return of this 23 investment, but not a return on this investment, I 24 believe your counsel indicated that the Company might 25 modify a lead service line replacement program?

1	A Yes.
2	Q How so?
3	A Yeah. If the if the Commission was to
4	determine that we were to get recovery of which
5	means the depreciation and then not get a return
6	on, that really puts us in a situation where we're
7	where we're having to, in essence, provide an
8	interest-free loan for however long period that
9	recovery of is.
10	So what we would do in that situation
11	really hope we don't get in that situation. But if in
12	that situation, what we would do is try to avoid lead
13	service line restoration costs. So we try to avoid
14	situations in which we had to replace a lead service
15	line.
16	Q Though you do have a statutory obligation to
17	provide a safe and reliable service. And your
18	testimony here is acute, that you believe that there's
19	a health hazard faced by your customers related to
20	those service lines?
21	A Yeah. I think in the in terms of the
22	the operational aspects of that because I get a
23	little bit outside of my field in terms of how we
24	would address that. That would be best addressed by
25	Bruce Aiton in terms of how we would encounter and

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1 implement an avoidance approach. 2 CHAIRMAN HALL: Okay. Thank you. 3 EXAMINATION 4 QUESTIONS BY COMMISSIONER KENNEY: 5 Just briefly. We're Q Good afternoon. 6 talking about the 1.748 million around the AAO or is 7 it --At 12/31/17, it's 1.4 million. 8 А 9 Okay. 1.4. And then going forward from Q 10 January to May, there's been approximately 7.2 million 11 in replacement? 12 The exact numbers you can get --А 13 Similar? Q 14 А -- from Bruce Aiton. 15 Okay. Q 16 А But, directionally, we're speaking of 17 needing to -- or having to ramp up the investment and ultimately, you know, as -- as Bruce Aiton has 18 19 mentioned, it could be up to \$15 million a year. 20 Fifteen to 18 million, about 3,000 lines? 0 21 А Yes. 22 So based on the Company's estimate, maybe up Q 23 to 10 years worth of replacement time? 24 А Yes. 25 COMMISSIONER KENNEY: Okay. Thank you.

1	EXAMINATION
2	QUESTIONS BY JUDGE BURTON:
3	Q I just have a few questions for you. You
4	were saying that the Company wants this to be placed
5	in the uniform system of accounts. Can you just
6	clarify for the record what you mean by "uniform
7	system of accounts" and which one?
8	A Yes. Currently, the Commission utilizes the
9	1976 version of the uniform system of accounts. And
10	what I was making reference to is that there are plant
11	instructions within the uniform system of accounts,
12	and specifically those plant instructions do speak to
13	the area of damages. And in and, essentially, that
14	any expenditures that are incurred with respect to
15	damages to third-party assets are eligible for
16	capitalization.
17	So that's some of the guidance you get from
18	the instructions and specifically in terms of
19	recording the these costs incurred to restore the
20	service lines, our recommendation, or my
21	recommendation, is to record those into Account 345.
22	Q Okay. And there are three portions to
23	Account 345; correct? There's an A, a B, and a C?
24	A Right.
25	Q Which portion do you think these types of

1 replacements of customer lines would fall into? 2 It'd fall under C. So there's items. А Let 3 me go to that and look. 4 Because I'm seeing, and correct me if I'm 0 5 wrong, for A it says: "This account shall include the 6 cost installed of service pipes and accessories 7 leading to the customers' premises." 8 А Correct. 9 And B says: "A complete service begins with 0 10 a connection on the main and extends to, but does not 11 include, the connection with the customer's meter. 12 The stub service extends from the main to the property 13 line or the curb stop." 14 А Yes. And then it goes on to identify items 15 that are representative of costs that would be 16 incurred. 17 0 I'm looking at C next. 18 А Okay. 19 I'm going to interrupt you real quick. Q 20 This says C: "Services which have been used 21 but have become inactive shall be retired from utility 22 plant and serviced immediately if there is no prospect 23 for reuse, and, in any event, shall be retired by the 24 end of the second year following that during which the service became inactive unless reused in the interim." 25

1 А That's correct. That is from the correct version of uniform 2 Q 3 system of accounts for Class A and B, water utilities 4 1973, the 1976 revision? 5 Α Yes. 6 0 And Missouri-American would qualify as a 7 Class A and B water utility; right? 8 Α Yes. 9 Q Okay. So this would be under C, you were 10 stating? 11 А Well, it really falls under the costs 12 installed of service pipes and accessories leading to the customer's premises. So it would fall under an 13 14 item that's eligible for recovery. 15 Under A? 0 16 Α Under A. 17 Okay. Where it says "accessories leading to 0 18 the customer's premises"? 19 А Correct. 20 And these lines are on the customers' 0 21 premises, other than perhaps St. Louis County where a 22 part of it is under the street as well? 23 That's true. А 24 Q Okay. Now, you mentioned the homeowners 25 service program, I believe, whenever you were

1 questioned by OPC about the insurance program that's an affiliate? 2 3 А Yes. 4 Would that be American Water Resources? 0 5 А I think it's American Water Enterprises. 6 Okay. And would --0 7 But it's part of the American Water А 8 affiliate interest. 9 Okay. And that provides an insurance for 0 10 customers throughout the country or just through 11 Missouri? 12 Throughout the country, and in Missouri, it А would be outside St. Louis County. 13 14 Okay. Outside of St. Louis County? Q 15 А Yes. 16 And do you have any idea of how many Q 17 Missouri-American customers are currently customers 18 also of this other program? 19 А I do not. 20 And that program covers problems, let's say, 0 21 with water leaks, with the customer line, or repair 22 needs for the customer line? 23 You know, generally, customers would need А 24 to -- would have to sign up for it, but -- would have 25 to sign up for it, yes.

1 Q And that's a paid volunteer program that any 2 customer --Correct. 3 А 4 Has there been any attempts by Q 5 Missouri-American to coordinate with American Water 6 Resources or Homeowners Services Program or this other 7 company, whatever the name might be, about saying, 8 listen, we have these old lines, these old mains, that 9 are worn down and they're leaking and we need to do 10 repairs, and we imagine that the customer lines are 11 also leaking and need repairs; so we can coordinate 12 and do repairs at the same time? 13 I don't know. And I think that question А 14 would be best addressed to Bruce Aiton who handles 15 those issues from an operational perspective. 16 Okay. Are you familiar with how many 0 17 residential customers Missouri-American has within the 18 state? 19 Like a little over 400,000. А 20 Approximately, how many of those are located Q 21 in St. Louis County? 22 I think about 386,000. А Are in St. Louis County? 23 0 24 St. Louis County. And then the other two Α 25 districts -- District 1 and 2 have approximately

1 40,000; so my math might be a little short on the 2 400,000. 3 JUDGE BURTON: Okay. Thank you. 4 COMMISSIONER KENNEY: I just have one other 5 question. 6 EXAMINATION 7 OUESTIONS BY COMMISSIONER KENNEY: 8 I just have one question because I'm not Q 9 versed on it or not -- excuse me -- familiar with it. 10 That restoration goes in plant service? 11 А Yes, and -- from our perspective, yes. 12 So then you -- if you were to dig up a Q 13 sidewalk or, let's say, some older part of a street 14 and you restore that, that work would go into plant 15 service? 16 А Yes. And we've been doing that for decades 17 to the extent that we've disturbed or damaged third-party assets. And I think it's pretty clear, 18 19 from my reading of the uniform system of accounts and 20 the application, is that's where we record those 21 costs. 22 COMMISSIONER KENNEY: Okay. Thank you. 23 JUDGE BURTON: Any recross from Staff? 24 MS. ASLIN: Yes. Thank you. Just a few questions. 25

1	EXAMINATION
2	RECROSS-EXAMINATION BY MS. ASLIN:
3	Q In response to a question, you referred to
4	damages cause is a part of the main replacement.
5	Could you clarify what you mean by that?
6	A Okay. I'm certain that Mr. Aiton, who
7	follows me, can speak to it, you know, better from an
8	operational perspective. But, you know, generally
9	speaking, if we're replacing an infrastructure, aging
10	infrastructure down a street, what we're likely going
11	to encounter is disturb the service line, and
12	disturbing that service line with respect to the lead
13	particles and a possibility for that to get in the
14	water supply. That's the issue. And I refer to that
15	as disturbed as well as, in essence, damages of that
16	service line because we need to restore it to a safe
17	condition.
18	Q Okay. And in response to a question from
19	Chairman Hall, you referred to these lead service line
20	replacements as an asset in service. Do you recall
21	that?
22	A Not exactly.
23	Q Would you qualify them as an asset in
24	service?
25	A Oh, if once we restore the customer-owned

1	lead service line because we've disrupted it, those
2	expenditures, in my opinion, should be recorded in 345
3	and would be an asset that we would depreciate.
4	Q But how are they a Missouri-American asset
5	in service if Missouri-American doesn't own the line?
6	A Well, that that's, you know, my
7	interpretation of how uniform system of accounts
8	works. If you go back to the components of
9	constructions, which was plant plant guidance, it
10	specifically talks about expenditures that incur
11	that are incurred when you damage third parties, that
12	those are expenditures that are eligible for
13	capitalization.
14	And when you look at Account 345, one of the
15	items that's listed, and those items are
16	representative, is when you disturb pavement and the
17	associated cost with that. So that's how I get to
18	those costs being recorded into part of the project
19	costs themselves and, thus, it would be an asset.
20	Q So it is your interpretation of Account 345
21	that these lines qualify as an asset in service?
22	A Yes.
23	Q And But would it be possible for someone
24	else to interpret that account in a different way?
25	A Perhaps.

1 MS. ASLIN: Thank you. 2 JUDGE BURTON: Public Counsel. 3 MR. SMITH: Yes. 4 EXAMINATION 5 RECROSS-EXAMINATION BY MR. SMITH: 6 0 There were some questions from the bench 7 about costs. What was the cost that you referenced? 8 A million-four; is that right? 9 Yes. А 10 Did you read Mr. Aiton's surrebuttal Q 11 testimony? I did. 12 А 13 Q Do you have it with you? 14 А I don't, but he'll be correcting that number 15 if that's your next question. 16 Q Okay. So the number in his testimony, you 17 understand, is his third cost estimate? 18 I'm not aware of how many cost estimates А 19 that he's made. 20 Okay. Will you agree the number in his Q 21 testimony is 1,748,978? 22 А Yes. 23 So that number went down somehow? Q 24 Α Yes. 25 So this would be the fourth -- I'm sorry. Q

1 You don't know how many revisions. Where did you get the million-four number? Is that something he told 2 3 you or did you look at the data? 4 That's what we have recorded on our Α No. 5 books and we've provided that in, I think, a data 6 request response as part of the true-up. 7 But no sort of correction has been 0 Okav. 8 made to the testimony yet, but you said that it will 9 be? 10 I think it's forthcoming, yes. А 11 Q Okay. I also thought I heard, when 12 answering question from the bench, that the Company -one of the reasons the Company wanted to include these 13 14 costs in plant was because it would help spread the cost out over a longer period of time; is that right? 15 16 А Yes. A 65-year amortization we believe accomplishes that. 17 18 0 Well, a 65-year amortization, that's not 19 originally what the Company proposed; correct? 20 Correct. Α 21 And OPC Witness Mr. Robinett pointed out 0 22 that the original depreciation life was inaccurate? 23 Well, I think I would address it this way, А 24 is I think the OPC witness made some very good points 25 in surrebuttal. And one of the things that I hadn't

1	factored in is to treat expenditures for restorations
2	as a subaccount. And as soon as I read that in
3	surrebuttal, I thought that was a very fair
4	representation of how that should be treated and
5	that's the reasons we revised our position on it
6	today.
7	Q Now, if the goal is to spread the cost out
8	over a longer period of time, couldn't that be done
9	through an amortization?
10	A It could.
11	Q Okay. Have you heard the saying "when
12	you're a hammer, everything's a nail"?
13	A No.
14	Q Well
15	A Heard of others, but not that one.
16	Q When you're talking about damages to a lead
17	service line, is it possible there might be other
18	fixes, other tools that could be used, other than
19	replacing a lead service line? Is it possible?
20	A I don't know.
21	Q You don't know. Okay.
22	MR. SMITH: No further questions.
23	JUDGE BURTON: Redirect?
24	MR. COOPER: Thank you, Your Honor.
25	EXAMINATION

1	REDIRECT-EXAMINATION BY MR. COOPER:
2	Q Mr. Jenkins, you had described, I think a
3	couple times, your connection to the uniform system of
4	accounts and what you referred to as damages or
5	disturbances of the line?
6	A Yes.
7	Q Can you give us a little bit more detail
8	where that's coming from? I mean, I assume we start
9	in in Account 345, I think you it was pointed
10	out that, you know, the cost installed is referenced
11	in Account 345, sub-provision A. And are there
12	other is there another section of the USOA that
13	helps define what costs means?
14	A Yes.
15	Q And what is that?
16	A You can find that within the uniform system
17	of accounts. There's a section referred to as utility
18	plant instructions.
19	Q And when you look at the utility plant
20	instructions, is there a section that that defines
21	what the components of cost will be?
22	A Yes. Section 8.
23	Q Well, let's back up. More generally, is
24	there a section that defines the components of
25	construction cost?

1	A Yeah. Within the utility planning
2	instructions, item No. 3 titled: "Components of
3	Construction Cost."
4	Q And then within that Components of
5	Construction Cost, is there a particular section that
6	you're looking at when you tell us that that
7	disturbed property, the cost of that, fixing that,
8	fits within the cost?
9	A Yes, and that's item 8.
10	Q Which defines what?
11	A It defines the actual reference is
12	injuries and damages and it says: "Injuries and
13	damages includes expenditures or losses in connection
14	with construction work on account of injuries to
15	persons and damages to property of others."
16	And it goes on. I can read it if I need to.
17	Q That's good enough for now.
18	In your answer to Chairman Hall, you talked
19	about, I think, both amounts that have been deferred
20	between January 1 of 2017 and December 31 of 2017. I
21	think that's one category; is that correct?
22	A Yes.
23	Q And then there was a second category of
24	amounts that have been, or will be deferred, I
25	suppose, from January 1 of 2018 to May 31 of 2018; is

1 that correct?

2 А Yes.

3 And could you differentiate for us your Q 4 recommendation as to those two -- two items?

5 Α With respect to the settlement and Yes. 6 the -- in this case, we've agreed with the parties 7 to -- to accumulate those costs through 12/31/17, and 8 address that through however the Commission decides to 9 address that, and the impact on the case would -would be reflected in addition to the \$318 million 10 11 amount.

