1	BEFORE THE PUBLIC SERVICE COMMISSION
2	STATE OF MISSOURI
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4	TRANSCRIPT OF PROCEEDINGS
5	Evidentiary Hearing
6	August 27, 2018
7	Jefferson City, Missouri
8	Volume 3
9	In the Matter of the Application of )
10	Laclede Gas Company to Change its ) Infrastructure System Replacement ) File No. GO-2016-0332
11	Surcharge in its Missouri Gas Energy ) Service Territory )
12	In the Matter of the Application of )
13	Laclede Gas Company to Change its ) Infrastructure System Replacement ) File No. GO-2016-0333
14	Surcharge in its Missouri Gas Energy ) Service Territory )
15	In the Matter of the Application of )
16	Laclede Gas Company to Change its ) Infrastructure System Replacement ) File No. GO-2017-0201
17	Surcharge in its Missouri Gas Energy ) Service Territory )
18	In the Matter of the Application of )
19	Laclede Gas Company to Change its ) Infrastructure System Replacement ) File No. GO-2017-0202
20	Surcharge in its Missouri Gas Energy ) Service Territory )
21	In the Matter of the Application of )
22	Spire Missouri Inc. to Establish an ) Infrastructure System Replacement ) File No. GO-2018-0309
23	Surcharge in its Spire Missouri East ) Service territory )
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     In the Matter of the Application of
     Spire Missouri nc. to Establish an
 2
     Infrastructure System Replacement
                                           ) File No. GO-2018-0310
     Surcharge in its Spire Missouri West )
 3
     Service Territory
 4
                           MICHAEL BUSHMANN, Presiding
                                 SENIOR REGULATORY LAW JUDGE
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                           DANIEL Y. HALL, Chairman.
                           WILLIAM P. KENNEY,
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                            SCOTT T. RUPP,
                           RYAN SILVEY,
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                                 COMMISSIONERS.
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     REPORTED BY:
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1	(WHEREIN; the hearing began at 8:32 a.m.)
2	JUDGE BUSHMANN: Let's bring the proceeding to
3	order and go on the record.
4	Good morning. Today is August 27th, 2018. The
5	Commission has set this time for an evidentiary hearing in File
6	Nos. GO-2016-0332, GO-2016-0333, GO-2017-0201, GO-2017-0202,
7	GO-2018-0309 and GO-2018-0310, which all relate to applications
8	filed by Spire Missouri Incorporated to change its
9	infrastructure system replacement surcharges.
10	My name is Michael Bushmann. I'm the regulatory
11	law judge that will be presiding over this hearing.
12	Let's have the attorneys for the parties make
13	their entries of appearance, please. For Spire Missouri
14	Incorporated.
15	MR. ZUCKER: Good morning, Your Honor. Michael
16	C. Pendergast and Rick Zucker here on behalf of Spire Missouri.
17	JUDGE BUSHMANN: Thank you. Commission Staff.
18	MR. KEEVIL: Thank you, Judge. Appearing on
19	behalf of the staff of the Public Service Commission, Jeff
20	Keevil, Mark Johnson, and Whitney Payne. Our contact
21	information, I believe, has already been given to the court
22	reporter.
23	JUDGE BUSHMANN: Very good. Thank you. Office
24	of Public Counsel.
25	MR. CLIZER: Good morning, Judge. Appearing on

1	behalf of the Office of Public Counsel, John Clizer and Lera
2	Shemwell.
3	JUDGE BUSHMANN: Thank you. I will advise
4	everybody in the audience to please make sure that your mobile
5	devices or cell phones are set on silent.
6	Before we get started do the parties have any
7	preliminary procedural matters that need to be addressed?
8	MR. ZUCKER: Your Honor, we have listed on our
9	exhibit list Exhibit Numbers 1 and 2 are our applications in the
10	current the 2018 ISRS cases. And I would just ask if
11	everyone agrees that we can enter those applications into
12	evidence.
13	JUDGE BUSHMANN: You're wanting me to take
14	official notice of those so they would be in the record of the
15	hearing?
16	MR. ZUCKER: Yes, as Exhibits 1 and 2.
17	JUDGE BUSHMANN: Are there any objections to
18	that from anybody?
19	MS. SHEMWELL: No.
20	MR. CLIZER: No.
21	MR. KEEVIL: Judge, one question, I guess. Are
22	they being introduced as factual evidence of what they purport
23	to represent or are they simply proof that the plea filed this
24	particular document to constitute its application in whatever
25	particular case.

1	JUDGE BUSHMANN: Mr. Zucker, since you list them
2	as exhibit numbers, then I assume that you are wanting to admit
3	them for the truth of the matter contained in there. Is that
4	correct?
5	MR. ZUCKER: Yes, Your Honor.
6	JUDGE BUSHMANN: Okay. Is there any objections
7	to those exhibits being admitted into the record?
8	MR. KEEVIL: Who would be the witness sponsoring
9	the exhibits? Who would be subject to cross regarding the
10	exhibits?
11	JUDGE BUSHMANN: If there's a question,
12	Mr. Zucker, do you want to wait until a witness comes up and you
13	can have the witness offer them at that time, if there's any
14	cross-examination over those exhibits?
15	MR. ZUCKER: I guess that's all right, Your
16	Honor.
17	JUDGE BUSHMANN: Why don't we put that on hold
18	and then you can choose which witness you want to offer those.
19	Office of the Public Counsel filed a motion to
20	dismiss both of the 2018 cases alleging that Spire Missouri
21	failed to submit timely supporting information and the
22	applications include claims for infrastructure replacements that
23	do not qualify for ISRS recovery. I'll be taking that motion
24	with the case, so I won't be making any ruling on that today.
25	The Commission will take official notice of the

1	following: The partial Stipulation and Agreement filed on
2	December 13, 2017, the amended Report and Order issued on March
3	7th, 2018, and the Order approving tariff in compliance with
4	Commission order issued on April 4th, 2018. All of those in
5	File Numbers GR-2017-0215 and GR-2017-0216.
6	The Commission also takes official notice of the
7	unanimous Stipulation and Agreement filed on April 18th, 2017,
8	in GO-2017-0201 and GO-2017-0202.
9	The Commission also takes official notice of the
10	opinion of the Western District Court of Appeals issued in the
11	two 2016 cases on November 21st, 2017, that's WD80544.
12	As far as the order of witnesses, we'll follow
13	the order established by the Commission in its Order that was
14	issued on August 24th.
15	Anything further from the parties or anybody
16	else need to mark any exhibits before we proceed with opening
17	statements?
18	All right. Why don't we go ahead and start with
19	opening statements then, and the first would be my Spire
20	Missouri.
21	MR. ZUCKER: Thank you, Your Honor. May it
22	please the Commission.
23	In these remand and ISRS cases, it is the
24	Commission's duty to determine how much of the ISRS costs in
25	these cases can be attributed to replacement of ISRS ineligible

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plastic facilities. Bottom line, the answer is zero. None of the ISRS costs in the remanded cases can be attributed to replacing plastic. In fact, the replacement of plastic actually permitted the Company to lower the cost it otherwise would have incurred to replace cast iron and bare steel.

To understand how we got to this place, we have to go back about ten years. During the 2000 Spire East had a copper service replacement program. The program was scheduled to be completed in 2010 with the replacement of all of the copper service lines. At the same time, Spire East, which was — we did not own Spire West at that time. Spire East was replacing cast iron in its system at a pace of about five to ten miles per year, and at that pace, it was anticipated that Spire East would have eliminated all of its cast iron some time near the end of the 21st century. While we were certainly making progress in complying with the requirement to eliminate cast iron, the safety staff was not satisfied. Spire East was told that once it's copper service replacement program was finished, the safety staff expected that we would pick up the pace on the cast iron main replacements.

So in 2010 we began developing a comprehensive plan to replace cast iron. The basis of the plan was simply to accelerate the replacement of cast iron by ramping up the number of miles we replaced per year.

As explained in the testimony of our first

witness Craiq Hoeferlin in late 2010 and early 2011, a series of 1 2 incidents took place that shone a bright spotlight on replacement programs, especially cast iron. The first thing 3 that happened is the well-known incident in San Bruno, 4 5 California. Now, although that was not caused by cast iron, it 6 brought attention to the safety activities of gas utilities. 7 Then, in early 2011, two back to back incidents 8 occurred in Philadelphia and Allentown, Pennsylvania, both of 9 which resulted in deaths and both of which implicated cast iron. These events amplified that attention and focused it directly on 10 11 the presence of cast iron. 12 In the wake of these incidents, as Mr. Hoeferlin 13 has testified, pressure was applied by the Federal Department of 14 Transportation by PHMSA, by state commissions and their safety 15 staffs, including the Missouri safety staff to ramp up cast iron 16 replacement programs, even the United States Congress chimed in 17 with the Pipeline Safety Regulatory Certainty and Jobs Creation 18 Act of 2011. All of this pressure to accelerate the replacement 19 of cast iron, of course, flowed downhill to the pipeline 20 operators, and that is the utilities. What's more, in December 2011, PHMSA published a 21 22 white paper in which it encouraged states to use special rate 23 mechanisms to motivate utilities to accelerate the replacement of high-risk infrastructure. The white paper specifically 24 2.5 identified Missouri's ISRS statute as just such a mechanism.

The message to Spire East from these multiple government entities was clear, we want you to replace the cast iron faster and with the ISRS you have no excuses not to do it. Talk about your regulatory certainty.

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So Spire East proceeded with its plan to replace its piecemeal approach to cast iron replacement with a more comprehensive approach. In other words, instead of going into a neighborhood and replacing a section of cast iron on one street that showed signs of leaking and then returning over and over again to that neighborhood as new problems arose, Spire East planned to visit the neighborhood once, replace all of the cast iron in that neighborhood and be done with it.

I want to emphasize that whether Spire East continued its slower cast iron replacement program or sped up the cast iron replacements, all of these expenditures were being made to comply with the state and federal safety requirements to replace the worn out and deteriorated cast iron.