12 Then with respect to the costs from 13 January 1st through May 31st, and pursuant to Commission order, since that's been allowed to be 14 15 recorded into Account 186, is we'd stop the carrying 16 cost in terms of the interest component on it at 17 May 31st. And then our recommendation is to record --18 transfer that balance at that time to Account 345, and 19 then upon transfer, it would begin to be amortized. 20 And then on a going-forward basis, since this program is going to continue, and in terms of 21 22 disrupting and damaging service lines as we replace

aging infrastructure, our recommendations on a 24 going-forward basis to record those restoration costs into the Account 345. 25

23

_	rying cost, like an allowance
	ystem of accounts, you rying cost, like an allowance
4 guidance of the uniform s	rying cost, like an allowance
5 wouldn't capitalize a carr	struction because the
6 for funds used during cons	
7 construction cycle wouldn	't last more than 30 days.
8 So I wouldn't anticipate a	any carrying costs to be
9 accumulated on those balar	nces.
10 Q You were asked s	some questions about an
11 American Water subsidiary	that provides service line
12 protection or a service la	ine protection program. Do
13 you remember those?	
14 A Yes.	
15 Q And you've been	with the Company for some
16 time; correct?	
17 A Yes.	
18 Q Do you remember	any past scrutiny before
19 this Commission in terms of	of Missouri-American's
20 communication with that en	ntity, perhaps even the
21 Company being discouraged	from discussions with that
22 entity?	
23 A My memory's pret	tty good. I'd say yes, I
24 recall that.	
25 Q Okay. And that	resulted in issues in prior

1 rate cases; correct? That's correct. 2 А 3 Q You were asked questions by Staff counsel 4 about your surrebuttal and some discussion about, I 5 think, the phrase that's in your testimony is "defer 6 collection." Does that refer to uncertainty related 7 to recovery of Account 186 --8 Yes. Α 9 -- amounts? Could you explain that, please? Q 10 Yes. When items get included in А 11 Account 186, it definitely raises a level of 12 uncertainty and -- and just overall clarity in terms of how the Commission is going to treat those costs on 13 14 an ongoing basis. And as we accelerate and increase 15 the program, that risk, you know, raises from our 16 perspective. 17 And, you know, from my experience, the amounts that are in that 186 from rate case to rate 18 19 case are subject to quite a bit of scrutiny in terms 20 of change and -- and if we have to go down a path of reseeking the AAO authority, we have to go through, 21 22 you know, a pretty complicated proceeding. So that's 23 my background with respect to... MR. COOPER: That's all the questions I 24 25 have, Your Honor.

1	JUDGE BURTON: You're excused.
2	Company may call its next witness.
3	MR. COOPER: We call Mr. Gary Naumick.
4	GARY NAUMICK,
5	having been duly sworn, testifies as follows:
6	JUDGE BURTON: You may be seated.
7	EXAMINATION
8	DIRECT EXAMINATION BY MR. COOPER:
9	Q Please state your name.
10	A My name is Gary Naumick. Last name
11	N-a-u-m-i-c-k.
12	Q By whom are you employed and in what
13	capacity?
14	A I'm employed by American Water Works Service
15	Company in the capacity of the vice president of
16	corporate engineering.
17	Q Have you cause to be prepared for purposes
18	of this proceeding certain rebuttal testimony, revenue
19	requirement in question-and-answer form?
20	A Yes.
21	Q Is it your understanding that that testimony
22	has been marked as Exhibit 27 for identification?
23	A Yes.
24	Q Do you have any changes that you would like
25	to make to that testimony at this time?

1 А No. 2 If I ask you questions which are contained Q 3 in Exhibit 27 today, would your answers be the same? 4 А Yes. 5 Are those answers true and correct to the 0 6 best of your information, knowledge and belief? 7 А Yes, they are. MR. COOPER: Your Honor, I would offer 8 9 Exhibit 27 into evidence and tender the witness for cross-examination. 10 JUDGE BURTON: Exhibit 27 has been offered. 11 12 Are there any objections? 13 MR. SMITH: No objection. 14 JUDGE BURTON: Exhibit 27 is admitted. 15 (COMPANY'S EXHIBIT NO. 27 WAS RECEIVED IN 16 EVIDENCE.) 17 JUDGE BURTON: Any questions from MIEC? 18 MR. MILLS: No questions. 19 JUDGE BURTON: Jump to Staff then. 20 MS. ASLIN: No questions. 21 JUDGE BURTON: Public Counsel? 22 MR. SMITH: Thank you. 23 EXAMINATION 24 CROSS-EXAMINATION BY MR. SMITH: 25 Mr. Naumick, I assume you were in the room Q

1 when I was asking those same questions -- or I'm sorry -- when I was examining Mr. Jenkins? 2 3 I was in the room, yes. А 4 0 Okay. I had asked about whether the Company 5 tests the water prior to a lead service line 6 replacement. Do you recall that? 7 Actually, I did step out. I do not recall А 8 that question. 9 Okay. Are you aware of whether the Company 0 10 tests a homeowner's water prior to doing a lead 11 service line replacement? I would defer what Missouri-American is 12 А doing to Mr. Aiton. I do not believe they test prior 13 14 to replacement is made. 15 You were involved in the AAO case? 0 16 Α Yes. 17 Correct? And you were cross-examined by my 0 18 former co-worker Mr. Opitz. Do you recall that? 19 Α I do. 20 And do you recall being asked about how long 0 21 it takes to return to a stable condition if a partial 22 replacement is conducted? 23 I don't remember the specific question, А 24 but... 25 Do you remember what the answer would be? Q

1	A I generally are you asking me to know the
2	answer that I gave at that time or a general question?
3	Q Do you recall answering that there's some
4	research, it could be hours or potentially days?
5	A I'll accept that that's what I said, subject
6	to checking.
7	Q Okay. So in a partial lead service line
8	replacement, in order for a line to be stable, it
9	takes some time, and the research suggests hours or
10	potentially days. Is that fair?
11	A It can, yeah. It's not an exact situation
12	and it can be somewhat mitigated through the flushing
13	and so forth, but it's not a precise thing that
14	happens in X minutes or X hours or even X days.
15	Q So it's a I guess a short-term situation?
16	A Again, some research has shown some samples
17	that goes beyond that two weeks and weeks and months.
18	In many cases, it returns pretty pretty quickly.
19	But there is some of the research has it as long
20	as, you know, a period of months.
21	Q And could that be possibly accounting for
22	such variables as the internal plumbing of a
23	customer's home?
24	A It can be the whole physical, as well as
25	chemical reaction that goes on. A scale of a scale

1	that may encompass lead gets broken off and they may
2	break off at a random time in the future.
3	Q So the I guess some of the research has
4	shown that kind of a worst case scenario would be a
5	couple of weeks?
6	A Again, I've seen some that's beyond that. A
7	lot of it is shorter than that.
8	Q A lot of it. You would agree that
9	Missouri-American doesn't have a complete or a perfect
10	inventory of lead service lines; correct?
11	A It's not perfect. I think the feeling is
12	it's directionally directionally good and getting
13	better all the time. It is obviously not perfect.
14	Q I'm not sure this got fleshed out in the
15	last hearing so I'm going to ask about it again. Do
16	you recall questions about the York Water Company in
17	Pennsylvania?
18	A I do recall a question about that.
19	Q Are you aware that the York Water Company
20	only reimbursed owners \$1,250?
21	A I'm not specifically aware of it. I don't
22	have reason to disagree with what you said. I'm not
23	real familiar with the York the York decision.
24	Q Are you aware, or do you recall, that the
25	York Water Company was in violation of the lead and

1 copper rule? 2 That's my understanding, yes. А 3 Are you aware of any remaining amounts that Q 4 weren't paid in excess of \$1,250 that the York Water 5 Company would help to offer no-interest finance 6 payment plans for customers? 7 Again, I'm not familiar with it in that А 8 level of detail. 9 0 You've read Dr. Markes' testimony? 10 А Yes. 11 Q So are you familiar with the Madison, 12 Wisconsin, example he cited to? 13 I am generally familiar with it. I can't А 14 say I've, you know, recently boned up on the details 15 I know about the, you know, situation there. of it. 16 Wouldn't you agree that the utility agreed 0 17 to cover up to \$1,000 in that situation? I don't know. I don't have any reason to 18 А 19 dispute what you're saying, but I don't know 20 firsthand. 21 Would you agree for any amount over, there 0 22 was an offer by the utility to provide a low-income 23 customer with a loan with a repayment deferred until 24 the property was sold? 25 А Again, I don't know that, or at least don't

1 know or recall that level of detail about their 2 program. 3 If I were to tell you that level of detail Q 4 was contained in the testimony of Dr. Marke, would you 5 agree with me? 6 Α I don't have any reason to disagree. 7 And wasn't that Madison utility also in 0 8 violation of the lead and copper rule? 9 That I don't -- again, don't remember. Α 10 Do you recall that after lead service line 0 11 replacement in Madison, several years after, it was 12 found that the lead levels -- there were still high 13 lead levels for some homes? 14 Again, I don't know the details. I know --А 15 I know, generally, the Madison situation was 16 particularly unique because they, I believe, did not 17 practice corrosion control and had a reason they 18 didn't want to. Again, I'm not expertly familiar with 19 that -- that case study, but I know that the issue of 20 corrosion control was a specific central piece of the Madison situation. 21 22 And does Missouri-American Water perform 0 23 proper corrosion control? 24 Performs proper corrosion control and/or Α 25 uses the natural chemistry of the water to produce a

water that's not corrosive. 1 2 0 And doesn't the water content also create 3 sort of a coating? 4 Again, a -- yeah, a noncorrosive supply А 5 would put -- over time would put a coat on the 6 interior pipe. 7 And that would protect it from lead 0 8 contaminants being leached in; correct? 9 It does help, yes. Α 10 And, in fact, for 30 years, 0 11 Missouri-American Water has been in compliance with 12 the lead and copper rule? 13 А I believe so, yes. 14 After reviewing all of the testimony, do you Q 15 still believe that OPC's pilot proposal would be 16 either duplicative or inconsistent with the lead 17 service line replacement collaborative? 18 А Yes. 19 Did you read Dr. Markes' direct testimony in Q 20 this case? 21 А I did. 22 All right. And do you have that with you? Q 23 I believe I do. It's what -- oh, well, I А 24 have his surrebuttal testimony with me. 25 Do you have his surrebuttal testimony from Q

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1
     the AAO case?
 2
               I don't believe I have that with me.
          А
 3
               I've got it.
 4
               All right. Do you have a copy of page 11 of
          Q
 5
     Dr. Markes' -- I guess I could phrase this two ways --
 6
     either his schedule GM-4 attached to his direct
 7
     testimony or a copy of his surrebuttal testimony from
 8
     the WU-2017-0296 case?
 9
          А
               Yes.
10
               Okay. And do you see lines 17 through 22
          Q
11
     there?
12
               Yes.
          А
13
          Q
               And have you reviewed this testimony?
14
          А
               Yes.
15
               MR. COOPER: Excuse me. What page are you
16
     on, Counsel?
17
               MR. SMITH: Yes, page 11. I believe it
     could also be referred to as 14/49. I guess it
18
19
     depends because --
20
               MR. COOPER: I'm there. Got it. Thank you.
21
               MR. SMITH: No problem.
22
               (By Mr. Smith) All right. Now, I'm sorry.
          Q
23
     I lost my train of thought.
24
               You reviewed this testimony?
25
               I just read what you directed me to, yes.
          А
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Did you review this testimony prior to this 1 Q 2 hearing? 3 А Yes. 4 Okay. What about -- I mean, what it says --0 5 does that seem to say that a starting point would be 6 to form an advisory group to discuss options? 7 Well, we were well beyond the starting А 8 point. And I would say what it says: "Engaging local 9 leaders, state agencies, others to gain perspectives and expertise." 10 11 We have been doing this quite extensively. 12 Folks like myself doing it on the national level, 13 talking to EPA, others, nationally. I would --14 Can I --Q 15 -- defer to Mr. Aiton about what they're Α 16 doing within the state and talking to local health 17 departments and so forth. 18 0 So were those findings from these alleged 19 conversations that you had put in some sort of report 20 or testimony? 21 Α I believe Mr. Aiton describes some of them. 22 We've described our program and --23 Well --Q 24 Really we've --Α 25 Just asking a question, if they're put in Q

1 the report or were they put in testimony of some sort? 2 I believe I may have referred to it in А 3 generality. I don't think I attached specific 4 examples of discussions, but we've been doing it 5 continuously for -- for several years. 6 0 Did you engage with the epidemiologists, 7 state's epi -- epidemiologists? I can't say that 8 word. I'm sorry. 9 We have been in working groups with А 10 children's health advisory groups, the universities, 11 other utilities, EPA, CDC, and so forth, really 12 running the gamut of folks that are involved in this 13 situation. 14 Have you been engaged in any conversations 0 15 at the Missouri level? 16 Α I have not specifically. 17 Okay. So there's -- what other American 0 18 water utilities are doing this? 19 Doing this? А 20 Yeah, this sort of engagement that you're Q talking about. 21 22 Moving forward, Indiana, Illinois, А 23 New Jersey, Pennsylvania. So, again, a lot of 24 activity going on in multiple states. 25 Okay. And has there been approval, to your Q

1 knowledge? 2 They're in different -- they're in different Α 3 There was a legislation in Indiana. states. 4 To your knowledge --Q 5 There are pending cases. А 6 I'm sorry. To your knowledge, has there 0 7 been approval? To your knowledge. 8 А Not to my knowledge. I don't follow all the 9 nuances of the regulatory steps. As I said, there's activity both legislatively and regulatory in a number 10 11 of states. 12 Okay. I'm going to mark an exhibit. Q I 13 think OPC -- this will be our first exhibit, but I 14 believe the number will be 227. Does that sound 15 right? I'll hand a copy to the court reporter. 16 All right. Are you familiar with that 17 statute? I am generally familiar. This is the 18 А 19 Indiana legislation; correct? 20 Could you identify it? Yeah. Q 21 А Yes. 22 Okay. And what is -- please identify it. Q 23 I'm not sure what you mean. You want me to А 24 read the title? 25 Yes, please. Please. Q

1	A Burns Indiana I don't even know what
2	the abbreviations are, but I know it's the Indiana
3	legislation about lead service lines. I don't know
4	what these abbreviations are.
5	Q And how do you know that? You've seen it
6	before?
7	A I've seen the contents of this, yeah.
8	Q Okay. And can you describe what the
9	legislation says in Indiana?
10	A Well, it asks for kind of some details about
11	what and how much about the program, the number of
12	lead service lines that are estimated in the utility
13	range to be to be done annually. You can see there
14	are 10 different items, mostly factual about the plant
15	program.
16	Q And at the end, the Commission would approve
17	the plan if it's reasonable in the public interest.
18	True?
19	A I believe so, yes.
20	Q To the best of your knowledge, is this a
21	true and correct copy of that piece of legislation?
22	A To the best of my knowledge, yes.
23	Q That statute? Okay.
24	MR. SMITH: I'll offer to admit that exhibit
25	at this time.