The question then became -- once we decided to go along and do the accelerated replacement program, the question then became how to do it most efficiently. Some plastic already existed in the neighborhood from these previous target replacements over a period of decades. Did it make sense to retain the use of that plastic and just fill in new plastic to replace cast iron only? In other words, reuse the old plastic and just fill in the new plastic. Or did it make more

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sense to bypass the cast iron and the old plastic and ramp up 2 the program that way? Spire quickly recognized that the accelerated approach could best be conducted by simply bypassing 3 the old line entirely. Doing so, would result in replacement of 4 5 not only cast iron, but previously installed plastic sections, 6 much of which probably did not independently require 7 replacement. However, it became apparent to Spire East that the 8 opportunity to bore in an entire main line was more economical 9 than trying to salvage the previously installed plastic by 10 piecing it together with new plastic. 11 This was especially true since the new line

would be easier to access as it would be under grass instead of concrete and roughly three feet deep instead of five feet deep. The new main would require Spire East to attach new service lines or, where economically feasible, reattach the old service line to the new main. New service lines would replace further plastic, since many of the service lines that would be replaced were plastic and not necessarily at the end of their useful lives.

This was a closer question but Spire East realized that any extensive replacement of cast iron main would require work to attach service lines or reattach them, whether you used old service lines or new service lines. On balance, the Company believed it to be obvious that the economy's favorite bypassing the main rather than trying to tie into old

plastic.

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Now, of course, independent of and in addition to the direct costs of replacement customers would enjoy other benefits such as lower cost maintenance, lower cost to access meters, which were being moved outside in Spire East territory especially and increase safety and better customer service. But these are in addition to the economic reality that bypassing the main is the lower cost alternative.

So Spire proceeded with its new plan in the 2011, 2012 timeframe with the full support of the safety staff, the Missouri Safety Staff. Spire made a presentation at a September 2012 Commission agenda meeting on the new program. That presentation was well received, and Spire continued to file ISRS case after ISRS case that included the outcome of its strategic plan to eliminate cast iron. That is, these ISRS applications had more projects in them and at higher costs. The staff admirably and consistently supported the Company's ISRS applications and the Commission consistently approved them. the pace of cast iron replacements increased, it became more and more apparent that the program was succeeding, that where cast iron removal had been on pace to take 80 years to complete, something in the neighborhood of 20 years or less to completion was now on the horizon.

After Spire Missouri acquired MGE, which is now Spire Missouri West, it brought a similar accelerated program to

the western side of the state.

2.5

Okay. Let's move the story now to 2016. At the end of September, Spire filed another ISRS application for Spire East and Spire West. Those are the 2016-0332 and 0333 cases. At day 60, Staff filed its recommendation supporting the application. Okay. Meanwhile, OPC had previously become aware that some plastic was being placed under Spire's strategic plan and they determined to challenge it, but OPC did not make a filing early in the case to raise the issue nor did it make a filing at the 60-day mark when a recommendation is due under the statute. Instead OPC waited until day 70 in response to the Staff's recommendation and on December 9th, 2016, ten days after Staff filed its recommendation, OPC challenged the plastic.

Now, Spire argued that in the 120-day process with a 60-day recommendation deadline, a day 70 filing of an issue that was not even covered in the Staff recommendation was too late. The Commission denied this argument and we proceeded with a procedural schedule. Testimony was filed on December 23rd, 2016, and a hearing was held on January 3rd, 2017. Happy New Year everybody. Briefs were filed on January 6th, and 12 days later on January 18th, the Commission issued its Order approving Spire's application and finding that the interspersed plastic was all part of the cast iron system being replaced. Unfortunately, the January 18th Order did not mention the undisputed testimony in the record that the method Spire chose

1	to replace a significant amount of cast iron was the most
2	cost-efficient method.
3	Okay. OPC appealed the Commission's January 18
4	Order to the Western District. Now, the Western District was,
5	of course, unaware of the explosions in Philadelphia and
6	Allentown, unaware of the
7	CHAIRMAN HALL: Let me stop you for a second.
8	MR. ZUCKER: Yes, sir.
9	CHAIRMAN HALL: At the Oral Argument before the
10	Western District, did your counsel explain to the court that the
11	plastic patch replacement was the most economical process?
12	MR. ZUCKER: Yes. I was there, Your Honor, and
13	counsel tried to explain that very concept.
14	CHAIRMAN HALL: Were those words uttered?
15	MR. ZUCKER: Well, I think the answer is yes.
16	CHAIRMAN HALL: So then, to me, that issue was
17	before the Western District and the Western District was aware
18	that there was undisputed testimony before the Commission that
19	that was the most economical process available to the Company.
20	MR. ZUCKER: Well, that wasn't in the Order and
21	they didn't seem to take that into account.
22	CHAIRMAN HALL: I would agree. They did not
23	seem to take that into account. All right. Thanks.
24	MR. ZUCKER: The Western District was unaware of
25	explosions. They were unaware of the unanimous positions of

1 federal and state governments that cast iron replacements be 2 accelerated. They were unaware of the PHMSA white paper urging states to use their ISRS type tools to spur faster cast iron 3 4 replacement. They were unaware that the Missouri Safety Staff 5 encouraged and supported Spire's ramped up cast iron and bare 6 steel replacement programs. And most important they seemed 7 unaware that Spire's chosen methodology of bypassing cast iron 8 along with some interspersed plastic was actually the most cost 9 effective way to remove significant amounts of cast iron. Instead -- and this may further answer your question, Chairman 10 11 -- the Western District appeared to be under the impression that 12 Spire was using its ISRS eligible cast iron program to make some 13 other unrelated non-ISRS eligible improvements to its 14 distribution network. They saw it as a separate decision in 15 which we were trying to kind of add in this plastic replacement 16 in with our cast iron program. 17 The Western District made a general finding in 18 their order that I think we all agree with. It's a truism that 19 incurring costs to replace plastic that is not worn out or 20 deteriorated is not ISRS eligible work. We understand that. 21 That's why we do not include replacements of plastic in our -with our ISRS applications. In other words, we're not going out 22 23 into the suburbs replacing plastic and trying to call that ISRS 24 eligible. 2.5 The point that the Western District made Okay.

is an oversimplification and really begged the question that the 1 2 Commission had entertained. Now, even the Western District recognized that some incidental plastic replacement was 3 acceptable in the context of a cast iron main replacement 4 program. But what the Western District knew that it did not 5 know is where the costs fell out on that. So what the court 6 7 found was, to the extent that there are costs to replace plastic 8 facilities, they should be disallowed. And they returned the 9 case to this Commission to determine what costs, if any, are 10 driven by the replacement of plastic. 11 Now, Commissioner Rupp had a very good solution. 12 He -- having already taken evidence on the matter, the 13 Commission could have simply issued a new order telling the 14 parties and possibly the Western District, should it go there 15 again, telling them what it hadn't said in the first order, that 16 the replacement of plastic is occurring in order to save costs, 17 not to increase them. Commissioner Rupp took second place on 18 that vote and so the parties are providing more evidence and 19 having this hearing. I think as Commissioner Kenney pointed 20 out, it doesn't hurt to take some more evidence and get some 21 more information. 22 Okay. What did the new evidence show? The new 23 evidence that we filed last week showed that it supported what 24 the Company testified to in the previous case, that Company's 2.5 method in replacing significant amounts of cast iron and

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coincidently replacing some plastic is the most cost effective. Even using the work orders handpicked by OPC in the previous case yields net savings compared to a method where plastic is reused instead of replaced. This doesn't even count the fact that the retirement of plastic reduces depreciation expense in these ISRS cases, that the customers get immediate credit for by reducing our ISRS revenues.

Okay. Having demonstrated the seniority of the bypass approach now a second time and in more detail, that should, hopefully, put this matter to rest. Maybe an even better support for our methodology is the fact that neither OPC nor the Staff are willing to engage in the debate, and that's a debate of whether or not the methodology we are doing increase costs or save them. Instead, both Staff and OPC are busy adding up the retirements of various materials to come to a percentage of plastic retirement, which they then claim represents ineligible ISRS costs. Neither of the parties even tried to explain how or why a simple percentage should be used to allocate costs, a theory that is completely unsupported and unsupportable. In other words, they're just doing the math, they're not showing why that method has any meaning in contrast to what Spire is doing, which is comparing the cost to replace plastic to the cost to reuse plastic.

The positions of Staff and OPC send the same message to us: Please continue to use a cost-efficient method

to replace cast iron and bare steel and we will use that cost-efficient method against you to lower your ISRS rates. Spires' first two witness our both longtime Company engineers who were involved in the project to strategically remove increased amounts of cast iron. They were involved in repeated and regular interactions with the safety staff -- and it's that safety staff that supported our program. Now, for their part in this case, Staff's witnesses are auditors and one manager of the ACA gas supply audit department known as the procurement analysis department. The Staff has proffered no engineers and no witnesses from its safety department, not one. These are witnesses that could corroborate Staff support and encouragement of Spires' effective cast iron and bare steel main replacement program.

In the end, Spire asks that the Commission direct the judge to write an order that shows that the Commission heard the evidence and came to the correct conclusion in the original cases, 2016-0332 and 0333, and now having heard more evidence, confirms its original findings that Spires' cast iron and bare steel replacement programs are properly ISRS eligible and adds the rationale that the practice of retiring plastic where it can be economically or operation -- I'm sorry, the practice of retiring plastic where it could not be economically or operationally reused, avoided rather than caused costs and therefore reduced rather than increased the Company's

1	ISRS costs and charges.
2	Thank you.
3	CHAIRMAN HALL: Do you think the Commission has
4	the statutory authority to order a refund?
5	MR. ZUCKER: Well, the ISRS law determines how
6	credits are to be handled. And I think Staff had the right
7	answer: If there is money to be refunded, it should come off of
8	the next ISRS.
9	CHAIRMAN HALL. But ISRS was reset to zero in
10	the last rate case.
11	MR. ZUCKER: Right.
12	CHAIRMAN HALL: So how what is our statutory
13	authority to order a refund in those cases? I understand how we
14	could do it in the pending in the 2018 cases. I just don't
15	understand how we could do it in the cases where the ISRS has
16	been reset to zero.
17	MR. ZUCKER: Okay. The ISRS was reset to zero
18	and we're currently collecting costs for those expenses, but
19	before it was reset to zero, we collected ISRS charges on those
20	original cases. And so that is what is at issue and that would
21	be the amount that would be offset from the current ISRS cases,
22	if in fact we had additional costs.
23	CHAIRMAN HALL: Well, I'll be very interested in
24	hearing Staff and OPC's explanation for how we can order a
25	refund because I don't personally see it. I don't see how we do

it. 1 2 MR. PENDERGAST: Chairman, if I can address that question real quickly. I went back and obviously looked at the 3 ISRS statute itself on this issue because you have several 4 5 witnesses proposing some sort of refund or credit for the first 6 four ISRS cases, and when you read the statute it talks about if 7 there is an adjustment to be made based on prudence or 8 otherwise, that you make it in the rate case and that you 9 determine it at least in the rate case. And in this rate case, 10 there was no determination that any ISRS amount was imprudent or 11 should otherwise be adjusted. So I think that's a fair point to 12 wonder how under the law that would be done. CHAIRMAN HALL: Now, there is a statute which 13 says we can do a refund if we are specifically instructed to do 14 15 so by the court. I'm not sure I see how the Western District's 16 opinion specifically instructs that. I guess maybe reading 17 between the lines you could make that argument and maybe that's 18 what I'm going to be told by OPC and perhaps Staff, but I'm -- I 19 think that's an open question. 20 MR. ZUCKER: I'm fine with an answer that 21 results in no refund. 22 CHAIRMAN HALL: But -- yeah, but that doesn't --23 that solves your issue going backward. It doesn't solve your 24 issue going forward. 2.5 MR. ZUCKER: Correct. Which is why we focused

on the issue itself. 1 2 CHAIRMAN HALL: Thank you. 3 JUDGE BUSHMANN: Opening by Staff. 4 MR. KEEVIL: May it please the Commission. As 5 Mr. Zucker mentioned, we are here today to address six ISRS 6 cases concerning Spire Missouri or Spire East and Spire West, 7 formerly known as Laclede Gas Company and Missouri Gas Energy. 8 Although we are addressing six cases as shown on the list of issues and position statements, we have a relatively small 9 10 number of issues considering that we are dealing with six cases. 11 And, as you already know, the primary issue is what to do about 12 the replacement cost of plastic pipe and components that were not worn out or in a deteriorated condition in light of the 13 14 Western District Court of Appeals' opinion and remand. 15 Now, in its opinion, which I'm sure everyone has 16 read multiple times by this point, the Court of Appeals stated 17 that, quote, while Laclede's replacement strategy may laudably 18 produce a safer system, the question squarely before us is not 19 whether its chosen approach is prudent but rather whether the 20 replacement of plastic components that were not in a worn out or 21 deteriorated condition are ISRS eligible. The court clearly and 22 undeniably answered that question, no, they are not ISRS 23 eligible. 24 As reflected in Staff's testimony -- based on 25 the court's opinion, Staff has now calculated the amounts which

were inappropriately recovered by Spire East and West through 1 2 the 2016 and 2017 ISRS cases for the replacement of ineligible plastic and has removed the replacement costs for ineligible 3 plastic from its recommended ISRS recovery for the 2018 cases. 4 5 Despite the Court of Appeals' opinion and 6 remand, Spire Missouri has stood pat with the same argument it 7 made previously, despite the court's rejection of that argument, 8 and essentially ignores what the court said in its opinion. 9 Spire Missouri's argument basically boils down to the following: 10 The method they chose to replace cast iron and unprotected 11 steel, which was worn out and deteriorated, may have also 12 replaced plastic pipe, which was not worn out or deteriorated. 13 However, because they believe that method was less costly than 14 some other method they could have chosen, the replacement cost 15 for all of that pipe, cast iron and unprotected steel and 16 plastic, becomes ISRS eligible. 17 Now Spire Missouri's argument flies directly in 18 the face of the Court of Appeals' opinion. Remember, that the 19 court stated that the question is not whether Spire Missouri's 20 chosen approach is prudent and stated that no party contests 21 that the plastic mains and service lines were not in a worn out 22 or deteriorated condition. 23 The court also stated that we do not believe --24 we, the court, do not believe that Section 393.10095(a) allows 25 ISRS eligibility to be bootstrapped to components that are not

1 worn out or deteriorated simply because they are interspersed 2 within the same neighborhood system of such components being replaced or because the gas utility is using the need to replace 3 4 worn out or deteriorated components as an opportunity to 5 redesign a system, i.e., by changing the depth of the components 6 or system pressure, which necessitates the replacement of 7 additional components. The court also expressly concluded that 8 recovery of the cost for replacement of plastic components that 9 are not worn out or in a deteriorated condition is not available 10 under ISRS. Now, I'd like to emphasize that last statement that 11 shows that the court clearly distinguished between cost recovery 12 through the ISRS mechanism and cost recovery in a rate case. Simply, Spire Missouri's argument is not. Spire Missouri's 13 14 argument simply conflates costs and cost savings by claiming 15 there is no cost for replacing plastic pipe due to the savings 16 they claim to have achieved. However, if there were no costs, there would be no need for an ISRS charge. So we know there's 17 18 costs. 19 Finally, as the applicant Spire -- as the 20 applicant, Spire Missouri has the burden of proof to prove that 21 the cost for which it seeks recovery through the ISRS statute 22 are in fact ISRS eligible and satisfies each of the requirements 23 set forth in the ISRS statute. 24 Staff is presenting the testimony of four 25 witnesses, Ms. Bolin and Ms. Newkirk and Mr. Arabian presents

1 the results of Staff's audit and Mr. Sommerer presents Staff's 2 proposed rate design and rates. As summarized in Staff's statement of position, 3 after everything is said and done, if the refunds from the 2016 4 and '17 cases are included as an offset to the 2018 cases, which 5 6 is Staff's recommendation pursuant to what Staff believes to be 7 the proper interpretation of the statute and rule, Spire West 8 should be permitted to collect \$4,052,629 and Spire East should actually refund 194,252. Now, those are the net figures. 9 Those are not -- I see the look of question on your face, 10 11 Mr. Chairman. Those are the nets when you offset the 2018 ISRS 12 with the remand that the case figures. So those are not the 13 total -- what would you call them -- credits. That would be the 14 net amount. 15 CHAIRMAN HALL: My question isn't about the 16 numbers. My question is about the statutory authority to order 17 a refund. 18 MR. KEEVIL: I thought you might have such a 19 question. 20 CHAIRMAN HALL: Okay. So what statute are you 21 applying that would give us the authority or a refund for the 22 cases prior to the rate case? 23 MR. KEEVIL: Hang on. Let me find that statute 24 Too many pieces of paper. Here we go. here. 25 First of all, let me say that we will -- or at

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least I will readily admit that it is doesn't say after a remand
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     from a court proceeding. But if you look at 393.1015 -- I
     believe it's 8 -- yes. It's 393.015 -- .105 -- 10158 talks
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     about in the event that you have a rate case and the Commission
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     were to make a prudence disallowance or something regarding the
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     ISRS plan in a rate case and then although the determination is
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     made in the rate case it says in the event the Commission --
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     excuse me -- in the event the Commission disallows during a
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     subsequent general rate proceeding recovery of costs associated
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     with eligible infrastructure replacement previously included in
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     ISRS, the gas corporation shall offset its ISRS in the future as
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     necessary to recognize and account for such over collections.
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     And somewhere -- it says in the next -- that shall be done in
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     the next -- or the first ISRS after the rate case. That may be
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     in the rule. Do you have the rule?
16
                      CHAIRMAN HALL: Well, I don't know if we need to
17
    belabor this point. That's clearly an issue that I think is
18
    relevant and something that can probably be briefed by all the
19
    parties.
                      MR. KEEVIL: Like I said, there is a reference
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21
     in the rule to doing it in the next -- or the first rate case --
22
     or the first ISRS case after the rate case because the ISRS
23
     rates were reset to zero. I also think that goes to -- if I
     could throw this out there -- that also goes to Public Counsel's
24
2.5
    point that you can't do a refund because of the .5 percent
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1
    revenues or whatever language of the statute. I think the
 2
    statutes clearly contemplate refunds in the first ISRS case
    after a rate case and then that if you're talking about a
 3
 4
    negative number, that .5 percent requirement wouldn't come into
 5
    play.
 6
                      Anything further?
 7
                      CHAIRMAN HALL: Are you familiar with the
 8
     Supreme Court's opinion in the Clean Line case, the recent
9
    opinion?
10
                      MR. KEEVIL: Depends on how familiar you mean.
11
                      CHAIRMAN HALL: Well, when I read that opinion,
12
     it seemed to say that the Commission erred by following an
    erroneous Western District opinion. So I am wondering what
13
14
     lesson we should take from that.
15
                      MR. KEEVIL: The Commission erred by following
16
    an erroneous opinion? That's -- it puts the Commission,
17
    obviously, in a bind, but I would say until --
18
                      CHAIRMAN HALL: I mean, in some ways it's a
19
    very, very similar place we're in right now. I mean, this
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    Commission viewed the Western District opinion as wrong in the
21
    Clean Line case, but we felt compelled to follow it. So we did.
22
    And then, ultimately, the Supreme Court said you shouldn't have
23
     followed it. And in this case we believe the Western District
24
     issued an erroneous opinion, but we feel like we need to follow
25
     it, or should we follow the Supreme Court, which tells us don't
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follow an erroneous Western District opinion.
1
                      MR. KEEVIL: I would say that on a matter of law
 2
     such as this, until the Supreme Court overturns the Court of
 3
 4
     Appeals, that you are bound to follow the Court of Appeals,
 5
     because that's the law as we have it right now. Even if you
 6
     think it's wrong, that's -- that's what the court system does.
 7
     So if you get a Supreme Court opinion interpreting it -- when I
 8
     say it, I mean the Western District, then you're free to
 9
     obviously -- or you're bound to follow the Supreme Court
10
     interpretation, but until you get a Supreme Court
11
     interpretation, you're bound to follow the Western District,
12
     unfortunately.
13
                      CHAIRMAN HALL: Thank you.
14
                      JUDGE BUSHMANN: Thank you. Opening by public
15
     counsel.
16
                      MR. CLIZER: If it pleases the Commission. ISRS
     is prescriptive and narrow by design. We know it is narrow
17
18
     because the Supreme Court has told us as much, twice in fact.
19
     It applies only in limited circumstances to specifically defined
20
    projects. ISRS isn't concerned about prudency. It doesn't look
21
     to economic efficiency. And most of all, it does not contain
22
     any mechanism to account for avoided costs. All ISRS is
23
     supposed to do is provide a mechanism for the collection of
     rates between a rate case for projects that check all the right
24
2.5
    boxes. The project that Spire is trying to collect in these six
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cases do not check all of the right boxes. Spire is not making 1 2 repairs to an existing system. They are abandoning the existing system and building a new one in its place. Spire says that in 3 doing so they complied with the steel and cast iron replacement 4 5 programs. It says this method is cheaper than repairing the old 6 system. That all may be true, but that does not make it ISRS 7 eligible. This is precisely what the Western District Court of 8 Appeals opinion says. The pipes that Spire abandoned in the 9 grounds were not worn out or deteriorated. Spire knew this when 10 it made its application. As such, Spire's application is not 11 compliant with the ISRS statutes, meaning it should not have 12 been authorized to collect an ISRS and had no authority to 13 collect revenue from its customers. Consequently, the OPC 14 argues that Spire should be required to refund everything 15 collected. 16 CHAIRMAN HALL: I've got to stop you there for a 17 second. So are you essentially saying that when a company files 18 an ISRS application and there is one project on that application 19 that's not ISRS eligible that therefore they are not entitled to 20 any ISRS? MR. CLIZER: Once a company -- when a utility 21 22 company files an application but does not comply with the 23 statute, the Commission does not grant the authority to issue 24 ISRS. 25 CHAIRMAN HALL: So there's one project on there