1	JUDGE BURTON: I'm just identifying that as
2	the Indiana Code 8-1-31.6-6. Exhibit 227 has been
3	offered. Are there any objections?
4	MR. WESTEN: Just a question actually.
5	Ryan, is this this is this is actually
6	passed legislation that's been signed into law?
7	MR. SMITH: Yes.
8	MR. WESTEN: Staff has no objection.
9	MR. COOPER: I don't know if I have an
10	objection, Your Honor. I guess I would encourage you
11	to maybe just take administrative notice of the
12	Indiana statute number, and then to the extent that
13	would give us chance to to take a look and make
14	sure we've got the complete statute before us. But
15	that would be my suggestion to you. But it's not
16	really admitted into evidence, but perhaps take
17	take notice of the Indiana statute, if you would.
18	JUDGE BURTON: Do you have an objection to
19	it being admitted subject to any addendum for
20	clarification for anything that's missing?
21	MR. COOPER: No, I do not.
22	JUDGE BURTON: Okay. Then I would prefer to
23	just go ahead and admit it for the record. Exhibit
24	227 is offered and admitted.
25	(STAFF'S EXHIBIT NO. 227 WAS RECEIVED IN

1	EVIDENCE.)
2	Q (By Mr. Smith) So there are a number of, I
3	guess, questions in the plan that need to be answered
4	in Indiana; correct?
5	A Correct.
6	Q And a little bit different than the approach
7	Missouri-American Water is taking. Fair?
8	A Not really. The things that are in here
9	are are the same way we're running the program
10	in in Missouri. In Indiana, they're articulated in
11	answer to these questions, but they're really the
12	same the same steps process that we're taking
13	forward here.
14	Q I mean, where's the Company's plan then?
14 15	Q I mean, where's the Company's plan then? Was that submitted? Did I miss that?
15	Was that submitted? Did I miss that?
15 16	Was that submitted? Did I miss that? A Again, a lot of details. I know, as an
15 16 17	Was that submitted? Did I miss that? A Again, a lot of details. I know, as an example, in one of Mr. Aiton's testimonies, I lose
15 16 17 18	Was that submitted? Did I miss that? A Again, a lot of details. I know, as an example, in one of Mr. Aiton's testimonies, I lose track whether it's AAO or this, but there was a very
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15 16 17 18 19 20	Was that submitted? Did I miss that? A Again, a lot of details. I know, as an example, in one of Mr. Aiton's testimonies, I lose track whether it's AAO or this, but there was a very large detailed flowchart of what to do if when you see a lead line in construction, do this, how we do
15 16 17 18 19 20 21	Was that submitted? Did I miss that? A Again, a lot of details. I know, as an example, in one of Mr. Aiton's testimonies, I lose track whether it's AAO or this, but there was a very large detailed flowchart of what to do if when you see a lead line in construction, do this, how we do the sampling, how we do the flushing, how we do the
15 16 17 18 19 20 21 22	Was that submitted? Did I miss that? A Again, a lot of details. I know, as an example, in one of Mr. Aiton's testimonies, I lose track whether it's AAO or this, but there was a very large detailed flowchart of what to do if when you see a lead line in construction, do this, how we do the sampling, how we do the flushing, how we do the communication. We've developed a whole battery of

1 testimony -- but that's all part of the program. 2 All right. Are you generally familiar with 0 American Water's research on lead line removal? 3 4 А Yes. 5 Are you familiar with the studies conducted Q 6 by the parent in New Jersey and in Illinois? 7 А Yes. Generally, yes. 8 I'm going to butcher the name but who's 0 9 Dr. Mark LeChevallier? Can you help me with the name? Dr. Mark LeChevallier, now retired, was our 10 А head of research. 11 12 All right. And did you read our Dr. Markes' Q surrebuttal testimony in this case, WR-2017-0285? 13 14 А Yes. 15 Do you have that in front of you? Q 16 А Yes. 17 Okay. Would you turn to page 22? 0 18 А Twenty-two, yes. 19 All right. Are you there? Q 20 А Yes. 21 And you've reviewed this in advance, I 0 22 assume? 23 Yes. А 24 Q Okay. Lines 1 through 10 -- sorry, 1 25 through 13 -- do you generally agree with these

1 statements? 2 А No. 3 What about lines 1 through 5? Q 4 I mean, first, I really don't А No. 5 understand it. I don't understand the context and so no, I don't -- I don't know what the context of it or 6 7 what it really says or means. 8 Do you have reason -- do you think it's Q 9 untrue? 10 It's something Dr. LeChevallier may have А 11 said on a phone call. In what context, or did he say 12 it, I -- I'm not really willing to validate it, not 13 having been there or not talking to Dr. LeChevallier 14 about it. 15 0 Okay. Fair enough. Fair enough. Thank 16 you. 17 MR. SMITH: No further questions. 18 JUDGE BURTON: Ouestions from the bench? 19 CHAIRMAN HALL: Yeah. 20 EXAMINATION 21 QUESTIONS BY COMMISSIONER HALL: 22 Afternoon. Q 23 Hi, Judge Hall. А 24 Are you involved in Missouri-American's Q 25 formation of its main replacement program?

1	A Just in an overall review step process. Not
2	in the in the weeds, not in detail.
3	Q Who's in the weeds?
4	A Bruce Aiton.
5	CHAIRMAN HALL: Okay. Thank you.
6	COMMISSIONER KENNEY: Yes. Thank you.
7	EXAMINATION
8	QUESTIONS BY CHAIRMAN KENNEY:
9	Q Bimetallic. Is that right, Bimetallic
10	corrosion? Okay. How does that work?
11	A The I'll try my best. Would be putting
12	two dissimilar metals next to each other and having
13	the corrosion of ions from one to the other.
14	Q The what? Ions? The corrosion of ions?
15	A Well, the liberating of ions. So in other
16	words, the discharge of the metal by corrosion.
17	Q Does one metal give more ionized causes
18	the other the way I understand part of this is that
19	two metal that causes that the lead pipe would
20	lose some of its ions and so the lead can leach out
21	into the water.
22	A Yeah. Yes.
23	Q That is that a short-term effect or can
24	that be a longer-term effect?
25	A That would be a longer-term effect, which in

1	construction, you would try to mitigate by not
2	allowing kind of a galvanic path between those metals
3	to interact with each other.
4	Q So how would you do that if we if the
5	Company comes across a lead pipe when they're
6	replacing the mains, would they and they don't
7	replace that lead pipe, would they have tried to
8	connect a different fitting to it?
9	A You would. You would either connect plastic
10	to the lead or you would have a I believe it's
11	called a dielectric coupling to break the galvanic
12	contact.
13	COMMISSIONER KENNEY: Okay. Thank you.
14	JUDGE BURTON: Any recross?
15	MR. SMITH: No, thank you.
16	JUDGE BURTON: Redirect?
17	MR. COOPER: Thank you, Your Honor.
18	EXAMINATION
19	REDIRECT EXAMINATION BY MR. COOPER:
20	Q Mr. Naumick, you were asked some questions
21	about Mr. Markes or Dr. Markes surrebuttal
22	testimony and a conversation that purports to be
23	described there. Were you a part of that telephone
24	call?
25	A I was not.

1	Q Would you be surprised if the American Water
2	person referenced there said there was no difference
3	between partial and full lead service line
4	replacement?
5	A Yes. And, in fact, I know that the pilots
6	were about full replacements. The goal of the pilots
7	was to really tighten up and validate protocols about
8	exactly how to flush, exactly when to sample, how many
9	times. So they were they were piloting of some
10	full samples. So they were not piloting partials.
11	And, again, having been with Dr.
12	LeChevallier many times, no, he would not. I believe
13	he would have said there's no difference between
14	partials and fulls.
15	Q So the pilots that would have been
16	referenced would not have have been testing the
17	difference between partial and full?
18	A Correct. Again, that was not the purpose of
19	them. That was not the sample set.
20	Q Are you aware of research that does show a
21	difference between partial and full replacements?
22	A Yes.
23	Q Okay. Could you describe that for us?
24	A It's you know, there's a multitude of
25	that, multitude of external research by universities

1 and others showing that the higher prevalence and 2 persistence of lead after a partial as compared to 3 after a full service line.

Q Mr. Smith also had pointed you to some testimony that referenced a stage of this process as forming an advisory group. And I think you said you're beyond that step. Could you explain to us what you mean by the fact that you're beyond that step?

9 Again, and we're advancing it, the work and Α the sampling and the learning in Missouri and in other 10 11 states and -- and as we go, we're learning. As you 12 could imagine, in the field, you start to run into all 13 the odd situations, and so we're -- we're refining, 14 developing plans for those odd situations, but we've 15 really established a pretty strong working protocol of 16 the activity.

17 And, again, the follow-up activity that I described, the education, the flushing of the line to 18 19 clear sediment after a full replacement and then the 20 follow up sampling. So, again, we've gone a long ways 21 down, and we are constantly talking really with all 22 the experts across the country to keep up with 23 activity that's going on and to continue to learn from 24 that.

25

Q So not only has that been developed, but

1	it's	been	developed	in	coordination	with	others?
2		А	Absolutely	7.			

Q You were asked some questions about how coating on the inside of the pipes may protect from lead contamination. What kinds of things can -- if any, can disrupt that coating or change that protection?

8 Again, the one we talked most primary is Α 9 the -- you know, the replacement of the main and 10 having to disconnect the main and reconnect and just 11 that physical disruption. There could be other things 12 out of our control. The work of another utility, for instance, nearby. Potentially, even something that 13 14 the homeowner does on the property, a tree -- you 15 know, a tree, taking out a tree or somebody grinding 16 out a stump or something that can cause a physical disruption nearby. 17

Q You were asked questions about York Water
and then Madison, Wisconsin. Are either of those
systems subsidiaries of American Water Company?
A No, they're not.

22 Q You were asked several questions by 23 Mr. Smith about how long it takes a lead pipe to 24 return to stable condition after partial replacement. 25 And I think you talked about various lengths of time.

1	Why is your answer not exact?
2	A Because there's there's research showing
3	some variation, as well as just the fact this physical
4	activity, there was a disruption and there's
5	particulate matter that's been disrupted or has
6	resettled and something could just trigger trigger
7	particulate lead to have a random spike back into the
8	water.
9	Q Just a lot of different circumstances out
10	there when you start talking about service lines, lead
11	service lines?
12	A Yeah. I mean, it could be something where,
13	for some reason, the customer turns on the water real
14	heavily in the house and it's a flow volume that
15	hasn't been experienced that can just pull off some of
16	the particulate.
17	MR. COOPER: That's all the questions I
18	have, Your Honor.
19	JUDGE BURTON: You're excused.
20	THE WITNESS: Thank you.
21	JUDGE BURTON: Company can call its next
22	witness.
23	MR. COOPER: Missouri-American would call
24	Mr. Bruce Aiton.
25	BRUCE AITON,

1	having been duly sworn, testifies as follows:
2	JUDGE BURTON: Thank you.
3	EXAMINATION
4	DIRECT EXAMINATION BY MR. COOPER:
5	Q Please state your name.
6	A Bruce Aiton, A-i-t-o-n.
7	Q And by whom are you employed and in what
8	capacity?
9	A Missouri-American Water. I'm director of
10	engineering for the State.
11	Q Have you cause to be prepared for the
12	purposes of this case direct testimony, rebuttal
13	testimony, revenue requirement, and surrebuttal
14	testimony in question-and-answer form?
15	A Yes.
16	Q Is it your understanding that testimony has
17	been marked as Exhibits 1P for public, 1C for
18	confidential, 2 and 3?
19	A Yes.
20	Q Do you have any changes that you would like
21	to make to that testimony at this time?
22	A I do. Actually, two pieces, both on the
23	same page in my surrebuttal testimony. On line
24	page 6, line 3, the number 250 should be 240. And
25	then the dollar value that was referenced earlier from

the 1.7 million should be 1,420,494.91. 1 2 JUDGE BURTON: I'm sorry. Would you repeat that number? 3 4 THE WITNESS: 1,420,494.91. 5 (By Mr. Cooper) Are there any other changes Q 6 that you would like to make to your testimony? 7 А No, sir. 8 If I were to ask you the questions that are Q 9 contained in Exhibits 1P, 1C, 2, and 3 today, would 10 your answers as amended be the same? 11 А Yes, sir. 12 Are those answers as now amended true and 0 13 correct to the best of your information, knowledge, 14 and belief? 15 Yes, sir. А 16 MR. COOPER: Your Honor, we would offer Exhibits 1P, 1C, 2, and 3 into evidence and tender 17 Mr. Aiton for cross-examination. 18 19 JUDGE BURTON: Exhibits 1 through 3 have 20 been offered. Are there any objections? 21 MR. SMITH: I think I'm going to object on 22 the basis of not understanding the change that was 23 made and what the grounds for that was, but I think if 24 I explore that, that would probably resolve my --25 JUDGE BURTON: Do you want to clarify that

1 now or do you want to --2 MR. SMITH: Yeah, I think -- well, yeah, that'd work for me. 3 4 EXAMINATION 5 VOIR DIRE EXAMINATION BY MR. SMITH: 6 0 Mr. Aiton, what is the basis for the change 7 in these figures? 8 The 250 actually was through the end of А 9 January, not through the end of December, and so we redact that back to the end of December number, the 10 11 240. And the 1.7 million, I'll say is a mistake. I 12 asked the wrong accountant. The actual number from our accounting group that was filed elsewhere in the 13 14 record is the 1.4 number. 15 So the number that you just recently cited, 0 16 is that also based on a conversation, or what is that 17 number based on? It's based on what was then had been filed 18 А 19 by the Company in the -- in the rate structure, I 20 believe, and, yes, in the conversation with other 21 accountants, that was the number that had been used. 22 So it was based on a conversation with the Q 23 accountants? 24 Α Yes. 25 Have you reviewed the data that -- that Q

1 forms the foundation of those conversations? 2 Yes. Yes. А 3 And you've tabulated the data and you agreed Q 4 with it? 5 А I looked at the data and I agree with it. 6 MR. SMITH: Okay. Subject --7 JUDGE BURTON: To cross-examination. Okay. 8 Exhibits 1P, 1C, 2, and 3 have been offered and are 9 admitted. (COMPANY'S EXHIBITS 1P, 1C, 2, AND 3 10 11 WERE RECEIVED IN EVIDENCE.) 12 JUDGE BURTON: Any cross from the Public 13 Water Supply Districts? 14 MR. COMLEY: No, thank you, Judge. 15 JUDGE BURTON: Division of Energy? 16 MR. POSTON: No, thank you. 17 JUDGE BURTON: MIEC. 18 MR. MILLS: No questions. 19 JUDGE BURTON: Staff. 20 MR. WESTEN: Very briefly, Judge. Thank 21 you. 22 EXAMINATION 23 CROSS-EXAMINATION BY MR. WESTEN: 24 Q Good afternoon, Mr. Aiton. 25 A Hello.

1 Q My name is Jacob Westen. I am the attorney 2 who has helped to represent Staff in this case. Ι 3 imagine you probably received DRs with my name on 4 them. 5 I want to ask you a few questions about 6 operations. As the previous witnesses have indicated, 7 you're the operations guy? 8 А Yes. 9 So it's fair to call you the operations guy? Q 10 А That's fine. No problem. 11 Q All right. Real briefly, you're the 12 individual who is responsible for the estimate of the approximately 33,000 lead service lines in Missouri? 13 14 Yes. With my staff, yes. А 15 0 Okay. So you supervised the individuals who 16 did that? 17 Α Yes. 18 0 Okay. And if I recall correctly, you 19 provided some testimony on this item in the AAO case WU-2017-0296. Does that sound correct? 20 21 А Yes, sir. 22 And I think you stated that the basis for Q 23 that estimate is on company experience and tap cards; 24 is that correct? 25 А Yes, sir.