that's not ISRS eligible and you're trying to tell us that we 1 2 have to give them zero? MR. CLIZER: Yes. If the application is not 3 4 compliant, then you have no authority to issue the ISRS. 5 However, the OPC understands that the Commission 6 has specifically requested a calculation for the amount that 7 Spire collected for just the ineligible plastic components. 8 Therefore, the OPC will provide testimony to show how that 9 amount could be calculated and what that number should be. The 10 OPC notes that its calculations are very similar to the numbers 11 that have been calculated by Staff which reinforces the validity 12 of both estimates. By contrast, Spire has refused to present any calculation for the cost of replacing ineligible plastic 13 14 parts, despite the fact that it has the burden of proving that 15 it was entitled to recover. Instead, Spire continues to cling 16 to its erroneous argument that because it claims to have 17 abandoned -- to have avoided costs, it should not have to pay for 18 anything. But, as previously stated, ISRS does not permit 19 recovery of avoided costs, nor does it allow for avoided costs 20 in its calculations. As such, Spire's argument misses the 21 essential point of the Western District's opinion. 22 that, but Spire's current ISRS application continues to ask for 23 recovery of the replacement of ineligible plastic parts in utter 24 defiance of the Western District opinion. In fact, Spire has 2.5 failed to produce evidence to prove that any of the replacements

1 it seeks recovery for in its current application of ISRS 2 eligible. The reason for this is because none of the replacements, steel, cast iron, or plastic that Spire is making 3 are ISRS eligible. That is due to the fact that Spire is 4 replacing pipes not because they are worn or deteriorated, but 5 6 simply because it believes it was required to due to its steel 7 and cast iron replacement program. The OPC does not oppose this 8 steel and cast iron replacement program nor does it think that 9 Spire would not be unable to collect those costs at a general 10 rate case. However, the Western District's opinion made it very 11 clear that the pipes have to be worn out or deteriorated before 12 they are eligible under ISRS, which is the point that Spire 13 continues to miss. Spire, as stated, just assumes all the pipes 14 subject to its steel and cast iron replacement program are worn 15 out or deteriorated and has made no effort whatsoever to verify 16 that anything it's retiring is actually ISRS eligible. 17 Consequently, Spire's current ISRS application 18 is also not in compliance with the applicable statute and should therefore be dismissed. 19 In order to support its position, the OPC will 20 21 be presenting the testimony of two witnesses, first, Robert 22 Schallenberg who will explain the issues with compliance in 23 Spire's application as well as rebut the arguments raised by 24 Spire in the direct testimony; and John Robinett who will 25 discuss the method and results of the OPC's calculation of the

cost recovered through ISRS -- Spire's ISRS for the ineligible 1 2 plastic parts and rebut Spire's claim for ISRS eligibility for any of the replacements in the 2018 cases. 3 CHAIRMAN HALL: No questions. Thank you. 5 JUDGE BUSHMANN: Thank you. 6 I would like all parties to brief the issue of 7 statutory authority for the Commission to order a refund in the 8 2016 and 2017 cases, and please include in your discussion any 9 possible effects of Section 386.520, the Stipulation and 10 Agreement that was Commission approved in the 2017 cases and the 11 effects of Spire's last general rate case. 12 At this point, I think we are ready to move 13 along with the testimony. Spire can call its first witness. 14 MR. PENDERGAST: Thank you, Your Honor. At this 15 time Spire would call Craig Hoeferlin to the stand. 16 (Witness sworn.) 17 CRAIG HOEFERLIN having been first duly sworn testified as 18 follows: 19 DIRECT EXAMINATION BY MR. PENDERGAST: 20 0. Good morning, Mr. Hoeferlin. 21 Α. Good morning. 22 Would you please state your name and business Q. 23 address for the record. 24 Craig R. Hoeferlin. Spire, Inc., 700 Market Α. 2.5 Street, St. Louis, Missouri, 63101.

And are you the same Craig R. Hoeferlin who has 1 0. 2 caused to be filed in this proceeding direct testimony consisting of 15 pages and one schedule which has been marked as 3 Exhibit 3? 4 5 Α. Yes. 6 Ο. Do you have any corrections or revisions to make 7 to your direct testimony? 8 Α. No. 9 And if I were to ask you the same questions 0. 10 today that appear in your direct testimony, would your answers 11 be the same? 12 Α. Yes. 13 And are those answers true and correct to the 0. best of your knowledge and belief? 14 15 Α. They are. 16 MR. PENDERGAST: At this time I would move for the admission of Exhibit 3? 17 18 JUDGE BUSHMANN: Any objections? Hearing none, 19 it is received into the record. 20 (WHEREIN; Spire Exhibit 3 was received into 21 evidence.) 22 MR. PENDERGAST: Your Honor, I think we're to 23 have the opportunity for limited live rebuttal. 24 JUDGE BUSHMANN: That's correct. 25 MR. PENDERGAST: Okay. And should we proceed,

1 with me asking him questions and him answering? JUDGE BUSHMANN: Yes. Now that his direct is 2 in, you can go ahead and ask rebuttal questions. 3 REBUTTAL BY MR. PENDERGAST: 4 Mr. Hoeferlin --5 0. 6 Α. Yes. 7 -- do you have -- or have you reviewed the 0. 8 direct testimony of Staff witness David Sommerer as it pertains 9 to the Company's provision of planning documents and design 10 schematics for its replacement strategy? 11 Α. I have. 12 And he's indicated that the Company is only Ο. 13 provided a couple of high level slide presentations; is that 14 correct? 15 Α. He has indicated that. Yes. 16 And just so the Commission has, perhaps, a 0. 17 fuller, more complete picture of what the Company has actually 18 done in this regard, can you please tell me what information the 19 Company provides the Commission's safety staff relating to its 20 replacement program strategies? 21 Sure. So when the -- when our engineering 22 staff, which I am responsible for, our operations team decided 23 to look at replacing cast iron from what we call a piecemeal 24 approach to a systematic approach, we came up with a plan. We met with the gas safety staff. They were very receptive of 25

that. As Rick Zucker indicated, when we were finished with the 1 2 copper replacement program, this was, you know, the next step to cast iron. So they really were quite pleased to hear that we 3 4 were going to take a more robust approach to it, which we have. So we went over the plan that we had, at the 5 time it was Laclede Gas. The Staff liked it. Then we took it 6 7 to the full Commission to an agenda meeting, went over that and 8 presented what we were going to do. That was very well received. It's the plan we're still on. And then in terms of 9 10 how we report back to the gas safety staff, there's several 11 steps. One, every year, every operator in the country is 12 required to submit what's called the DOT report to the US Department of Transportation, PHMSA, Pipeline Hazardous Material 13 14 Safety Administration gets a full report of the mains and 15 services, the type, the size, the age and the material. So 16 that's presented every year. Staff gets a copy of that for both 17 East and West. 18 For Missouri East, we also provide a replacement 19 letter that indicates how much cast iron we have replaced per 20 our replacement program and also, you know, what our plans are 21 going forth, what categories of cast iron we're going to 22 replace. That's in terms of the mandatory, the angle of repose 23 and then, you know, systematically what will be replaced. 24 And then in Missouri West, as agreed upon with 25 the acquisition of Missouri Gas Energy, now Missouri -- or Spire

1	Missouri West, we do a one in three year ISRS plan. We present
2	that to the Staff in terms of what is going to be replaced.
3	So those are the formal indications of where we
4	are at with the program. Staff comes in as they're required
5	by you know, by PHMSA to do audits every year. So they do
6	audits of our programs and then they go out in the field, they
7	do construction inspections, site visits. So they are very
8	aware of what we're doing in the field as well.
9	Q. You mentioned the MGE acquisition stipulation
10	and the one to three year plans that are provided for MGE. Do
11	you recall, did the Company in its testimony supporting why its
12	acquisition of MGE would not be detrimental to the public
13	interest address its replacement program?
14	A. Yes. At the time Missouri Gas Energy, now Spire
15	West, was replacing approximately 15 miles, seven miles cast
16	iron, seven miles of bare steel. Since that time, we have
17	ramped up, and this year, for instance, we're going to replace
18	close to 140, maybe 150 miles of cast iron, bare steel. So we
19	have increased that by tenfold. So, to me, we've increased the

Q. And did the Company essentially make a commitment that it would ramp up the replacement programs for MGE if it was allowed to acquire MGE?

safety, we've increased the efficiency of our system by ramping

A. Yes.

up those replacement programs.