1	Q Am I leaving anything out?
2	A No. Not substantially, no. We have tap
3	card records for much of the system. And in other
4	locations, say in Parkville, for example, those tap
5	card records were lost in previous floods and so we no
6	longer have that data. It was never transferred to be
7	in electronic format.
8	So that's where the staff experience of
9	having worked in the system for a number of years and
10	looking at a number of systems, you know, taps and
11	their experience of where they think that there might
12	be lead service lines.
13	Q So the majority of the estimation is
14	actually outside of the St. Louis area?
15	A No. The majority of the estimation, yes, it
16	would be outside. It would be in Mexico and
17	Parkville, in particular.
18	Q Okay. And I think I recall, but, again,
19	just very briefly. A tap card is an actual written
20	card that identifies the size, the material and the
21	date and method of installation of different
22	components, either the customer service line or other
23	parts of the main; is that correct?
24	A That's correct.
25	Q Okay. Were you present for Mr. Jenkins'

1 testimony earlier this afternoon? 2 Yes, sir. Α 3 Okay. And I believe Mr. Jenkins referred to Q 4 treating the repairs as incidental to and I -- they 5 are part of the damage and disturbances that happen to 6 customer service lines. Were you present for that? 7 А Yes, sir. Does that phrase, "incidental to," does that 8 Q 9 have meaning for you as an operations guy? Not -- not specifically, but it's -- when 10 Α 11 you're replacing the main, whether it's through a 12 break or through planned replacement, you will affect that service line by cutting it and reconnecting it to 13 the main. So in that reference, then, yeah, it would 14 15 be a part of that. 16 Q It's part of the replacement? 17 Part of the replacement process, correct. Α 18 0 Is it also part of the repair process if 19 mains are repaired? If there's a service line that would be 20 А 21 adjacent to that or really directly impacted by that, 22 then potentially yes. 23 Okay. Now, this is a -- this might seem 0 24 like a nitpicky question, but I'm very interested in 25 it. Does the damage or disturbance occur because of

1 the main replacement or is that damage or disturbance 2 that has happened prior to the main being replaced? 3 Does that question make sense to you? 4 I believe so. I would say that it's because Α 5 of the main replacement. 6 0 Okay. So --7 I mean, other than in the case of a break. А 8 Q Right. 9 If there's a main break specifically that Α would impact that adjacent service, then that would be 10 11 that case. 12 Okay. The -- Mr. Jenkins referenced part of 0 the reason why he believed that customer-owned service 13 14 line replacements could be accounted for in 15 Account 345 is that -- because it would be done in 16 response to emergency replacements. Do you recall 17 that testimony? 18 А Yes. 19 Q And my understanding is that 20 Missouri-American doesn't just replace mains during 21 emergency situations --22 А That's correct. 23 -- am I right? So I also understand that Q 24 Missouri-American has replaced lead -- customer-owned 25 lead service lines in nonemergency situations where

1 mains are being repaired or replaced; is that correct? 2 I'm sorry. Would you say that one more А 3 time? 4 Sure. Missouri-American has replaced the Q 5 customer-owned lead service line in situations where 6 mains have not -- mains have been replaced, but there 7 was not an emergency; is that correct? 8 That's correct. That's the majority of А 9 those, yes. 10 It's the majority of those; right? Q 11 А Yes. 12 In fact, I think -- and I believe Mr. -- his Q 13 name escapes me, the previous witness who was just up, 14 he mentioned that --15 Naumick. А 16 Q Naumick. Thank you. He mentioned that you 17 actually have a flowchart of when repairs occur and 18 replacements occur. 19 To address and to try to give field А 20 personnel a direction based on variety of situations, 21 yes. 22 And are you familiar enough with your Q 23 flowchart? Should I direct you to it? 24 It's probably too small in here to actually А 25 read it, but we'll try.

1	Q Okay. So for reference for other
2	
	counselors, I'm looking at Mr. Aiton's Schedule BWA3,
3	which is attached to his direct testimony. This is
4	previously marked schedule BASR2 in the AAO case. You
5	can just let me know when you got there.
6	A Sorry. Give me just a minute.
7	Q Sure.
8	A Okay. Which page?
9	Q This is page 1 of 9.
10	A Okay.
11	Q And I'm looking at a flowchart that says:
12	"Water mains/service line renewal." And it says:
13	"Basic workflow" in tiny font underneath that title,
14	"Version," it looks like "May 18, 2017"?
15	A Yes, sir.
16	Q And this flowchart actually has two
17	different types of work anticipated. Planned work,
18	which is the main call, and then unplanned work, which
19	I'm assuming is the emergencies. And just
20	reiterating, your experience has been the majority of
21	the lead service line replacements have occurred
22	customer-owned lead service line replacements have
23	occurred as standard work, not during emergency
24	situations?
25	A That's correct.

1 Q Okay. Are you familiar with -- are you an 2 accountant? Do you have any accountant training? 3 No, sir, I'm an engineer. А 4 So it would be -- you would not be able to 0 5 answer a question about the proper booking of these 6 kinds of operations into Account 345 or that are 7 asking those types of questions? 8 No -- no, sir, I defer those to Mr. Jenkins. Α 9 The work that Missouri-American does 0 Okav. 10 that is a part of the main replacement, that is your 11 understanding at least, gets booked as that work replacements incidental to main replacement? 12 13 Yes, sir. Α 14 And gets recovered as part of that process? Q 15 А Yes. 16 Where is the limit for Missouri-American 0 17 where it stops being an incidental replacement on a 18 customer-owned service line -- or it stops being an 19 incidental replacement -- I'm sorry -- on any service 20 line? Well, I'll give you a different scenario 21 А 22 that may help speak to that. There are times when in 23 the replacement of a line, we actually relocate it 24 from, say, a backyard main to a front yard main or 25 in-the-street main. And in those situations, we

1	actually replace that service line also. So separate
2	from whether it's lead or not, we actually replace
3	those. So I wouldn't say that there's necessarily a
4	limit. It's it's what's in the best interest of
5	the public and to provide that service to the
6	customers.
7	Q In the example you just gave, you're talking
8	about entire relocation of a service line from a
9	customer's home to the main?
10	A If we move the main from, say, backyard to
11	the front yard, yes, we would replace that entire
12	service line.
13	Q In that scenario, do you also notify the
14	customer and ask them permission to replace their own
15	portion of the service line?
16	A Yes, we do because we have to be on their
17	property and we need that, you know, permission to
18	access the property.
19	Q This might be a little bit of a stretch, but
20	that just that scenario doesn't strike me as a
21	common occurrence.
22	A It's less common.
23	Q Okay. And that type of example also sounds
24	like the type of work that occurs outside of the
25	Company's easement?

1 А Well, we would have an existing easement in the backyard and we would be abandoning that easement 2 3 and moving the main to the street. 4 And that's part of the reason why you have Q 5 to ask the customer's permission? 6 Α Correct. 7 So in scenarios where work is done, but it's 0 not outside of an easement, do you ask the customer 8 9 permission to replace those lines? 10 А Would you repeat that one more time? In work on a main where you are having to 11 0 adjust a customer connection, not the customer-owned 12 13 portion, but a connection to the main and that occurs 14 within the easement, do you ask permission? 15 We don't really ask permission, but we do А 16 notify all customers before we start work in a 17 particular block prior to that work happening so they're aware of what's going on, but not -- not 18 19 necessarily their permission to do that. 20 0 Okay. Have you read Mr. Merciel's testimony 21 in this case? 22 Yes. А And Mr. Merciel's testimony references a 23 0 24 reporting requirement that he proposes involving the 25 lead program.

Yes, sir. 1 А 2 And in my reading of your testimony, you Q 3 took some issue with this proposal, but not total 4 issue. Can you explain if you have any objection to 5 Staff's reporting requirement? 6 Α Generally, no -- no -- no major objections. 7 We can provide them what we plan to do and what we 8 have done. 9 0 And that's -- that's an annual reporting of 10 the planned work that you will do and the annual 11 reporting of the work that you have done through 12 process; correct? 13 А Correct. 14 MR. WESTEN: Okay. No further questions. 15 Thank you. 16 JUDGE BURTON: OPC? 17 MR. SMITH: Yes. Thank you. 18 EXAMINATION 19 CROSS-EXAMINATION BY MR. SMITH: 20 In terms of measuring the benefit that Q 21 customers will receive for this, is the Company 22 testing the water lead levels prior to replacing lead 23 service lines? 24 Not really prior because at that point they А 25 have not been disturbed yet.

1	Q So there's no benchmark
2	A Other than I'm sorry other than as
3	part of the lead and copper rule where we would
4	regularly test as part of that overall program.
5	Q So for those customers who are the
6	recipients of new lead line, there's no benchmark upon
7	which to measure the punitive benefit of a lead
8	service line replacement; isn't that correct?
9	A Well, the benefit would be the long-term
10	protection of not having any exposure to lead.
11	Q They wouldn't have any exposure to lead?
12	A Not from that source.
13	Q So there could be other sources?
14	A Source of paint, which is the predominant
15	source of contamination or high blood levels.
16	Q And interior plumbing, too; correct?
17	A That's a potential. It's much smaller. In
18	our experience in the 250 that we've done, we've never
19	seen lead plumbing inside the house.
20	Q But what about
21	A There is a solder
22	Q light fixtures or solder?
23	A Yeah.
24	Q There's that.
25	A There's potential lead solder at individual

1	joints or lead in the fixtures that would be leached
2	out of the bronze that's actually there.
3	Q What about blood levels? Are those measured
4	prior to installing a lead service line?
5	A Not specifically. We did have conversation
6	with the Department of Health where they have high
7	blood lead levels. We told them what we were going to
8	be doing. And they basically said that they don't
9	view that our water as being a particular source; so
10	drive on and replace the lines. They thought it was a
11	good idea, but not they didn't feel like they had
12	had any particular
13	Q I'm sorry. Did you just say that who did
14	you speak with?
15	A We spoke to the Department of Health.
16	Q And they told you it wouldn't have any
17	<pre>impact on blood lead levels?</pre>
18	A They they told us that the primary
19	they believed that the primary source of high blood
20	levels in Missouri was paint, not our pipe, because,
21	again, we haven't had any negative results in our
22	in our lead testing.
23	Q Do you agree with that conclusion?
24	A I think that it's in the near term, yes. If
25	we continue to disturb pipes, service lines without

1	replacing them, I think that that risk goes up.
2	Q When there is construction or main
3	replacement, if there is any lead leaching, couldn't
4	that be mitigated through a temporary filter?
5	A Well, my experience, and the testimony of
6	Mr. Naumick before in the AAO period as well, is that
7	filters are a stop gap and they wear out over a period
8	of time, and depending on the specific filter, it's
9	it's imperfect and it doesn't eliminate the issue
10	because if that line is
11	Q I appreciate the lengthy response. I'm just
12	trying to get, you know, could a filter be a
13 :	mitigation factor?
14	A It would be a temporary mitigation at best.
15	Q Okay. You agree with that. And costs could
16 :	be 50 bucks, maybe?
17	A If you for like a pitcher filter, but it
18	wouldn't affect whether people were drinking out of,
19	say, the bathroom faucet instead of the kitchen
20	faucet. It wouldn't be it's not a perfect plan.
21	Q Have you had any conversations to determine
22	any cases of waterborne lead poisoning from
23 1	Missouri-American Water customers?
24	A I'm sorry. Say that one more time.
25	Q Yeah. Have you had any communications which

1 would provide information to you about frequency of --2 of waterborne lead poisoning? 3 I've spoken to our water quality staff А 4 and -- and to confirm that we've not failed any lead sampling out of the lead and copper rule. 5 6 So to your knowledge, there has been no 0 7 waterborne lead poisoning? 8 That's correct. Α 9 Okay. And I keep repeating this, but it --0 10 just repeat it one more time. Isn't it true that for 11 the last 30 years, Missouri-American has had perfect 12 compliance with the lead and copper rule? 13 Yes, sir. Α 14 Does that mean they're treating their water? Q Yes, we do. 15 Α 16 So what occurred in Flint should not occur 0 17 in Missouri; correct? I believe that's true, but that also doesn't 18 А 19 address the partial lead lines and the replacement in 20 there and the disturbance when we're replacing main. 21 Do you believe that -- excuse me. 0 Strike 22 that. In your testimony, in your direct, you -- at 23 page 4, lines 18 to 20 -- you don't have to go there 24 25 necessarily unless you'd like to follow along -- but

1 isn't it true you indicate the primary mitigation to potential exposure of lead in drinking water is stable 2 3 water quality and treatment? 4 А Yes. 5 In other words, a lead service line 0 replacement is not the primary mitigation to potential 6 7 exposure of lead in drinking water; correct? 8 I would say that there's two -- two А 9 components. One is that --10 I'm sorry. Is it the primary? Q 11 А I think the best --12 Is it --Q 13 -- protection is the treatment of water. А 14 Correct. 15 0 Okay. 16 Α The treatment of water actually may not 17 protect from the other pieces to --18 0 There's not a question. 19 -- lead solder or the fixtures. А 20 JUDGE BURTON: Let's please, for the court 21 reporter's sake, try not to talk over each other. 22 THE WITNESS: Sorry. 23 (By Mr. Smith) So Mr. Naumick had indicated 0 24 he doesn't know how many times you've produced cost 25 estimates. Would you agree this is your fourth cost

1 estimate and filed testimony between the AAO case and 2 this case, the WR-2017-0285?

3 I wouldn't say it's a fourth cost estimate. А 4 I did provide testimony earlier that revised the 5 estimate to around 6,000. We are all the time looking 6 to optimize the cost. Actually, if you go from what 7 you said earlier, the ratio of the 1.4 million, it 8 actually is just over 5,000 per -- 5,900. So it's 9 right in the range of the 6,000 that I had revised my earlier testimony to. We're still working to revise 10 11 that, and it varies depending on the individual 12 service. It's not a precise every -- every service is going to cost X. 13

14 Q Mr. Aiton, I appreciate you wanting to fully 15 answer my questions, but I'm not necessarily asking a 16 narrative question that requires lots of words. Your 17 counsel will have the opportunity to redirect you. 18 A Okay.

19 So you would agree that there were four Q 20 different cost totals presented in your testimony? 21 А I don't know that I would say four, but 22 there -- it has been a moving target. Fair enough. 23 Would the first -- the first occurrence of 0 24 this would have occurred in your direct of the WU 25 case; correct?

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1	A That's correct. At that time, we had some
2	preliminary quotes from from a plumber that gave us
3	the 3- to 5,000 range.
4	Q And Right. Three to 5 5,500. I'm
5	sorry.
6	A Okay.
7	Q Right?
8	A Yes.
9	Q Then in surrebuttal, it changed again. Is
10	that true?
11	A Changed to the 6,000.
12	Q And in the Let me clarify the record.
13	The surrebuttal and the AAO case, it changed to 6,000;
14	correct?
15	A I believe so. That's correct.
16	Q In the surrebuttal in WR-2017-0285, the
17	number changed to 7,000; correct?
18	A No, I don't believe it did. That was based
19	on the totals, not on individual services. And as I
20	just said, the actual number should have been
21	1.4 million and actually is right in range with the
22	6,000 that I had said before.
23	Q So in your surrebuttal testimony before it
24	was amended, you would agree that the number was
25	\$1,748,978; right?

1	A That was an incorrect number, but, yes,
2	that's what I put in there.
3	Q Would you agree there's lots of incorrect
4	numbers?
5	A No, sir.
6	Q Well, if we take the quotient of that along
7	with 250 lines, you'd agree that number equals 7,000?
8	A Yes, it does, but
9	Q So those are three occurrences; correct?
10	Three different changes?
11	A Well, that's not the intent of that
12	testimony, but sure.
13	Q And then the fourth change came today;
14	correct?
15	A The fourth change was a correction to what
16	we've actually spent and the actual number of lines,
17	and it does change it. And tomorrow we put in another
18	line and it will change it again because it's working
19	with contractors to optimize that cost. And even
20	one on one side of the street versus the opposite
21	side of the street will cost a different number
22	because this one they're able to tunnel and that one
23	they can't.
24	Q Do you agree there could be value to study
25	these costs in more detail than what was contained in

1	your testimony?
2	A That's why we started out slow, and we
3	believe that now we have the cost down to that
4	reasonable range before we ramp up to the, say, 3,000
5	a year.
6	Q Okay. Do you agree there's value in
7	studying these costs beyond the scope of this
8	testimony?
9	A I believe that we've already been doing that
10	and that's part of the iteration that you see.
11	Q Do you believe there's value in studying
12	these costs beyond the scope of this testimony, yes or
13	no?
14	MR. COOPER: I would object. I think he's
15	answered the question.
16	MR. SMITH: I was looking for a yes or no
17	and I felt like I got a narrative.
18	THE WITNESS: I'll say that we'll be looking
19	at this for the next 10 years to always try to refine
20	that cost to be low and as efficient as possible.
21	Q (By Mr. Smith) Okay. I will I will leave
22	that issue for a moment.
23	Now, you do a lot of construction
24	management?
25	A Not directly at this point, but yes.