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1	Q. Did the Commission approve that acquisition?
2	A. Yes.
3	Q. Has the Company also addressed the pace and
4	results of its replacement program in its most recent rate
5	cases?
6	A. Yes.
7	Q. Did Mr. Lindsay testify as to what the results
8	of that replacement program have been?
9	A. Yes. He has testified to that.
10	Q. To your knowledge, when the Company makes an
11	ISRS filing, does it indicate in that filing in some detail what
12	the amount of footage replaced has been, what the costs have
13	been for installed facilities, each and every time it files one
14	of those ISRSs?
15	A. Yes. Yes. It gives a detailed report on, you
16	know, how much the footage is of the mains and services that
17	have been replaced for each project that we're submitting for
18	ISRS recovery.
19	Q. And then that filing is reviewed and audited by
20	the Commission Staff, and OPC also has an opportunity to ask
21	DRs; is that correct?
22	A. That's correct.
23	Q. And in the end, does the Commission specifically
24	approve what it believes is a reasonable amount of ISRS costs to
25	include in rates?

1	A. Yes.	
2	Q. You said that you were involved with the coppe	
3	service line replacement program?	
4	A. Yes, I was.	
5	Q. And I'd just like your opinion. That had	
6	regulatory oversight as well, did it not?	
7	A. It did.	
8	Q. In your opinion, how does the regulatory	
9	oversight apply to the cast iron and unprotected steel programs	
10	and the other ISRS investments made by the Company compare to	
11	the regulatory oversight of these prior replacement programs?	
12	A. I would say it's the same. It's very good	
13	oversight. The formal reports that we issue that are reviewed	
14	many times we'll, you know, submit them and then we'll get	
15	questions. We'll have follow-up with the gas safety staff.	
16	Sometimes even PHMSA may call. Because the DOT report goes to	
17	them, they may have a question. So we'll answer that as well.	
18	So I think there's very, very good oversight of that program	
19	similar to what we had with the copper service replacement	
20	program.	
21	Q. And in his testimony Mr. Sommerer also talked	
22	about his desire to see more analysis, schematic designs and	
23	that type of thing of the Company's various replacement	
24	projects. Do you recall that?	
25	A. I do recall that request, yes.	

1	Q.	Has the Company provided that kind of
2	engineering anal	ysis in these cases?
3	A.	Not in this case, no, not to I mean, we have
4	provided in this	case we analyzed nine cases, plus the case
5	that Mark Lauber	or the project the Mark Lauber testified, we
6	did analyze that	in terms of if it would be, you know, more cost
7	efficient to rep	lace the plastic or to reused the plastic. So,
8	yes, we did supp	ly, I believe, ten projects that were
9	hand-picked by the OPC.	
10	Q.	And you presented the results of that analysis
11	in your testimony?	
12	A.	I did. It's Exhibit, I believe, D1.
13	Q.	And that Exhibit D1 was backed by schematic
14	drawings	
15	A.	Yes.
16	Q.	and footage which has also been provided to
17	the parties?	
18	A.	That's correct.
19	Q.	And you say Mr. Lauber also did an analysis in
20	the Company's ra	te case; is that correct?
21	A.	That's correct.
22	Q.	Did Mr. Lauber also do an analysis of what the
23	impact of retiri	ng rather than reusing plastic is where it's not
24	economically fea	sible to do so in the original ISRS cases?
25	A.	Yes, he did.

To your knowledge up to this point, have 1 0. Okav. 2 you ever received a data request from the Staff regarding those analyses that have been performed by the Company? 3 4 No, I have not. Α. 5 0. Okay. Mr. Sommerer also talks in his testimony 6 at Page 6, Lines 12 to 13, that it's not totally clear to him 7 when a new main was being installed to facilitate new interstate 8 take-points versus having some additional proof of replacing 9 part of the existing worn out system. Do you see that? 10 Α. Can you help me out again? What page? 11 Page 5. Ο. 12 Page 5. Α. 13 Line 6. 0. 14 I'm sorry. I am in Missouri West. So for Α. 15 Missouri East, his testimony at Page 5? 16 0. Yes. 17 Α. And which lines? 18 Lines 6 to 8. That's The remand cases. Q. 19 Α. Okay. 20 Ο. You got it? 21 Yeah. Line 15 and 16 on Page 6. Α. 22 Well, let me just ask you. Has the Company done Q. 23 anything with its cast iron main replacement programs or 24 otherwise that are designed to go ahead and change its 2.5 distribution system to accommodate new take-points?

No, it has not. 1 Α. 2 O. And if the Company were to do it for that purpose, would it include the cost in the ISRS? 3 No, it would not. 4 Α. Okay. Are you familiar with the direct 5 0. 6 testimony of Ms. Bolin where she talks about applying her 7 percentage method to blanket work orders? 8 Α. Yes. 9 0. And under that application of the percentage 10 method some of those blanket work order costs would be excluded 11 or reused to reduce the Company's ISRS charges; is that your 12 understanding? 13 In her testimony, yes. Α. 14 When it comes to blanket work orders and what 0. 15 you know about blanket work orders, is there cost associated 16 with that that should be excluded for ISRS for any reason? 17 Α. No. It should not. 18 Can you explain why? 0. 19 Sure. So the blanket work orders, if our 20 construction crews are or leak crews, say, would come across a 21 corrosion leak or maybe cathodic protection issue, the blanket 22 work orders would be used to replace that worn and deteriorated 23 pipe. Say a piece of steel that is corroded that needs to be 24 replaced, they would use that blanket work order to charge that 25 account. So if the charges were not allowed for the blanket

1	work orders, then we would not be capturing those charges.	
2	Q. So the blanket work order is designed to	
3	basically charge for these sort of routine situations where	
4	there is a leak or other problem with the facility that needs to	
5	be replaced?	
6	A. That's correct. It's is not a planned project.	
7	It's something that we came across, say through our leak surveys	
8	or through a leak crawl, things like that.	
9	Q. It is not really part of the cast iron	
10	replacement program or the unprotected steel replacement	
11	program?	
12	A. That's correct.	
13	Q. Are you also aware of the fact that Staff has	
14	excluded plastic that was retired in connection with transfers?	
15	A. Yes.	
16	Q. Can you explain for the Commission, briefly,	
17	what a transfer is?	
18	A. Sure. So a transfer would be a new main is put	
19	in place and then if the existing service is going to be reused,	
20	it will be transferred to that main to allow the gas service to	
21	continue once we're finished.	
22	Q. So is it true that when a transfer is done the	
23	old plastic service line is being reused?	
24	A. Yes, that's correct.	
25	O In each case?	

1	A. Yes.
2	Q. Okay. And so the plastic being eliminated when
3	that happens is what?
4	A. The plastic that's being eliminated is perhaps a
5	portion of it that is no longer needed, so depending on where
6	the new main is compared to the existing service, there may be
7	part of the plastic that's no longer needed so we'll just hook
8	up with to the new main right where the new service line is,
9	and then just not use, not need maybe a portion of the remaining
10	plastic.
11	Q. So that plastic that would be associated with
12	these transfers is not being replaced, it's just being
13	eliminated?
14	A. That's correct.
15	Q. And is that being eliminated because it's no
16	longer needed and it's less expensive just to go ahead and do it
17	the way the Company is doing it?
18	A. So the plastic that's being eliminated, again,
19	it's not needed, so we are just hooking up to the portion of the
20	plastic that's needed. That's the most efficient way to do that
21	in that case.
22	Q. And to your knowledge is there any impact
23	cost impact associated with that other than we're no longer
24	collecting depreciation on that eliminated plastic?
25	A That's correct

1	MR. PENDERGAST: Thank you. I have nothing	
2	further.	
3	JUDGE BUSHMANN: Cross-examination by Staff.	
4	MR. JOHNSON: Yes. Thank you, Judge.	
5	CROSS-EXAMINATION BY MR. JOHNSON	
6	Q. Good morning, Mr. Hoeferlin.	
7	A. Good morning.	
8	Q. I just want to run through a few points on	
9	Spire's neighborhood replacement program. It's my understanding	
10	that this program is a neighborhood approach that not only	
11	replaces cast iron or steel but could also replace plastic	
12	items; is that correct?	
13	A. It could bypass plastic that is currently in the	
14	system, yes.	
15	Q. And by bypass you mean that plastic is retired	
16	in place and no longer used?	
17	A. That's correct.	
18	Q. And as part of this program, you place a new	
19	pipe that replaces the functionality of the pipe that is retired	
20	in place?	
21	A. Yes. What we do	
22	Q. Thank you, Mr. Hoeferlin.	
23	Now, some of this plastic pipe that is retired	
24	in place, would you agree that it is not worn out or	
25	deteriorated?	

1	A. Yes.
2	Q. Would it also be accurate to say that in fact no
3	review was conducted to determine if the plastic the plastic
4	that was retired in placed was worn out or deteriorated?
5	A. No. A review was done to determine what was the
6	most efficient way to install the new system.
7	Q. Thank you, Mr. Hoeferlin. But there was
8	actually no review conducted to determine if it was worn out or
9	deteriorated?
10	A. Correct.
11	Q. Now, as part of this neighborhood replacement
12	program would you agree that Spire has essentially redesigned
13	some aspects of its system?
14	A. Spire, by replacing the cast iron, we have made
15	the system more efficient by eliminating low pressure, moving
16	meters from the inside to the outside and eliminating the
17	problems that water caused on the system. So the system we have
18	now is much safer and much more efficient and was less costly to
19	install.
20	Q. And so through the changes implemented to the
21	system it has resulted in a safer system in your opinion?
22	A. Yes.
23	Q. And some of those changes to the system included
24	the change of location of mains?
25	A. Yes.

1	Q.	The change of the depth of the mains and service
2	lines?	
3	Α.	Yes.
4	Q.	I believe Spire utilizes different sizes of
5	pipe?	
6	Α.	That's correct. Smaller.
7	Q.	And you've also changed the pressure of the
8	system for these	replacements?
9	Α.	That's correct. We've raised the pressure to 60
10	pound MAOP.	
11	Q.	And these changes necessitated some replacement
12	of service lines and movement of mains?	
13	Α.	That's correct.
14		MR. JOHNSON: All right. Thank you,
15	Mr. Hoeferlin.	I have no further questions.
16		JUDGE BUSHMANN: Cross by Public Counsel.
17		MS. SHEMWELL: Thank you.
18	CROSS-EXAMINATIO	N BY MS. SHEMWELL:
19	Q.	Good morning, Mr. Hoeferlin.
20	Α.	Good morning.
21	Q.	I'm Lera Shemwell. I was the attorney on the
22	gas copper servi	ce line replacement program. You may recall.
23	Α.	Yes.
24	Q.	And together with Mr. Leonberger and Company, we
25	designed a repla	cement system that we believe would replace the

1	copper lines in an effective manner to reduce incidents; is that
2	correct?
3	A. That's correct.
4	Q. Have you replaced all of the Company's copper
5	service lines?
6	A. We've replaced all of what's called the soft
7	copper service lines, which is what was covered in that program
8	and which was causing the issues that we had. We still have the
9	hard copper in the system, but we have replaced the soft copper.
LO	Q. Did you replace the soft copper with plastic?
11	A. We did.
L2	Q. As I recall, not to nitpick, but there were four
L3	lines that the Company could not find and were ordered to
L4	continue to do leak surveys over those four soft copper service
15	lines.
L6	A. Right.
L7	Q. Have you done that? Have you identified them?
L8	A. I don't know the particulars at the moment, but
L9	there were a few lines either we couldn't find them or perhaps
20	they were out in the middle of a major intersection and it was
21	just at the time going to be very difficult to close the road,
22	dig down and find them. So we had an agreement to do the leak
23	survey. I'll need to check to see what the status is of those.
24	Q. 81,000 services replaced; is that right?
25	A. Yes.

1	Q.	Do you have similar oversight for your cast iron
2	service lines re	placement?
3	Α.	Oversight by me?
4	Q.	No. I'm talking about regulatory oversight
5	A.	Yes.
6	Q.	that requires a certain number of lines to be
7	replaced annuall	у.
8	A.	There is not a requirement for a particular
9	mileage or foota	ge to be replaced. We
10	Q.	I think that answers my question. Thank you.
11	A.	Okay.
12	Q.	Have you replaced all cast iron service lines?
13	Did you do that by December 31st, 1991?	
14	A.	Yes.
15	Q.	Is that true for both East and West?
16	A.	To my knowledge, yes, it is.
17	Q.	You did incur costs to install the upgraded
18	system?	
19	A.	Yes.
20	Q.	And the new system is going to be or is an
21	upgrade for the	entire old system?
22	A.	That's correct.
23	Q.	We all agree there was plastic in the old
24	system?	
25	A.	Yes.

1	Q. Do you have any evidence that the plastic that
2	you're using in your replacement is superior to the steel cast
3	iron that's going out of service?
4	A. Yes.
5	Q. And what is that?
6	A. So the for instance, the cast iron that's
7	being replaced, first of all, most of it is over a hundred years
8	old. There is a process called graphitization. So the iron has
9	leached out so it's mainly carbon, so it can crack very easily.
10	So that's what can lead to leaks and things like that. So the
11	plastic does not have that issue. So it's much safer.
12	Q. Let's have the same comparison with your steel
13	mains.
14	A. So the steel that we replaced that was bare and
15	unprotected could corrode very easily. So we needed to get that
16	out and replace that with plastic as well.
17	Q. Do you have protected steel mains still in
18	service?
19	A. We do.
20	Q. And they are cathodically protected?
21	A. That's correct.
22	Q. I was reading the transcript in the last case
23	and you didn't like Mr. Poston's description of cathodic
24	protection. But it involves electrons and a sacrificial anode.
25	Would you like to add to that?

1	A. I mean, basically the steel is the cathode	
2	and then you put a magnesium anode in it. So the corrosion	
3	takes place on the anode, which is then protecting the cathode,	
4	which is the steel main. That's the industry-standard.	
5	Q. Which is why they call it a sacrificial anode?	
6	A. That's correct.	
7	Q. Do you agree with me that the ISRS requires a	
8	certain character of pipe that will be replaced?	
9	A. The ISRS requires worn and deteriorated pipe to	
LO	be replaced, yes.	
11	Q. Can you tell me which corrodes at a slower rate,	
L2	cast iron, unprotected steel, or plastic?	
L3	A. Well, unprotected steel does corrode relatively	
L4	quickly, so that's why it needs to be replaced. Cast iron	
15	really doesn't corrode. It's a different type of corrosion.	
L6	It's graphitization where the iron leaches out and then it	
L7	becomes very brittle. So those two types of materials, for lack	
L8	of a better term, do corrode, that's why they need to be	
L9	replaced. Plastic does not corrode.	
20	Q. We were talking this morning and the guys kept	
21	saying he's a chemE. You're a chemical engineer. Correct?	
22	A. That's correct.	
23	Q. Is it your opinion that plastic is going to last	
24	longer than the cast iron or unprotected steel?	
25	A. Yeah. The industry right now, no indication	

that there will be any issues with the plastic. Early on when 1 2 the plastic was first involved there were some issues with what's called legacy plastic. We do not have any of that, for 3 4 instance, in Missouri East. Other companies may have a little bit of that. They're going to replace it. But the plastic 5 we're putting in, the polyethylene, it should last indefinitely. 6 7 Do you have any Aldel-A still in your system? 0. 8 Α. Missouri East, I think we have replaced it all. 9 Missouri West, there might be a small amount that we're working to replace, but it is very, very minor amounts. It might be a 10 11 few service lines that we initially put in. If they haven't 12 been replaced yet, they will be. 13 You're aware of the explosion that occurred in 14 Springfield as a result of Aldel-A that killed a young man at 15 the fairgrounds? 16 Α. Yes. And that plastic pipe has a significant flaw 17 Ο. 18 that if it is not installed properly it will rupture? 19 It will crack, yes. Α. 20 O. It will crack? 21 Α. Yes. 22 And potentially cause a leak? Q. 23 Α. Yes. 24 But you still have some out there? 0. 25 If we do, it's very minor and we are in the Α.

process of replacing it. I will have to check to see if there's 1 2 any left. In other words --I understand. Thank you. 3 0. We didn't install very much. We just used it Α. 5 and decided that's not the way to go, so we went with the better 6 polyethylene that we use now. 7 When you presented to gas safety staff you said Q. 8 they were very pleased. Did they tell you that any of this 9 would be ISRS eligible? 10 Α. They indicated that the ISRS program is a very 11 good program to help --12 No. That wasn't really my question. Did they 13 indicate that what you were doing would actually be ISRS 14 eligible? 15 Yes. They indicated, yes, it would be ISRS Α. 16 eligible. 17 0. Who on the gas safety staff told you that? 18 Α. When we first started the program, you know, Bob 19 Leonberger was very supportive, he said that's why ISRS is 20 there, and -- you know, the same reason when PHMSA reviewed all 21 the different states and all the programs they had and they said 22 Missouri has a very good program for cost recovery of 23 replacement programs. 24 Mr. Leonberger is an engineer? 0. 25 Yes, he is. Α.