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1 Q You have in your career? 2 I have in my career over the overall Α 3 investment program, yes. 4 Q And you're familiar with keeping to a 5 budget? 6 Yes, sir. А 7 You don't believe that the ratepayers would 0 8 give you an unlimited budget, do you? 9 Α No, sir. 10 Are you familiar with managing construction Q 11 projects on a timeline? 12 А Yes, sir. 13 Q Now, if someone were to shrink your 14 timeline, tell your crew to do the same amount of work in less time, does that put a strain on your team's 15 16 resources? 17 Α Depends. 18 0 All other things being equal, would it put a 19 strain on your team's resources? 20 Again, it would depend on the amount of Α 21 change in time and otherwise. It may just help drive 22 efficiency. 23 On June 30, 2017, I understand the Company Q 24 filed their direct testimony in this case? 25 А Okay.

1 Q Do you agree with that? А 2 Sure. 3 Where was the direct testimony on the lead Q 4 service line replacement? 5 Α The lead service line replacement was 6 actually pending on the AAO because it wasn't -- the 7 AAO had not been approved yet and so it wasn't in 8 there at that time. 9 So there was no lead service line 0 10 replacement testimony in your direct? 11 Α Pending review, I will agree to that. 12 And when did direct testimony get filed in Q 13 WU-2017-0351? Was it August? 14 А Yes. August 1st. 15 So we had OPC and other parties and other --0 16 whoever wanted to review the Company's proposal had 30 17 or 40 less days to review that proposal. Would you 18 agree? 19 Approximately 30, but yes. Α 20 Did the filing of an AAO case preclude the 0 21 Company, to the best of your knowledge, from filing 22 direct testimony on this subject? 23 MR. COOPER: Objection. The witness is not 24 an attorney. It sounds like a legal question to me. 25 MR. SMITH: I did qualify it with "to the

1 best of his knowledge." 2 JUDGE BURTON: I'm going to go ahead and 3 sustain that objection. Let's move on. 4 (By Mr. Smith) All right. So let's discuss 0 5 another aspect of timelines since you're familiar with 6 managing timelines. Company states they want to 7 replace all lead service lines in 10 years? 8 That would be optimum, yes. Α 9 0 When you say that it would be optimum, do 10 you mean that it might not be 10 years? 11 А It might not be 10 years. 12 Could it be 20 years? Q 13 Not by me because somebody else would have Α 14 to be doing it, but... 15 Good answer. You think 10 years is a quick 0 16 timeframe? 17 I don't actually with the amount of other Α pipe replacement we do. That would be, roughly, 3,000 18 19 per year and we're on track to do that this year and 20 that's -- we believe that's a reasonable number. 21 Is the Company only going to replace lead 0 22 service lines in the context of main replacements? 23 That's what we put forth at this point, yes. А 24 Well, how would a Company replace lead Q 25 service lines on a main that wasn't fully appreciated?

1	A Well, the individual mains are not
2	depreciated on individual basis. They're depreciated
3	as an asset class.
4	Q So there could be, on an individual basis,
5	very under-depreciated water mains that would have to
6	be retired?
7	A I would say no because of the time window
8	that those mains and the lead services were installed.
9	Lead services were installed, you know, I'll say
10	through the '50s or maybe even into the early '60s.
11	No precise date that we have. And the mains that are
12	in that time window would also be aged, either from
13	a from a condition or just pure age.
14	Q Has the Company not replaced any mains
15	wherein they observed lead service lines?
16	A We probably have over the last several
17	years.
18	Q What about over the last main I don't
19	know 10, 20, 30 years?
20	A Main replacement really began in in the
21	St. Louis systems not St. Louis systems but
22	Missouri systems in the mid '90s. And, really, if you
23	count, say, the ISRS passing in 2003, then, really, in
24	the last 15 years.
25	Q And with the ISRS in St. Louis County, the

1 practice was partial lead service line replacement? 2 Α At the time, yes. 3 So there are mains in St. Louis County that 0 4 are new that have lead service lines? 5 There are, and the disturbance has already Α 6 happened. 7 So how can that -- how can the Company 0 8 feasibly replace 30,000 -- all 30,000 lines in 10 9 years if the lines in St. Louis County through the 10 ISRS -- and when I say "lines" there, I meant mains --11 were installed so recently? 12 That 30,000 doesn't include any that have А been changed out in the past because we don't -- we 13 14 don't keep those records. At that time, we didn't 15 keep those records. 16 I'm sorry. You did not keep records of any 0 17 of the lead service lines while you were doing the 18 main replacements? 19 We didn't own those lead service lines and Α 20 we had no obligation to maintain those records. When 21 we changed out the line and changed out that partial 22 service, we changed the tap card information to be 23 whatever we changed that service to be. 24 Q So for the St. Louis County customers that 25 had lead service lines, when the Company did their

1 main replacements, no documents were kept? 2 That's -- that's generally correct, yeah. А 3 We'd have to go back to the original tap cards and 4 review those. 5 Why? Why weren't records kept? Q We don't own that data and we don't own that 6 А service line. 7 8 But if you believe --Q 9 Why would you keep records on something Α that, really, at that time wasn't your responsibility? 10 11 Q Did you not believe the lead service line to 12 be harmful? 13 Not at that point in time they did not. А 14 That was -- that came to light later through the 15 current investigations and the more recent studies. 16 0 So there was a lead and copper rule. When 17 was that passed? I'd have to review exactly when that was 18 А 19 passed or when it was arised last, but that did not 20 address the customer-owned lead -- the lead service 21 lines. 22 Was there a singular cathartic event that Q 23 changed the Company's approach? 24 I would say that as an industry-wide, the А 25 issues that were raised in Flint, and to a lesser

1	extent prior to that in Washington DC and in Durham,
2	North Carolina, all three of those cities and the
3	elevated lead levels in those locations raised the
4	industry's awareness of the issue.
5	Q What does ISRS stand for?
6	A Infrastructure replacement
7	Q That's okay.
8	A Sorry.
9	Q It took me a very long while to figure that
10	out and I still stumble. Would you agree that it's
11	the infrastructure system replacement surcharge?
12	A Yes.
13	Q And so St. Louis County customers have had
14	to bear this surcharge exclusively; correct?
15	A That's correct.
16	Q And we said that Missouri-American had its
17	ISRS for how long? Fifteen years?
18	A Since 2003 was when it originally passed.
19	It wouldn't be a full 15 years yet, but close.
20	JUDGE BURTON: Mr. Smith, I'm going to
21	interrupt you briefly.
22	MR. SMITH: Sure.
23	JUDGE BURTON: How much longer do you
24	imagine you're going to have on your
25	cross-examination?

1 MR. SMITH: Do you want to take a break? 2 Yes. JUDGE BURTON: 3 MR. SMITH: Yeah, that would be good. 4 JUDGE BURTON: Why don't we take a recess 5 and we will come back on the record at 4:00 o'clock. 6 (Whereupon, a brief break was taken.) 7 JUDGE BURTON: Okay. Let's go ahead and go 8 back on the record. 9 I believe, Mr. Smith, you were finishing up 10 your cross-examination. 11 MR. SMITH: Thank you. 12 Q (By Mr. Smith) I believe we were discussing 13 the ISRS. Do you recall that? 14 Α Yes, sir. 15 Would you agree with me that 0 16 Missouri-American has regularly sought recovery of an 17 amount near the ISRS maximum of their 10 percent of revenue minimum? 18 19 No. Α 20 Q You would not agree with that? 21 А No. It would have been well under that most 22 of those 15 years. 23 What about the most recent ones? 0 24 Well, the most recent one would -- defined Α 25 by what? We did one last year that was well under

1 that number and then we didn't do any in the previous year because of litigation that was ongoing. 2 3 Wasn't there a Supreme Court case recently Q 4 in which the Company was attempting to carry forward 5 an amount of ISRS expenditures beyond the minimum into 6 a future year? 7 I'm not aware of that. Α Do you have any idea how many millions of 8 0 9 dollars have been collected through St. Louis County 10 ratepayers since 2003? 11 Α I don't know that precise number, no. 12 Can you say with confidence that it would be 0 13 over \$100 million? 14 А Yes. 15 Okay. Over \$150 million? 0 Again, I don't know the precise number. 16 Α 17 You had mentioned earlier that the Company 0 18 did not keep records of customer-owned lead service 19 lines, I guess, in the past 15 years through the ISRS; 20 correct? We have the original tap cards, the hard tap 21 А 22 But in that time window, we actually had cards. 23 electronically changed those and so we have -- in that 24 electronic process when we change the service, we 25 change the material that was indicated in that

1	electronic record. But we have the original hard copy
2	tap cards that we would have to go back and review.
3	Q But you didn't update those; correct?
4	A We did not update those.
5	Q Today are you updating them?
6	A We're updating them because today we're
7	actually changing out that service completely.
8	Q Okay. When did you start actually keeping
9	records of lead service lines, customer-owned lead
10	service lines?
11	A We have records of customer-owned lead
12	service lines on the tap cards that date back to 1920s
13	and beyond. But the changing of that data when we
14	replace the main is what we didn't we didn't track.
15	Q And when did you start tracking them?
16	A We're only tracking it now because we're
17	changing out that material in its entirety.
18	Otherwise, it was galvanized and we're changing it to
19	copper as part of the main replacement. We still put
20	that it's copper because that portion beyond what
21	we what we touch or beyond what we own, again, is
22	not really our responsibility to sustain.
23	Q I think you said you were tracking it now.
24	Is do you have a date when you started to track and
25	update the tap records?

1	A We always updated the tap records to
2	whatever that new tap is. So if it was lead and we've
3	put it in that when we were doing the partials and we
4	changed it to copper, we change that information to
5	copper. We did not track that that distance beyond
6	what we what we had changed.
7	Q You mean
8	A So had it been lead or had it been
9	galvanized, we didn't sustain that record.
10	Q In other words, you updated the Company
11	side, but you did not update the information for the
12	customer side?
13	A Even even in St. Louis County where there
14	is no Company side, we we changed that record.
15	Q So you did update it for the customer side?
16	A But we didn't update to the rest of what the
17	rest of the service was made out of. We only updated
18	that portion that we changed.
19	Q So the customer side would not have been a
20	portion you changed; right?
21	A Correct. That's correct.
22	Q So that part was not updated?
23	A That's correct.
24	Q Okay. And the Company started updating that
25	when?

We're -- we're -- for the most part, we're 1 А still not updating that. It just is -- now as we 2 3 change it, it reflects the entire service line if 4 we're -- if we're affecting the entire service line. 5 So if you don't change it, but you observe Q 6 it, you currently are not updating the tap record for 7 the customer-owned line? 8 I believe that's accurate, if I understand Α 9 your question. 10 When construction projects were occurring 0 11 back in '03 or '04, did the Company communicate with 12 its customers based on -- based on those tap records, precautions to take, things like that? 13 14 А It wasn't really known in the industry at 15 the time and that predates my work with 16 Missouri-American Water. I can't speak to whether 17 they -- what communication they had. 18 0 Going forward, does the Company believe that 19 Missouri-American Water has duty to disclose what it 20 perceives as a health risk, such as the presence of 21 lead service lines from tap records? 22 Again, I'll say generally yes. But the tap Α 23 record information is not precise, as you mentioned 24 earlier. We have come across ones that we believe 25 would be lead, but somebody else had already changed

1 it to copper. So we don't want to unnecessarily put that information out there prematurely until we know 2 this data request to that effect. And as we -- as we 3 4 come across it and we confirm it, we do communicate it 5 to the homeowner. 6 0 You do communicate to the homeowner 7 currently; correct? 8 When we -- when we confirm that it is a lead А 9 service line, yes, sir. 10 But back in 2003 when you observed lead 0 11 service lines, or 2004, observations of those lead 12 service lines were not communicated to the customer, 13 to your knowledge? 14 Again, that predates my time here. I can't Α speak to it. 15 16 0 Is there anyone from the Company who could 17 speak to it? 18 А Possibly. 19 Q So when you -- you say it's disclosed, but 20 you also say you don't want to put information out 21 there prematurely, if a customer calls you and they 22 want to know what the tap record reflects and you can 23 verify their identity, do you have a policy in place 24 for how to handle that? We would tell them what we believe their 25 А

1	service line is, yes.
2	
	Q Okay. And could a buyer of a home find that
3	information or only the customer?
4	A The customer at this point.
5	Q Okay. This was asked in the AAO case, but I
6	would like to see if there's any sort of an update.
7	If a customer refuses a lead service line replacement,
8	does the Company have any plan on whether or when to
9	notify a future customer of the existence of a lead
10	service line?
11	A We are tracking that information. There
12	have only been a couple and if somebody asks we will
13	tell them. We're not we're not part of any
14	transactional information until somebody calls to set
15	up a new service.
16	Q You mentioned earlier in cross-examination
17	that you spoke with the Department of Health and Human
18	Services?
19	A Our water quality staff did, yes.
20	Q Did they express any sort of concern over
21	OSHA standards?
22	A No.
23	Q No?
24	A No, we follow OSHA standards.
25	Q I have a couple of exhibits. I believe this

1	would be 228 and 229.
2	If we can have just a minute. We're trying
3	to make sure I didn't carry this back up with me at
4	break or something.
5	JUDGE BURTON: Okay. Mr. Smith, can you
6	continue with your questioning on another issue and
7	maybe direct someone from Public Counsel's office to
8	bring it down?
9	MR. SMITH: I can. Good suggestion.
10	JUDGE BURTON: Thank you.
11	Q (By Mr. Smith) Mr. Aiton, did you see the
12	issue list?
13	A Yes.
14	Q Okay. You're familiar with the questions on
15	it?
16	A Generally, yes.
17	Q Understand what's in this statement, but I'd
18	like sort of a status update from you just having
19	knowledge in the field. Has the Company put in place
20	a plan on prioritization of at-risk populations, to
21	your knowledge?
22	A Yes, but at the same time, we I believe
23	what I stated, and it might be in one of the DRs, but
24	is that until that line is disturbed, there's not
25	necessarily an immediate risk to the people in

1	that that premise.
2	Q Do you think road construction is an
3	immediate risk?
4	A It can be and not necessarily. Typically,
5	the mains are 4- or 5-feet deep and the pressures that
6	road construction would would exert are pretty
7	nominal at that point. We do coordinate with
8	municipalities with respect to road construction, and
9	often either replace the mains at the same time, or in
10	the case here in Jeff City, we did replace lead
11	service lines when they were working on Capitol Street
12	over here.
13	Q So has the Company submitted any sort of
14	comprehensive written plan addressing each of these
15	issues?
16	A Well, I think I believe we have. We have
17	our plan. We have the flowcharts that are there.
18	We're prioritizing the mains over the over the next
19	several years. The prioritization of mains, as you
20	might expect, is a complex process, both in
21	coordination with the various municipalities that we
22	work with, looking at where the lead service lines are
23	at, where also leaks have happened; so prioritizing
24	all of those things in conjunction with areas that we
25	know have at-risk populations. So we're looking at

1	all of that data at one time.
2	Q And when you say you're looking at all of
3	that data at one time, you're saying the plan looks at
4	all of that data at one time?
5	A Yes, sir.
6	Q Does the plan speak to providing test kits
7	so people can test the water quality that they have?
8	A We don't provide test kits to people outside
9	of where we're planning to replace a service line.
10	The actual testing of lead, other than through the
11	lead and copper rule which you actually provide
12	bottles to customer to take that sample, there's some
13	nuances in education that have to happen to make sure
14	that that sample is taken correctly.
15	Q Has the Company done a cost-benefit
15 16	Q Has the Company done a cost-benefit analysis?
16	analysis?
16 17	analysis? A We really didn't. And, again, back to some
16 17 18	<pre>analysis? A We really didn't. And, again, back to some of the earlier stuff. We for us, the benefit is</pre>
16 17 18 19	<pre>analysis? A We really didn't. And, again, back to some of the earlier stuff. We for us, the benefit is that long-term protection of public health and,</pre>
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16 17 18 19 20 21	analysis? A We really didn't. And, again, back to some of the earlier stuff. We for us, the benefit is that long-term protection of public health and, really, elimination of risk and that's that hierarchy of protection. Water treatment is one we talked
16 17 18 19 20 21 22	analysis? A We really didn't. And, again, back to some of the earlier stuff. We for us, the benefit is that long-term protection of public health and, really, elimination of risk and that's that hierarchy of protection. Water treatment is one we talked about. Eliminating the risk is a much better
16 17 18 19 20 21 22 23	analysis? A We really didn't. And, again, back to some of the earlier stuff. We for us, the benefit is that long-term protection of public health and, really, elimination of risk and that's that hierarchy of protection. Water treatment is one we talked about. Eliminating the risk is a much better protection.

1	potential risk and what's the benefit to the
2	individual who may or may not be experienced lead
3	poisoning. And if we can eliminate the risk of even
4	one person getting it from our sources, then we should
5	do that. Those pieces that we have in our control, we
6	should exercise.
7	Q Have you explored alternative financing?
8	For example, rather than Missouri-American's
9	ratepayers funding the cost, some sort of low-interest
10	loan program?
11	A We have looked at a state-revolving fund
12	program and they've told us that we're not eligible
13	for that in this particular case for this particular
14	set of assets.
15	Q Well, not the state-revolving fund plan, but
16	more of a low-interest loan?
17	A That's about as low as you can get versus
18	what we already experience as a Class A Company,
19	but
20	Q You're talking about the Company would take
21	out that loan?
22	A If Missouri-American Water would be a
23	candidate for other SRF funding, but not for this
24	particular piece.
25	Q I guess my question was more about a

1	customer loan.
2	A Again, I think the cost of that loan would
3	be much higher. And we're I mean, to loan that to
4	the customer, we're not a bank. That's not
5	Q It'd be higher than the profit the
6	full-weighted average return?
7	A I again, that would be a question for
8	somebody else.
9	Q Does the Company plan account for excess
10	costs related to unusual site restoration?
11	A It does and the flowchart actually reflects
12	that as well. We actually do look at individual site
13	locations. We try to mitigate those when they come
14	up. The same as we would in a main replacement. Any
15	main replacement project, we try to route that main to
16	be as effective as possible, route around trees or
17	other utilities and those things so we minimize those
18	cost impacts.
19	Q Should the Company be required to remove all
20	lead service lines including vacant properties?
21	A Well, again, for a vacant property is what
22	we do currently is we try to contact the owner. We
23	would so the plan does address that, yes. We
24	would at this point, if it's completely vacant or
25	been vacant for an extended period of time, we would

1	cut and cap that. And if somebody applies for a new
2	service in the future, we would then work on putting
3	in the new service.
4	Q And from what I understand, the Company does
5	replace lead service lines for inactive accounts?
6	A We there's been one.
7	Q So is that a yes?
8	A Yes. Because the person was still there.
9	It was not a vacant building. It was just an account
10	that was in arrears. We were able to contact the
11	owner and get the requisite permissions, and we did
12	replace that because at some point they'll turn that
13	service back on.
14	Q Why lead as opposed to galvanized pipes or
14 15	Q Why lead as opposed to galvanized pipes or iron lines or even copper lines?
15	iron lines or even copper lines?
15 16	<pre>iron lines or even copper lines? A Because of the known public health risk.</pre>
15 16 17	<pre>iron lines or even copper lines? A Because of the known public health risk. The drinking water from an iron line doesn't have the</pre>
15 16 17 18	<pre>iron lines or even copper lines? A Because of the known public health risk. The drinking water from an iron line doesn't have the same public health risk that a lead line and doesn't</pre>
15 16 17 18 19	<pre>iron lines or even copper lines? A Because of the known public health risk. The drinking water from an iron line doesn't have the same public health risk that a lead line and doesn't have the same public health risk as a copper line or a</pre>
15 16 17 18 19 20	<pre>iron lines or even copper lines? A Because of the known public health risk. The drinking water from an iron line doesn't have the same public health risk that a lead line and doesn't have the same public health risk as a copper line or a PVC line.</pre>
15 16 17 18 19 20 21	<pre>iron lines or even copper lines? A Because of the known public health risk. The drinking water from an iron line doesn't have the same public health risk that a lead line and doesn't have the same public health risk as a copper line or a PVC line. Q You're aware in Flint the iron with</pre>
15 16 17 18 19 20 21 22	<pre>iron lines or even copper lines? A Because of the known public health risk. The drinking water from an iron line doesn't have the same public health risk that a lead line and doesn't have the same public health risk as a copper line or a PVC line. Q You're aware in Flint the iron with corrosive elements can breed Legionella; correct?</pre>
15 16 17 18 19 20 21 22 23	<pre>iron lines or even copper lines? A Because of the known public health risk. The drinking water from an iron line doesn't have the same public health risk that a lead line and doesn't have the same public health risk as a copper line or a PVC line. Q You're aware in Flint the iron with corrosive elements can breed Legionella; correct? A It's more related to temperature, but</pre>

1	Legionella to speak to that specifically.
2	Q Legionnaires?
3	A Legionnaires. I mean, I have very limited
4	knowledge of those. That would be best asked to
5	somebody else.
6	Q So when you say it's a health benefit,
7	that's not based on any sort of formal education or
8	A It's
9	Q training?
10	A based on reading the industry research
11	that and knowledge of specific risk related to
12	lead.
13	Q Okay. And where was that and what
14	authorities did you include in your testimony that
15	A I didn't. Mr. Naumick has multiple sources
16	in his testimony and I read much of that.
17	MR. SMITH: I think we're nearing the end
18	here, but I did want to get in a couple of exhibits.
19	If it's okay, maybe we counsel for the Company and
20	I had previously discussed these exhibits and I
21	understand potentially there could be a stipulation
22	on or maybe?
23	MR. COOPER: Your Honor, can you give us
24	just a couple minutes off the record?
25	JUDGE BURTON: Certainly.

1 (Whereupon, brief discussions were held off 2 the record.) 3 JUDGE BURTON: Okay. We'll go ahead and go 4 back on the record. 5 Mr. Smith, I believe there were some 6 exhibits that you were looking to offer. 7 MR. SMITH: Yes. I have two exhibits. One 8 of which is confidential. The confidential I'll mark 9 as 229 and the public I'll mark as 228. 10 JUDGE BURTON: Okay. And they're the same 11 documents. It's just a separate version or like are 12 they confidential? 13 MR. SMITH: Different documents. 14 JUDGE BURTON: Okay. So to be clear, the 15 legal-sized version is going to be Exhibit 229? 16 MR. SMITH: Yes. 17 MR. COOPER: Now, 29 is the confidential 18 one. Did you say that already? 19 MR. SMITH: Yes. 20 JUDGE BURTON: Yes. 21 (By Mr. Smith) All right. Mr. Aiton, I Q 22 just -- just a minute. 23 Okay. Mr. Aiton, you've received a copy of 24 Exhibits 228 and 229; is that correct? 25 А Yes.

1 Q Okay. And without divulging any 2 confidential details of those documents, can you 3 identify Exhibit 228 first? 4 I'm sorry. Mine don't indicate which is А 5 which; so which -- is that the --6 0 The --7 А The spreadsheet? 8 The other one. Yes. Q 9 The other one. Okay. This is the data А 10 request from the OPC that was received on 11 February 13th. 12 Okay. And isn't it true you're the Q 13 responsible witness who provided the answer to this 14 data request? 15 Α Yes. 16 0 Okay. And when you've had time to review 17 that, would you please let me know? I'm familiar with it. 18 А 19 Q Does that appear --20 MR. COOPER: Mr. Smith, I don't know. Ι 21 quess we didn't close this down, but we don't have any 22 objection to admission of these two exhibits; so... 23 MR. SMITH: Okay. Well, I quess I would 24 skip the authentication and move to offer each of 25 these exhibits.

1 JUDGE BURTON: Okay. Exhibits 228 and 229 2 have been offered and are admitted. 3 (STAFF'S EXHIBITS 228 AND 229 WERE RECEIVED IN 4 EVIDENCE.) 5 Q (By Mr. Smith) Okay. So the document we 6 were just referencing, I think that bottom bullet 7 point relates to the one inactive customer; correct? 8 Α Yes. 9 And I think we probably already established 0 10 that -- just for clarity, it is true that the Company 11 does not currently collect the customer's water --12 they don't do a water test actually? 13 Prior to replacing the service line, that's А 14 correct. 15 MR. SMITH: Okay. And that is all the questions I have. Thank you, Mr. Aiton. 16 17 THE WITNESS: Okay. Thank you. 18 JUDGE BURTON: Ouestions from the bench? 19 EXAMINATION 20 OUESTIONS BY CHAIRMAN HALL: 21 Q Good afternoon. 22 Good afternoon, sir. А 23 Are you familiar with the St. Louis County Q 24 water service line repair program? 25 А Yes.

1	Q And do you have an opinion as to whether or
2	not that fund could be used to cover any of the costs
3	related to customer-owned lead service line
4	replacements within St. Louis County?
5	A We did meet with the St. Louis County
6	people, and my understanding of the ordinance
7	Q By the St. Louis County people, do you mean
8	the director of Public Works or somebody under his or
9	her direction?
10	A Yes.
11	Q Okay.
12	A And the ordinance there actually said that
13	elective replacement is not authorized by that
14	ordinance. Their view at the time was that it could
15	not be what they did do, as we elevated the issue
16	with them, if there's a leak in a lead service line,
17	they are currently replacing that. So, in essence,
18	they are using those funds to replace, but only as
19	it's a leak.
20	Q And do you have any records on how many
21	replacements there's been under this program?
22	A The number that I was told, and, again, I
23	don't have very specific records, but that they've
24	replaced about 175 through 2017.
25	Q And do you know if, I guess, an attorney

1	with St. Louis I'm sorry with Missouri-American
2	made a determination that that legal analysis was
3	correct, that that this program could not be used
4	to cover the costs?
5	A Other than just reading the ordinance and
6	I've seen the ordinance, and it says that elective
7	replacement of lead service lines is not eligible
8	under the program.
9	Q Election by whom?
10	A I think by the homeowner because the
11	homeowner has to apply for that funding.
12	Q Okay. In response to some questions from
13	Public Counsel, you indicated that there were some
14	main replacements done starting in the mid 1990s that
15	did not include customer-owned lead service line
16	replacement; is that correct?
17	A I don't recall that specific, but correct.
18	Q So does the Company have any plan going
19	forward as to how to handle those customer-owned lead
20	service lines?
21	A Well, generally, our plan is as we replace
22	mains is to replace
23	Q Those mains are already replaced.
24	A I understand that. I was just going to get
25	to it. Just that once we're done with the

1 preponderance of them, which is the ones that are still existing, then we would go back and review that 2 and see whether -- you know, what the best path 3 4 forward would be to replace those that had been 5 touched before. 6 Have you notified those customers? 0 No, because as I mentioned earlier, we don't 7 А really have a precise record without going back 8 9 through the individual tap cards, which is -- for St. Louis County, in particular, is pretty voluminous. 10 It's 430,000 or so. 11 12 Do you have any kind of estimate whatsoever 0 as to the number of customer-owned lead service lines 13 14 that would fall into this? 15 That had been replaced as a partial? No, I А 16 don't at this point. 17 Looking through the flowcharts that are 0 18 attached to your rebuttal testimony, which, at least 19 it's my understanding, that this is the extent of at 20 least a written version of the Company's lead service 21 line replacement plan? 22 It's one facet of it, yes. А 23 What other facets are there? 0 24 We have another document that was submitted А 25 through the data request that is a -- I'll say a more

concise written directive just to our staff and to 1 2 contractors. Could I get a copy of that? 3 Q 4 MR. COOPER: Yes. Chairman, we have copies 5 and -- do you want it right now? 6 CHAIRMAN HALL: Sure. 7 MR. COOPER: It was something that we had 8 planned to go ahead and offer on redirect. 9 CHAIRMAN HALL: Well, I'm helping you out. THE WITNESS: As you see, the flowchart's 10 11 long; so --12 CHAIRMAN HALL: Thank you. 13 JUDGE BURTON: Mr. Cooper, is this going to 14 be marked as Exhibit 40? 15 MR. COOPER: It certainly can be. That 16 would be our next number. 17 JUDGE BURTON: Okay. The Company is offering it for admission at this time? 18 19 MR. COOPER: We would, yes, Your Honor. 20 JUDGE BURTON: Any objections? 21 MR. SMITH: No objection. 22 JUDGE BURTON: I'm going to mark this just 23 as a description data information request OPC 00016 and it is Exhibit 40. It has been offered and 24 25 admitted.