1	Q. H	He's not a lawyer?
		-
2	A. T	Chat's correct. A good engineer.
3	M	IS. SHEMWELL: Thank you. That's all I have.
4	J	TUDGE BUSHMANN: Questions from the
5	Commissioners.	
6	QUESTIONS BY CHAIR	RMAN HALL:
7	Q. C	Concerning blanket work orders, is it your
8	position, the Comp	pany's position that every project involved in
9	that work order wa	as related to worn out and deteriorated
10	infrastructure?	
11	Α. Ι	If it the blanket work orders, they're
12	reviewed by our en	ngineering staff and by our accounting staff to
13	make sure that eve	erything included in there would be ISRS
14	would be covered b	y ISRS, so yes.
15	Q. S	So you believe that everything replaced was worn
16	out and deteriorat	ed?
17	A. W	We believe everything that was all cast iron
18	was worn out, dete	eriorated. All the steel was worn out and
19	deteriorated. And	l by the the design that we did and the
20	design that we con	tinue to use, we believe that's the most
21	cost-effective and	1
22	Q. I	am not interested in the cost-effectiveness.
23	I'm trying to unde	erstand if there is evidence in the record, and
24	maybe it's your te	estimony, I'm not sure but if there's
25	evidence in the re	ecord to show that all of the work done with

1	regard to the blanket work orders related to worn out and
2	deteriorated infrastructure.
3	A. I guess I'll have to check to be sure, but it is
4	my understanding that everything covered in the blanket work
5	orders, for instance the SLRPs, the service line replacement
6	program at Missouri West that's worn and deteriorated that's
7	replaced, if there's a leak on the bare on a piece of steel,
8	that would be replaced under ISRS, and if there is a leak on the
9	cast iron, yes, that would be
10	Q. So are you essentially saying that whenever
11	there's a leak then that, by definition, makes it worn out and
12	deteriorated?
13	A. If it's on the bare steel or the cast iron, yes.
14	If it's on a plastic main, no, it would not be worn and
15	deteriorated. If we find a leak on a plastic fitting, that
16	would not be covered under the ISRS blanket work orders.
17	Q. Okay.
18	MR. PENDERGAST: Chairman, sorry to interrupt,
19	but I just wanted to advise you that Mr. Buck also addresses
20	this issue, so he'll be happy to answer questions as well.
21	CHAIRMAN HALL: I have no further questions.
22	JUDGE BUSHMANN: I just have one clarification
23	question.
24	QUESTIONS BY JUDGE BUSHMANN:
25	Q. You mentioned in your testimony a while ago that

you were increasing the pressure in the new system. Are you 1 2 increasing that pressure in both the East and the West distribution systems? 3 Yes, we are. In some cases it may -- in the Α. 5 Missouri West the pressure may not need to be increased, but in 6 other areas it is. But in Missouri East the entire system is 7 being -- the pressure is being increased for the area that we're 8 replacing. 9 JUDGE BUSHMANN: Thank you. 10 Recross based on Commission questions. Staff. 11 MR. JOHNSON: Yes. Very briefly. Thank you, 12 Judge. 13 RECROSS-EXAMINATION BY MR. JOHNSON: 14 Q. Mr. Hoeferlin, you were asked about blanket work 15 orders --16 Α. Right. 17 0. -- by Chairman Hall. Would you agree with me 18 that a blanket work order is not designed for a specific project and it does not have a defined end date? 19 20 It is not designed for a specific project. As 21 far as the end date, I think that may be renewed each year when 22 we set our budget. I think Glenn Buck might be able to answer 23 that better because it's an accounting question. 24 But you're not in fact an accountant? 0. 2.5 Α. I am not, no.

1	Q. Wou	ald you agree with me that these blanket work
2	orders can include s	several ISRS filings or projects related to
3	several ISRS filings	3?
4	A. Yes	5.
5	Q. Wou	ald you agree with me that the blanket work
6	orders do not contai	n detailed enough information for an
7	individual to determ	nine what amount of work is included with
8	which ISRS filing?	
9	A. I a	m not sure I can answer that, because I'm not
LO	sure how much detail	someone would need. I think I would be
11	able to look through	it, but that would be the best I could say.
L2	MR.	JOHNSON: Thank you, Mr. Hoeferlin. No
L3	further questions.	
L4	JUI	OGE BUSHMANN: Recross by Public Counsel.
L5	MS.	SHEMWELL: Just a clarification.
L6	RECROSS-EXAMINATION	BY MS. SHEMWELL:
L7	Q. MAC	P stands for maximum allowable operating
18	pressure?	
L9	A. Tha	it's correct.
20	MS.	SHEMWELL: Thank you.
21	JUI	OGE BUSHMANN: Redirect by Spire.
22	MR.	PENDERGAST: Just a couple, Your Honor.
23	REDIRECT EXAMINATION	I BY MR. PENDERGAST:
24	Q. Mr.	Hoeferlin, you were asked a question by
25	Staff counsel regard	ling whether or not newly installed plant

that resulted in retirement of plastic plant replaced the 1 2 functionality of that plastic plant. Do you recall that question? 3 Α. Yes. 5 0. And did it, in your opinion, replace the 6 functionality of that retired plastic plant at a higher or lower 7 cost? 8 Α. At a -- overall, it's a lower cost. 9 0. Which would have the effect of reducing rather 10 than increasing the Company's ISRS charges? 11 Α. That's correct. 12 You also were asked a question by Ms. Shemwell Ο. 13 about the absence of a specific time frame for the Company's cast iron and unprotected steel programs in contrast to the 14 15 copper program. Uh-huh. 16 Α. 17 Ο. And why -- well, let's just go back. Under the 18 old approach that was taken by the Company, how long would it 19 have taken to go ahead and remove the rest of its cast iron? 20 Α. For Missouri East, 80 to 100 years. 21 And this was cast iron that was already how old? 0. 22 We stopped putting it in the 1950s, so anywhere Α. 23 from 70 to -- all the way back to the Civil War essentially. 24 a hundred plus years old. 25 Q. Okay.

- A. So by the time we're done, if we'd have kept going at the rate we were with the former program, it would have been over two hundred years old.
  - Q. Okay. And you're aware that the Company has an obligation to provide safe and adequate service?
    - A. Yes.

- Q. Okay. In your opinion, would it have been consistent with that obligation to leave cast iron main in the ground for 180 to 200 years?
  - A. No, it would not.
- Q. You were also asked a question about upgrading the pressure on the system, and I think you said it happens in both the East and West areas. But that's principally an East phenomena; isn't it?
- A. That's correct. In Missouri East, it was originally installed as a low-pressure, about a quarter of a pound. So all meters had to be inside because if you had any type of leak on the system, the groundwater or a leaking water main would actually force water into the system. So you would have outages. If the meter was outside and water got into the meter, you'd have freeze-ups. So very inefficient and, quite frankly, unsafe because it could shut the pilot lights off if you had that outage and then when the water blew by it and the gas would come on with no pilot light being lit. So the higher pressure eliminates all of the water problems.

1	Q. Okay. In your opinion, in replacing cast iron
2	main and going to an intermediate pressure system rather than
3	trying to replicate or maintain a lower pressure system, would
4	it have been economically or operationally feasible to maintain
5	a lower pressure system?
6	A. No. We obviously considered that initially and
7	ruled it out right away, because, one, with the lower pressure,
8	you have to have larger diameter mains, because the gas is at a
9	lower pressure so it takes a larger diameter mains to carry the
10	gas. The meters would have to stay inside. And the hardest
11	part is, you have to make sure that the mains are lower than,
12	say, where the meter is so that if there is any water it will
13	drain out. So it's very, very it's much more difficult to
14	operate that system. So industry standard, everybody is getting
15	rid of that low-pressure type system.
16	Q. And has going to an intermediate pressure system
17	permitted the Company to put in a smaller diameter main?
18	A. That's correct.
19	Q. Does that any savings in terms of excavation
20	costs?
21	A. Yes. A couple of things. One, obviously, the
22	pipe itself is cheaper because it's a smaller diameter, less
23	material. Two, it's easier to install, because, say it's
24	two-inch versus say an eight-inch main. And then, three, with
25	the way that we're putting it in, rather than going back in the

street, down deep, we go back into the grassy areas of the city 1 2 and just directionally bore. So it's much easier and much more cost effective to put that in. 3 And has going to an intermediate system as 4 5 opposed to trying to preserve a low-pressure system had any 6 impact on the number of regulator stations the Company has to be 7 maintain? 8 Α. We had -- when we -- when the system was first 9 put in at the end of the 1800s, early 1900s, probably about 130 10 medium pressure to low pressure regulator stations. They were 11 cast iron. They were in the street, very hard to maintain. By 12 going with our new system, we'll have six very efficient, very 13 modern supply feeder to intermediate, which is about 60-pound in 14 the LP system. So a much more efficient design on the system. 15 Ο. So you went from 130 regulators stations down to 16 six? 17 Α. That's correct. 18 Is that what you're saying? Q. 19 Α. Yes. 20 Ο. Does that mean you have to maintain and monitor 21 six regulator stations now instead of 130? 22 That's correct. Α. 23 Q. Any kind of cost savings associated with that? 24 Α. There is a cost savings with that, yes. 25 Q. Finally, what's your opinion on whether going

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with an intermediate system has reduced the Company's ISRS costs
 1
 2
     and charges compared to maintaining a low-pressure system?
                      By going with the higher -- the intermediate
 3
              Α.
 4
     MAOP and 60-pound plastic system, it has lowered the ISRS cost
     rather than trying to go and piecemeal it and putting it in in
 5
     that fashion.
 6
 7
                      MR. PENDERGAST: Thank you. I have no further
 8
     questions.
 9
                      JUDGE BUSHMANN: That concludes your testimony,
10
    Mr. Hoeferlin. You may step down. You're excused.
11
                      THE WITNESS: Thank you, Judge.
12
                      JUDGE BUSHMANN: Why don't we take a short
13
    recess. We'll be in recess until 10:20.
14
                      (A RECESS WAS TAKEN.)
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                      JUDGE BUSHMANN: Okay. We're back on the
     record. Commissioner Kenney, did you want to add something.
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17
                      COMMISSIONER KENNEY: Yeah. I do have, just
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     briefly. I'd like the parties to brief the issue on the recent
19
     Supreme Court decision on Missouri American Water case, on their
20
     ISRS where after it had been reset they said that the issues was
     moot. So I would just like you to brief that.
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22
                      JUDGE BUSHMANN: Okay. We are ready for Spire's
23
    next witness.
24
                      MR. ZUCKER: The Company calls Mark D. Lauber.
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                      (Witness sworn.)
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1		JUDGE BUSHMANN: You may proceed.
2	MARK D. LAUBER h	aving been first duly sworn testified as
3	follows:	
4	DIRECT EXAMINATI	ON BY MR. ZUCKER:
5	Q.	Good morning, Mr. Lauber?
6	Α.	Good morning.
7	Q.	Can you state your full name and spell your last
8	name for the rec	ord?
9	Α.	It's Mark D. Lauber, L-A-U-B-E-R.
10	Q.	Okay. And did you file direct testimony in this
11	case last Wednes	day, August 22nd?
12	Α.	I did.
13	Q.	And if I asked you the same questions that are
14	in that testimon	y today, would your answers be the same?
15	Α.	Yes, sir.
16	Q.	Do you have any changes to that testimony?
17	Α.	I do not.
18	Q.	And are your answers true and correct
19	Α.	Yes.
20	Q.	to your information and belief?
21	Α.	Yes.
22		MR. ZUCKER: I move for the admission of
23	Mr. Lauber's dir	ect testimony into the record.
24		JUDGE BUSHMANN: Any objections. Hearing none,
25	it's received.	