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1	(COMPANY'S EXHIBIT 40
2	WAS RECEIVED IN EVIDENCE.)
3	Q (By Chairman Hall) My understanding is that
4	the customer-owned lead service line replacement is
5	essentially a by-product of the main replacement plan
6	wherever wherever I'm sorry. Is that a "yes"?
7	A I would say yes.
8	Q Okay. So wherever so wherever the
9	Company is doing main replacements, when it when it
10	discovers service line, lead service lines, that's
11	when it would replace those?
12	A In general, yes. We also would proactively
13	look at where we believe lead service lines to be and
14	increase those those mains as part of the
15	prioritization process.
16	Q Okay. Well, that's actually what I was
17	getting at is is I didn't see anything in the
18	flowcharts attached to your rebuttal, and I'm not
19	seeing anything in this Exhibit 40 that outlines the
20	main replacement program. Did I did I miss
21	something?
22	A Probably not.
23	Q Okay. Well, where is the main replacement
24	program? Is that is that a document that exists?
25	A It does. And as I mentioned earlier, we

1 have that priority -- prioritization model, and that's 2 really -- we prioritize those mains on an ongoing 3 basis. 4 Okay. Well, I'm really interested in 0 5 understanding that priorit -- prioritization model. 6 Α Okav. 7 So what -- what are the mains that you are 0 8 prioritizing? 9 So let's say four components primarily. Α We coordinate with the various municipalities. 10 For 11 example, in St. Louis County, there are a little over 12 90 municipalities. If they have a road project going 13 on, then we will coordinate with them, too, if 14 appropriate, replace the main in conjunction with 15 their road project. That offers cost improvement over the long term and a better working relationship with 16 17 municipalities and we're not going to dig up a new street. So we do that. That's one component of that. 18 19 And does that also save or reduce the Q 20 expense? 21 А Yes, it does because ultimately we have left 22 fewer restoration costs. We don't necessarily have to 23 replace the pavement because they're coming through 24 and replacing the pavement already; so that's part of our coordination. 25

1 Q Well, that would decrease the costs of the 2 main replacement. Does it also decrease the cost of 3 the service line replacement? 4 It would as well for the same reasons. А 5 Okay. All right. So that's one of the --0 One of those is -- and what's the driving 6 Α 7 force behind ISRS is the high number of main breaks 8 and the type of pipe that's in -- particularly in 9 St. Louis County with corrosive soil. But even outside of St. Louis County, the age of the systems 10 11 require replacement of pipes, that we look at which 12 pipes have leaks and we believe are in the most need 13 of repair. Multiple leaks, for example, on a single 14 block or a single stretch would raise that in the 15 priority process. In addition to that, now we're adding the 16 17 presence of lead service lines. So two mains, both have the same number of leaks. One has lead service 18 19 lines, one may not. We would probably prioritize the 20 lead service lines, particularly if it has an at-risk 21 population on that block. So that's what we look at 22 primarily around the breaks and then also lead service 23 lines. 24 0 So road construction coordination with 25 municipalities, existence of leaks, and presence of

1 lead service line are the three main criteria that you 2 are using -- the Company's using to -- to prioritize 3 main replacements? 4 Correct. Α 5 Are you also more interested in doing them 0 in St. Louis because -- because they're ISRS eligible? 6 7 No, not at this point. Maybe past practice, А but, no, we're really looking to get to that 1 percent 8 9 pipe replacement across the state. 10 Okay. Could you -- could you tell me how 0 11 that prioritization process might change if the -- if 12 the Commission were to determine that the Company is only entitled to a return of its investment and not a 13 14 return on its investment? 15 Well, we do have a limited amount of Α I think we discussed maybe in the AAO case 16 capital. 17 that if we're not getting a return on that, then it becomes a challenge for us of -- but with the 18 19 fiduciary responsibility to maximize that; so we do look at both of those. 20 21 So which of those three criteria -- how 0 22 would it affect the use of those three criteria to 23 determine the priority for main replacement? 24 Well, we may actually go to avoiding those Α areas with lead if we're -- if we -- if we can't -- it 25

1	doesn't make good fiduciary sense.
2	Q So you would do main replacement where there
3	is no lead?
4	A That would be the optimum, yes.
5	Q So where where does that exist?
6	A Oh, it exists in many places. We have
7	4,700 miles of main. So we have there are places
8	that don't really have lead. Joplin, for example,
9	doesn't have really any lead services to speak of,
10	just because that area they didn't put those in. They
11	may have a lead gooseneck, which would be our
12	responsibility to replace anyway. It's on our side of
13	the ownership. But the service lines themselves down
14	in that area are galvanized.
15	Q So where else? Anywhere else in the state?
16	A The best information I have, there's not
17	many lead service lines in Parkville. St. Joe has a
18	lot. St. Louis has quite a few. Mexico, again, we
19	don't have much data, but we've estimated how many we
20	think we have there. Jefferson City has some, but not
21	a lot. There are areas in St. Louis as well, even
22	that it has that same age of cast iron main, that one
23	block will have lead service lines and one won't
24	looking at the at the maps and the best information
25	
20	that we have.

1 Q So does -- does leaving those -- those lead 2 service lines in place present any -- any concern for 3 you? 4 It does because while we may not be А 5 disturbing it through a main replacement project in 6 the new term, at some point they may become a problem. 7 And it also doesn't protect the customers if somebody 8 else is disturbing that line. Say a different utility 9 is digging through that area, it's -- the best practice, in my opinion, is to replace those lines 10 11 proactively. 12 Q I would agree. 13 Α Thank you. 14 CHAIRMAN HALL: I have no further questions. 15 Thank you. 16 COMMISSIONER KENNEY: No questions. Thank 17 you. 18 JUDGE BURTON: Staff? 19 MR. WESTEN: No questions. 20 JUDGE BURTON: Public Counsel? 21 EXAMINATION 22 RECROSS-EXAMINATION BY MR. SMITH: 23 Q Yeah, I think just one here. 24 Where is this main replacement plan in your 25 testimony?

1	
	A It may not be in in in directly. I
2	think I reference it elsewhere. We talked about it.
3	It's probably on the record in the AAO because I know
4	we talked about that prioritization process during
5	that process.
6	Q So it's not there?
7	A Without pending review, I'm not sure.
8	MR. SMITH: Thanks.
9	JUDGE BURTON: Redirect?
10	MR. COOPER: Thank you, Your Honor.
11	EXAMINATION
12	REDIRECT-EXAMINATION BY MR. COOPER:
13	Q Mr. Aiton, you were asked some questions
14	near the end by Chairman Hall about whether there were
15	mains without load sources lines in Ot Jouris County
ТЭ	mains without lead service lines in St. Louis County.
16	At a high level, how many lead services lines has the
16	At a high level, how many lead services lines has the
16 17	At a high level, how many lead services lines has the Company estimated are present in St. Louis County?
16 17 18	At a high level, how many lead services lines has the Company estimated are present in St. Louis County? A Roughly, have about 16,000 in St. Louis
16 17 18 19	At a high level, how many lead services lines has the Company estimated are present in St. Louis County? A Roughly, have about 16,000 in St. Louis County.
16 17 18 19 20	<pre>At a high level, how many lead services lines has the Company estimated are present in St. Louis County? A Roughly, have about 16,000 in St. Louis County. Q About half of the about half of the 30?</pre>
16 17 18 19 20 21	<pre>At a high level, how many lead services lines has the Company estimated are present in St. Louis County? A Roughly, have about 16,000 in St. Louis County. Q About half of the about half of the 30? A Correct.</pre>
16 17 18 19 20 21 22	<pre>At a high level, how many lead services lines has the Company estimated are present in St. Louis County? A Roughly, have about 16,000 in St. Louis County. Q About half of the about half of the 30? A Correct. Q And how many miles do you of main line do</pre>
16 17 18 19 20 21 22 23	<pre>At a high level, how many lead services lines has the Company estimated are present in St. Louis County?</pre>

1 first page in your answer, there's a reference to 2 where that information was provided previously. Do 3 you see that? 4 А Yes. 5 Where was that information provided Q 6 previously? 7 It was part of the AAO case as a -- as a А 8 previous data request from the PSC, data request No. 9 12. 10 And -- Okay. And if you flip over to Q 11 page 2, what date was that requested? Do you see 12 that? 13 June 2nd. А 14 Of what year? 0 15 А Of 2017. 16 The -- I guess what I would call the plan 0 17 document at page 6 of 14, can you turn over to that? 18 Yes, sir. А 19 You see there's a subtitle that says: Q 20 "St. Louis Operations"? 21 А Yes, sir. 22 Is this plan only applicable to the Q 23 St. Louis operations? 24 No. It's generally the plan we're using Α 25 everywhere in the state.

1 Q Going back to the -- Well, nevermind. Leave that alone. 2 3 You were asked a couple times about whether 4 the Company tests prior to the replacement of a lead 5 service line, and I think you said that the Company 6 does not. However, when do you test during the lead 7 service line replacement process? 8 We test directly after the line is replaced. А 9 We do a flush and a test, and then again within 24 to 72 hours, we do another test to -- it's really an 10 11 internal governance test to ensure that we've removed that and the line's free. 12 13 Q You were asked some questions about filters. 14 I think you started to talk about the limitations of 15 filters and moved on -- got moved on to another 16 question, but would you like to explain a little bit 17 about the limitation of filters in homes? 18 А For example, the cheap version which would 19 be that pitcher. It doesn't really address that --20 the entire issue and has a fairly short life depending 21 on the number of contaminates or suspended solids that 22 would come through that filter. It's difficult to 23 predict exactly what the life of that would be. Not 24 more than a month for sure. 25 You were asked questions about the Company's Q

1	cost estimates and how they developed over time.
2	Could you describe for us the process you've gone
3	through to try to control those costs?
4	A Well, that the original estimate was
5	as I say, was just a quick quote from the local to
6	offer a order of magnitude of where the overall cost
7	of the program would be. As we proceeded forward with
8	the original, the initial few replacements, those
9	costs were coming in quite high.
10	We actually then competed that work across a
11	number of contractors, particularly in St. Louis
12	County. Outside of St. Louis County, much work is
13	actually done by our own crews. But in St. Louis
14	County, it's required that a licensed plumber to do
15	that work. So we competed that work actually now
16	twice and again to refine that number and to negotiate
17	it down to a lower number.
18	Q And has the result of that process been some
19	actual contracts that have firmed up those prices?
20	A Yes.
21	MR. COOPER: One moment, Your Honor.
22	That's all the questions I have.
23	JUDGE BURTON: Thank you. You're excused.
24	I know that we do have another witness
25	identified on this issue, at least for the Company,

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1	but Heppenstall is not available today. So I believe
2	that next on the list will be Staff's witnesses.
3	MS. ASLIN: Staff calls Jim Merciel.
4	JIM MERCIEL,
5	having been duly sworn, testifies as follows:
6	JUDGE BURTON: You may be seated.
7	EXAMINATION
8	DIRECT EXAMINATION BY MS. ASLIN:
9	Q Would you please state your name.
10	A James Merciel, M-e-r-c-i-e-l.
11	Q And how are you employed?
12	A I'm employed at the Public Service
13	Commission on the staff in the water and sewer
14	department.
15	Q And did you prepare or cause to be
16	prepared just a moment rebuttal testimony marked
17	as Staff Exhibit 108 and surrebuttal testimony marked
18	as Staff Exhibit 125?
19	A Yes.
20	Q Do you have any changes or corrections to
21	that testimony?
22	A No, I don't.
23	Q And are the answers contained in that
24	testimony true and correct to the best of your
25	knowledge and belief?

1 А Yes. 2 Q If I were to ask you those same questions 3 today, would your answers be the same? 4 Α Yes. 5 MS. ASLIN: Judge, I move for the admission of Exhibits 108 and 125. 6 7 JUDGE BURTON: Exhibits 108 and 125 are 8 offered. Are there any objections? 9 Seeing none, they are admitted. 10 (STAFF'S EXHIBITS 108 AND 11 125 WERE RECEIVED IN EVIDENCE.) 12 MS. ASLIN: I tender the witness for cross. 13 JUDGE BURTON: Mr. Mills, did you have any 14 questions for this witness? 15 MR. MILLS: No questions. Thank you. 16 JUDGE BURTON: Mr. Poston? 17 MR. POSTON: No questions. 18 JUDGE BURTON: Public Counsel? 19 MR. SMITH: Just a few. 20 EXAMINATION 21 CROSS-EXAMINATION BY MR. SMITH: 22 Mr. Merciel, do you believe that the 30,000 Q 23 number is understated? 24 I don't have any reason to believe it's А understated. It is an estimate and it's -- it's --25

I'm sure it's a round -- a round number of the 1 2 estimate. 3 I think in your testimony -- trying to find 0 4 it -- you indicate something to the effect that in 5 Staff's opinion, that the costs do not exceed the benefits? 6 7 Costs don't exceed the benefits? I don't А 8 remember saying that. 9 In your opinion, do you feel like you have a 0 10 good understanding of what the costs will be to this 11 project? 12 А I would answer yes with a -- further saying 13 that this is a -- this is a new activity undertaken by 14 this utility or most any utility. And so I think 15 just -- just -- service line replacement is not new, 16 but ordinarily it's -- it's -- it's an individual 17 customer undertaking the task. 18 This is a case where this company is going 19 down the street replacing a number of them in the 20 context of other work that's going on. In the context 21 that it's being done, this is a new activity. So I 22 think we're all learning what the cost is going to be 23 and how to deal with it and what's going to happen 24 with it. 25 So when you say we are all learning about Q

1 the cost, do you feel like we have a good handling of 2 that? 3 I'm sorry? Α 4 Do you feel like we have a good handle for 0 5 what the cost will be? 6 Α Well, yes. I think we're -- yeah. Yes, I 7 think we do have. But it's not -- it's not one final 8 cost that you can project into the future. I think 9 Mr. Aiton spoke to that and what I heard him say I would agree with. This is -- this is developing and 10 11 being updated continually. 12 Did you offer -- author, in part or in its Q 13 entirety, the Staff report to the Public Service 14 Commission on lead in the State of Missouri? 15 I did in part. I had a large hand in it, А 16 but I wasn't the only one. 17 Who are the other authors of that report? 0 18 Α The other primary one was Martin Hummel who 19 was in our department. He's retired now. Actually, 20 as I recall, he started the draft and the rest of us 21 worked on it from there. There were probably four or 22 five of us that had input. Martin and I probably did 23 a lot of the -- a lot of the technical work in it. 24 Q Do you recall in my opening I had quoted 25 from the report in which Staff had put into the report

1 a representation from the Department of Natural 2 **Resources**? 3 Α Yes. 4 Okay. Were you the one who made that 0 5 communication? I did. I did talk to -- there is -- there's 6 А 7 one person that heads up their lead and copper rule at 8 the Department of Natural Resources, and I had spoken 9 with him, actually, I think a number of times. 10 And do you agree with the quote that lead 0 11 contamination is, in general, not a problem in 12 Missouri because utilities are following the lead and 13 copper rule and produce noncorrosive water? 14 А Yes. And I'm going to point out the first 15 part you said, lead contamination is not a problem, we're not problem-free. There are some utilities that 16 17 have problems with the lead and copper rule, don't meet it. One of them is one of our regulated 18 19 utilities has some issues. So beyond that, 20 contamination is a problem, that doesn't mean we don't 21 have a risk of having a problem. 22 To your knowledge, have any of the parties Q 23 put forward witnesses with a medical background that 24 could explain the extent of any benefit of removal of 25 the lead service line?

1	A There have not been any witnesses on the
2	cases here, but there has been quite a bit of
3	documentation evidence in a number of people's
4	testimonies from a number of the parties. This is a
5	national debate, national topic of discussion.
6	It's it's in the news fairly frequently,
7	particularly industrial news. I've never ran across
8	anybody who who who believes that replacing
9	lead or I should say removing lead from water
10	components is not a good idea.
11	Q Not a good idea in the sense that all other
12	things being held equal?
13	A Well, what I mean is, if there's any lead
14	there, you should get it out.
15	Q All at any cost?
16	A Well well, that's another part of the
17	debate.
18	Q Exactly.
19	A But lead in the water water components is
20	not a good idea. That's that's the best I can
21	answer that question. Can you afford to take it out?
22	You know, what's it going to take to do it? That's
23	where we have to work through what the problem is.
24	Q Okay.
25	A But I've never heard anybody saying, yeah,

1 there's lead there, but it's not really a problem. Don't worry about it. All the stuff you hear in the 2 3 news, you hear about lead poisoning, it's not a 4 Don't worry about. problem. 5 I've never heard anybody advocate that. 6 0 Isn't that exactly what DNR said and that 7 you put in your report that, quote -- I can give you 8 the quote again, but lead contamination is, in 9 general, not a problem? 10 А That means we don't have a problem that 11 exists. Utilities are taking care of it. Again, it 12 doesn't mean we don't have a risk. But as far as 13 sending contaminated water, again, there's lead 14 components, there's a risk, but as far as sending 15 contaminated water to customers that's -- it's meeting 16 existing rules. 17 When you say, "it's meeting existing rules," 0 18 you're not aware of any mandate for the Company to 19 replace lead service lines? 20 There is no such mandate. Α Correct. 21 0 Okay. 22 I want to back up a little bit and just add Α 23 where -- where we don't have a widespread problem with 24 contamination. And, again, there are a few utilities 25 that do have some problems. That's different than

1 2	
2	some of the other ones that we've been talking about
	here on the record, such as York, Pennsylvania. They
3	didn't meet the lead and copper rule. They did have a
4	contamination issue. And that's true of some of the
5	other utilities. So around the country it does happen
6	and they do have to take some action. And that's
7	prompting a lot of the activity around the country,
8	not all of it, but but a proactive you know,
9	there are also groups. I think the EPA is looking at
10	it. They haven't made any rules, but there is
11	there is thinking nationally that anything you can do
12	to get lead out is a good thing.
13	Q And there's no mandate?
14	A No mandate.
15	Q Okay. Thank you.
16	A Well, short of not meeting the lead and
	copper rule, that kind of changes the picture.
17	
17 18	MR. SMITH: Thank you, Mr. Merciel. No
	MR. SMITH: Thank you, Mr. Merciel. No further questions.
18	-
18 19	further questions.
18 19 20	further questions. JUDGE BURTON: Missouri-American?
18 19 20 21	further questions. JUDGE BURTON: Missouri-American? MR. COOPER: No questions.
18 19 20 21 22	further questions. JUDGE BURTON: Missouri-American? MR. COOPER: No questions. JUDGE BURTON: Any questions from the bench?
18 19 20 21 22 23	further questions. JUDGE BURTON: Missouri-American? MR. COOPER: No questions. JUDGE BURTON: Any questions from the bench? EXAMINATION
10	it. They haven't made any rules, but there is
7	prompting a lot of the activity around the country,
	-
5	other utilities. So around the country it does happen
4	contamination issue. And that's true of some of the
3	didn't meet the lead and copper rule. They did have a
	here on the record, such as York, Pennsylvania. They
2	some of the other ones that we've been talking about

1 А Good afternoon. So you heard -- you were in the hearing room 2 Q 3 when Mr. Aiton explained the Company's main 4 replacement program and how they prioritize that 5 program? 6 Α Yes. 7 Are you familiar with the Company's main 0 8 replacement program? 9 Well, I would -- I would say sort of I am. Α You know, this goes back to the mid '90s. And I was 10 11 around then when county main breaks -- you know, it 12 was decided that this Company needs to ramp up the 13 main replacement program. And I should say this is 14 when it was St. Louis County Water Company and that 15 was really the system that was being addressed at the 16 time. 17 So prior to that, the Company -- St. Louis 18 County Water Company had a rather rudimentary 19 replacement program, you know, fairly simple, no 20 computer modeling. They were doing some replacement, 21 but they started getting more sophisticated with it. 22 And now that Missouri-American is involved with that 23 system and some of the other ones, they've kind of 24 tweaked it up, for lack of a better term. 25 Even -- even the idea he -- he was saying

1	lead service lines is one of their factors now. Well,
2	that it hasn't always been the case. That's
3	something that they modified it. So so realizing
4	they kind of tweaked up some of their decision-making,
5	I haven't been involved with all those decisions.
6	Q So you've never seen a document that
7	outlines the main replacement program?
8	A Not recently. I haven't seen one since the
9	mid '90s when we were developing a replacement program
10	for St. Louis County Water Company.
11	Q So the
12	A I think they probably have one; I just
13	haven't seen it.
14	Q So the extent of your understanding of that
15	program is really what was provided in oral testimony
16	here today?
17	A That plus my experience with the issue.
18	Q Based upon what you've heard today about the
19	main replacement program, does it seem reasonable to
20	you?
21	A Yes.
22	Q Are there any other factors that you would
23	recommend that that the Company consider or that
24	the Commission consider?
25	A Not really. I I I don't remember if

he mentioned critical customers as one of the points.
 He might have said it, but if he did, I don't remember
 it.

Q I don't believe he said it.

5 Α Okay. Well, I think that's one of their 6 points, too. Like, for example, if there's a hospital 7 and if that hospital is experiencing frequent water 8 outages because of main breaks, that might be one of 9 the factors that they look at. But I think they're 10 doing that. He may not have said it, but I think 11 they're doing that. And beyond that, frequent main 12 breaks, increasing main breaks on any -- any specific 13 section, and now with lead service lines, I think he 14 pretty well covered it.

15 Q You mentioned some possible modeling that 16 might occur as part of this program. What did you 17 mean?

Well, it's a -- it's a theory, and I looked 18 А 19 at it quite a bit a number of years ago. There's a 20 theory that is water mains age mostly due to 21 corrosion, but once main breaks start, you'll -- they 22 start -- the frequency increases exponentially. In 23 reality, it doesn't always happen that way. A lot of 24 times, it does, but it doesn't always. But the idea 25 was to basically plot -- plot your main breaks on a

4

1 map with -- with dates and -- and just watch the 2 development of it. And at some point, it becomes cost 3 beneficial to replace the main rather than to continue 4 repairing it. 5 There was a researcher, and I can't remember 6 his name, but he did come here either for a meeting or 7 he might have even provided testimony on how to 8 develop a modeling program like that. 9 Do you believe that the Company is using 0 10 such a program? 11 Α I think they're doing something similar to 12 that, yeah, developed from what was -- again, this is 13 back in the '90s when this was being worked on and I 14 think they're -- they're doing something like that. 15 If -- if -- if there was a main where there 0 16 was significant leakage occurring, would you believe 17 that it would be imprudent of the Company to not 18 replace it? 19 Well, I guess it means -- depends on what Α 20 you mean by "significant." 21 You tell me. 0 22 Yeah. Well --А 23 Q At some point. At some point --24 Certainly at some point. At some point. Α 25 That's where if -- your question was about leakage.

1	Determining an amount sometimes could be hard to do.
2	Most often we count the main breaks, what it costs to
3	repair it, and what the outages for customers,
4	disruption of traffic, you know. A lot of times,
5	they'll have to close half a street off, and a lot of
6	times, those are the factors where you determine,
7	well, this one this one's worth it just to make
8	this replacement rather than continue repairing it.
9	Q Would it concern you if the Company changed
10	its main replacement program in response to a
11	Commission order in this case such that it prioritized
12	mains where there is not lead service lines?
13	A I think I would have a concern with it
14	because it could impact distribution system
15	performance. If they're if they're avoiding the
16	lead service lines, then then I would I would
17	hope the Company would not let it get out of hand, but
18	you could have a situation where where you are
19	having frequent breaks, frequent disruptions and
20	outages, and I think we risk that getting out of hand.
21	Q Now, you you've heard that the Company
22	has indicated that it would it would consider such
23	a change to its main?
24	A Yes, I did.
25	Q Does Staff continue to hold its position

1 that in light of that testimony, that the Commission should not allow a return on that investment? 2 Yeah, that -- yeah, getting into the 3 Δ 4 accounting, and I'll defer most of it to our staff auditor, but I will say Staff has a conceptual problem 5 6 with including plant that the Company doesn't own in 7 their -- with their plant assets. Right. And I was intending to ask other 8 0 9 Staff witnesses about that. 10 А Okay. 11 Q I'm just wondering does -- does Staff continue to hold the position that it is inappropriate 12 to -- to award a return on an investment if that 13 14 results in a modification of the prioritization for 15 the main replacement program? 16 А Well, if there's -- I'm not sure I 17 understood exactly what you said there. 18 0 My understanding is that -- that your 19 testimony is that the current main replacement 20 program, prioritization is appropriate? 21 А Yes. 22 And you've also said that it would concern Q 23 you if that was modified so that it -- so that they 24 would prioritize mains where there are no lead service 25 lines?

1	A Yes.
2	Q So now I'm wondering does that cause you
3	does that cause Staff to change its position on
4	whether or not a return on this investment is
5	appropriate? And if that's something that you can't
6	answer, I understand.
7	A Okay. I don't think I can speak to that
8	change on behalf of Staff. I will say it causes a
9	concern. Whether Staff would change a position, I
10	don't think I'm the one to answer that.
11	Q Do you believe that \$6,000 per service line,
12	customer-owned service line replacement, is a is
13	a is a reasonable number?
14	A I think it's a reasonable number to use. I
15	don't think it's quite that simple. That's that's
16	the St. Louis largely drives the average cost just
17	because there's so many of them. But, of course, in
18	St. Louis, it's going to be more expensive because the
19	customer service lines also cross streets and connect
20	to the mains; whereas, in other service areas, you're
21	only talking about what's in the customer's yard, in
22	the customer's property.
23	So, inherently, St. Louis is going to be a
24	higher cost. Kind of depends on the assumptions you
25	want to you want to use to look at the costs. In

1	other service areas, the Company owns part of it and
2	the customer owns part of it, and that total thing
3	might cost almost as much as St. Louis.
4	But part of it's going to be Company
5	property, and it would be booked as a company-owned
6	service line. So do we include that or not when we're
7	looking at this? You know, as far as just
8	customer-owned, it's it's it's different in
9	other service areas.
10	Q Okay.
11	A But that number, from what I've seen and,
12	again, this is a fairly new activity. I think, as
13	Mr. Aiton said, I do agree with him, this is it's a
14	developing situation and and our analysis is
15	developing, but from what I see right now, the answer
16	to the question is yes, I think the \$6,000 is
17	appropriate.
18	Q Are you aware of any new technology maybe
19	coming down the pike that might allow for a reduction
20	in that cost, such as maybe some kind of liner for the
21	lead service lines as opposed to a replacement?
22	A I did see something about a liner somebody
23	was trying to develop, and this has been some time
24	ago, I'm going to say within the past year. And I
25	heard of it once and I haven't seen anything about it

since then. 1 2 Q Okay. So --3 А I don't know what the status is. 4 So -- and I believe you testified to that 0 5 effect in the AAO case. So since then, you don't --6 you haven't received any additional --7 I -- I haven't seen anything new on it, А 8 correct. 9 CHAIRMAN HALL: I have no further questions. 10 Thank you. 11 COMMISSIONER KENNEY: No questions. 12 EXAMINATION 13 QUESTIONS BY JUDGE BURTON: 14 I have a few questions for you. Q 15 Could you please just describe for the 16 record what type of age range are we talking about for 17 these lead service lines, the customer-owned? How old 18 are they? 19 I'd say the majority range from being built Α 20 in the 1920s up to the probably late '40s or '50s. I 21 don't know -- I don't know how old the newest one is. 22 I've heard up in the '50s and maybe even into the 23 '60s. I think those are probably rare. Could have 24 some -- some from before 1920, but those are -- those 25 are probably more rare, too. Just -- just from

1	knowing the St. Louis County area, that's just a
2	just my assessment. No, I don't have any numbers to
3	back it up.
4	Q Would you expect to see more leaks in those
5	lines, in those customer lead service lines?
6	A Customer lead service lines? Not really.
7	It's it's if it wasn't for the health hazard,
8	lead is actually pretty good pretty good material.
9	It's tough. It doesn't all that we're talking
10	about, corrosion contaminating the water, but but,
11	you know, you see some old ones and they're actually
12	in pretty good condition. And so so no, it's it
13	seems to last as well as about as well as anything
14	out there.
15	Q And what percentage would you say in the
16	state that are lead service would be in the St. Louis
17	County area versus other parts of the state? Have you
18	done any analysis or just reviewed
19	A No, I haven't. I really don't have any idea
20	how to answer that. I don't have any idea.
21	JUDGE BURTON: Okay. Thank you.
22	Any recross from OPC?
23	MR. SMITH: Just a bit. Thank you.
24	EXAMINATION
25	RECROSS-EXAMINATION BY MR. SMITH:

1 Q There was some discussion with the chairman about prioritization of mains. Do you recall that? 2 3 А Yes. 4 To your knowledge, when Missouri-American 0 5 Water did partial lead service line replacements, did 6 they deprioritize mains with lead service lines? 7 No. Lead really wasn't -- to my knowledge, А 8 lead was not part of the picture as far as determining 9 any main placements prior to about a year ago. 10 So for decades, there was no depriorization, 0 11 to your knowledge, of mains with lead service lines? 12 А Correct. 13 Q And this new priority that I guess is 14 conditional on the Commission giving a full-weighted 15 average cost of capital is new to you? 16 А It's -- it's as new as the lead replacement 17 issue, yes. 18 0 Okay. 19 This -- this whole -- the whole issue, what Α 20 we're talking about, is a fairly new issue. The 21 accounting is accounting, whether you should replace 22 them. Yeah, this is all new. 23 MR. SMITH: Okay. No further questions. 24 Thanks. 25 JUDGE BURTON: Missouri-American.

1	MR. COOPER: No questions.
2	JUDGE BURTON: Staff, redirect?
3	MS. ASLIN: Just briefly.
4	EXAMINATION
5	REDIRECT-EXAMINATION BY MS. ASLIN:
6	Q Mr. Merciel, Chairman Hall had asked you
7	about whether you had seen Company plans as far as
8	replacing main replacements or lead service lines. I
9	believe you said you hadn't seen any such thing since
10	the '90s. Do you recall that?
11	A Yes.
12	Q In the Missouri-American's Exhibit 40 that
13	was admitted just earlier this afternoon
14	MR. WESTEN: Did you see a copy?
15	Q (By Ms. Aslin) Did you see a copy of that?
16	A Is that the yeah, I did. I didn't read
17	it page for page.
18	Q All right. If you would turn to that second
19	page there. That's a DR from that was issued by
20	you and attached to it is plans for service line
21	replacement.
22	Do you recall receiving that?
23	A Yes.
24	Q So you have seen some sort of program plans
25	since the '90s?

1	A Well, Chairman Hall's question was about
2	main replacements, not service line replacements.
3	Q Okay.
4	A This is about service line replacements.
5	Q All right. Thank you.
6	A And, yeah, the issue is main replacements.
7	MS. ASLIN: Okay. No further questions.
8	JUDGE BURTON: Thank you. You're excused.
9	THE WITNESS: Okay.
10	JUDGE BURTON: It is 5:17 right now. I
11	don't know how much questions we have for the next
12	witness, but I believe they're still doing repairs in
13	the on the would Staff like to call their next
14	witness? Or do you want do the parties want to
15	recess until tomorrow morning? The Commission is at
16	your disposal.
17	MR. COOPER: Let's recess until tomorrow
18	morning, Your Honor.
19	JUDGE BURTON: Okay. Fair enough. We are
20	scheduled to begin tomorrow at 8:30. If the parties
21	want to meet before we go on the record to discuss the
22	procedural issues as far as scheduling, let me know.
23	Otherwise, when we also go off the record today, I
24	believe I can talk about potential hearing dates for
25	next week as well.

1	That being said, let's go ahead and adjourn
2	for the day.
3	(Whereupon, the Public Service Commission hearing was
4	recessed at 5:19 p.m.)
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1	REPORTER CERTIFICATE
2	I, REBECCA L. TUGGLE, a Registered
3	Professional Reporter, Certified Court Reporter, and Certified Shorthand Reporter within and for the State
4	of Missouri, do hereby certify that the PSC hearing held on March 5, 2018, commenced at the Missouri
5	Public Service Commission, 200 Madison Street, Jefferson City, MO 65101; that said hearing was
6	reported by myself, translated and proofread using computer-aided transcription; and the above transcript
7	of proceedings is a true and accurate transcript of my notes as taken at the time the proceedings were had.
8	I further certify that I am neither attorney nor
9	counsel for nor related nor employed by any of the parties to the action in which this hearing was taken; further, that I am
10	not a relative or employee of any attorney or counsel employed by the parties hereto or financially interested in this action.
11	
12	Dated this 12th day of March, 2018.
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16	Rebecca L. Tuggle, RPR, CCR, CSR
17	Rebecca B. Iuggre, Mik, cok, cok
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