Spire Exhibit 4 was received into 1 (WHEREIN; 2 evidence.) JUDGE BUSHMANN: Do you any rebuttal questions 3 4 that you would like to ask? 5 MR. ZUCKER: Yes, Your Honor. 6 REBUTTAL BY MR. ZUCKER: 7 Ο. Mr. Lauber, do you have Mr. Sommerer's direct 8 testimony with you? 9 Α. Yes, I do. And do you see on Pages 1 and 2 where 10 0. 11 Mr. Sommerer talked about a comprehensive before and after 12 design of the distribution system, that he thought should be 13 available? 14 Α. Yes. 15 And by before and after, is it your opinion that Ο. he means before we switched to the systematic program versus 16 17 after we switched to that program? 18 I believe he's referring to before we actually Α. 19 did our -- performed our replacements and then after. 20 0. Well, he's talking about a before and after of 21 the design of the system. Does that sound right? 22 Α. I'm sorry. Could you point out where that's at? 23 Q. Page 2, Line 8, 9, 10. 24 They have --Α. This is of his remand. I'm sorry. 25 Q.

Okay. I was looking at the wrong --1 Α. 2 Q. Yes, his remand direct which is the 2016-0332, 0333, 0201, and 0202. Sorry about that Mr. Lauber. 3 That's all right. I have Case 2018-0310. And I 4 Α. 5 may not be referring to the same thing, as you. 0309? 6 Ο. Yes. If you don't have it I would be happy --7 I don't believe I have it. Α. 8 Q. -- to provide it for you. One second, please. 9 I'm going to bring you mine. I believe he says the same kind of 10 thing in 0309 and 0310. Pages 1 and 2 is what I was looking at 11 in the one I just handed you? 12 Okay. I see that. Α. 13 All right. Let ask you: When the Company 0. 14 changed from its old piecemeal replacement to its systematic 15 replacement, how did the Company do it? What kind of analysis did it do? 16 17 Well, the piecemeal method was utilized over a 18 course of many years. And it was really just an approach of, 19 you know, basically addressing what we had to address, you know. 20 Specifically what was failing or what we felt was about to fail. 21 Actually, we've been doing that since probably the early 1970s, 22 that type of method. But as time went on and, you know, related 23 to the previous testimony with the, you know, the pressure that 24 the industry was undergoing to step up its placements in or about the year 2010, we really looked at other methods, and more 25

economical methods to step up, you know, the replacement.

So -- so it was just kind of an inherent, you know -- we met with our, you know, replacement crews that were actually doing the work. We met with industry groups to see what other methods were being utilized out there. About that time, you know, trenches technology or we call it, you know, directional boring really had come into its own. We were pretty comfortable with it and showed that it was a much more economical method of installing, you know, new pipe in urban congested environments where you didn't have to open up pavement and deal with a lot of pavement restoration and things like that.

So all of these things kind of combined really showed that, you know, the replacement, you know, if we were going to really step up, the placement of, you know, installing basically a new pipe, you know, off to the side, not trying to get into for the cast iron was at typically in the street was much more efficient to put that pipe in an area where we could get it off to the side, you know, typically the sodded area of the street.

So I would say that, you know, it was a maybe analyses and review of many jobs over the years and then especially toward, you know, the later part of the, you know, into 2010, you know, indicated that the method of the systematic approach was a much more economical approach.

Q. Okay. And did you compare that to the approach of reusing the plastic that was already in the net worth?

- A. Absolutely, because we had a been doing that for many years. Essentially, you know, from time to time we would go in and tie into an existing piece of plastic that was already there and then extending that on. Actually, that's how we did our replacements, you know, via an assertion type -- you know, in the old cast iron. So we were very familiar with that method of how you would try to reuse the plastic, if you will, because essentially when you're working your way down a block replacing that cast iron pipe that's exactly what you're doing. You're tying into the old plastic and you're going further down in the block and abandoning a section of cast iron and then another section of cast iron and another section of cast iron as you work your way down the block.
- Q. Okay. And did the Company just jump into the new system or did they kind of look into it how it might have worked with, you know, some samples?
- A. We spent a lot of time, actually over a year, you know, reviewing our system and determining, you know, how we would go about essentially, you know, redesigning, you know, the system to be able to eliminate the cast iron. So you know, we did have some early projects that we did look very close at, you know, the Grove area off of Manchester in St. Louis if anybody's familiar with that, the Baden (ph.) area. It's a little bit on

1	the north side fairly close to the river. And then Lee Bay is
2	another project. Those are the early projects that we really
3	embarked on. And yeah, we looked very closely at those and how
4	they were working.
5	Q. And what did you conclude from those early
6	projects?
7	A. The systematic approach was very effective.
8	Q. Mr. Sommerer was concerned that the Company had
9	not provided more information to the Staff. Had you kept the
LO	safety staff informed during this transition to the new system?
11	A. Absolutely. Yeah, they would come in on regular
L2	gas safety inspections and these issues and projects would be
L3	talked about quite openly.
L4	Q. And who did you talk with at Staff. Do you
15	recall?
L6	A. Yeah. Probably more often than not during a gas
L7	safety inspection it would be John Kottwitz, and some other of
L8	other staff engineers and then on a regular basis, you know, I
L9	would be in touch with Bob Leonberger as well.
20	Q. Let me go back to the old method. Mr. Sommerer
21	indicated that in the old method we used to insert the plastic
22	pipe into the cast iron. Do you agree with that?
23	A. Typically, that's how we would do it, yes.
24	Q. Okay. And so did we consider as an alternative

continuing the old method just ramping it up? In other words,

turning the old method of -- continuing to do the insertions,
but doing it on a more comprehensive basis?

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- A. Yeah. We evaluated insertion method along with as I mentioned the directional boring type of method. Yes, we did.
- Q. Okay. And why didn't you choose the insertion method?
- Α. Because it is extremely, extremely inefficient. You know, one of the problems you have is you have to maintain your current customers. And our practice has been that we don't like to see customers out of gas overnight during a project. would be very simple if we could just kill the main on the entire street temporarily while we're replacing it, but you would also take your customers out of gas, too. And unfortunately, we can only do all the service tie-in work for a couple of customers a day per crew at a time. So that means maybe you only have 200 feet of main that you're able to kill on a particular day and then you do all of the service tie-in work, you, after you insert your new plastic main. And then the next day, you know, you would work on killing the next 200 feet or so. And then because you've got to tie those services in before the end of the day to have the customers back in gas.
- Q. You're saying when you're doing insertion into the cast iron main, you would have to take the customers in that area in those few hundred feet out of service while you were

working inside the cast iron main? 1 2 Α. That's correct. That's correct. Because that is the feed to the customers' homes. Yes. 3 And you would not have to do that with the 0. 5 directional bore in? 6 MS. SHEMWELL: I'm going to object that all of 7 Mr. Zucker's questions are leading and he's talking to his own 8 witness. 9 JUDGE BUSHMANN: Your response? 10 MR. ZUCKER: I will be glad to rephrase the 11 question. 12 JUDGE BUSHMANN: Please go ahead. BY MR. ZUCKER: 13 14 0. Okay. Do you have to take gas out of service to 15 do directional bore in? 16 Α. No. You do not because you are installing an 17 entirely new system. So as we've discussed previously I 18 believe, you know, that main in on a completely different 19 location, different depth. It's typically along the sodded area 20 or along the curb. Once you get that main in, you know, you're 21 obviously not impacting the main or services that are feeding 22 the customers. You just put that main in and then you run --23 after that's done and you could put in maybe a whole block in a 24 day of main and then you have your crews start working on the 2.5 services.

Those services don't impact the customers because the customers are being fed off of a low-pressure older cast iron main. You get all of the services on that entire block ready to go. And then you transfer them over to the -- you gas it up, you gas up your new system, which is this intermediate pressure system. And, you know, as the customers are available -- because that's another issue is they have to be home so that we can transfer them over. So as the customers are available we will transfer them over to the new system. And that can take place at the convenience of when we have the resources to do it and when the customers are home. So it is a very efficient method of replacement.

- Q. Okay. So when you're directionally boring in main, the new main, how do the customers keep their gas on?
- A. Well, as I said, it doesn't impact the old system, you know, the cast iron system whatsoever because we're putting in a new main and that gas feed is coming from, you know, way down the street or blocks away, if you will, because we're feeding it along. It's a new pipe. We are putting in a new system. It's independent of the old low-pressure cast iron system, so they are not impacted at all. The only impact is that we'll get a new meter set typically on the side of their house outside because we're moving meters outside.

So we get the new meter set and ready to go, let the service line run up to it. Once we get gas on that then --

they're still being fed from the service that goes into the 1 2 basement typically with the meter inside. So we'll have the piping all ready to go to the new meter set and then it's just a 3 simple -- once we get all of that work done -- and while we're 4 5 doing this the customer's still on gas on the old system. Once 6 we are ready to transfer them over, it is just a very simple 7 short process of transferring them over to the new meter set. 8 Q. Okay. You indicated there's a limit. If you were to do insertion, there's a limit to how much you could do 9 in a day. Could you give me an estimate about what we're 10 11 talking about in footage? 12 Well, it is really subject to crew availability Α. and how many what we call our service technicians that would be 13 available to do that piping work of the customers piping and 14 15 that kind of thing. So that's usually what the shortcoming 16 would be is that you'll deal with the customers. In some cases 17 it may only be a few customers. You know, like I mentioned 200 18 feet but that's typically a couple of houses, you know. So it 19 would vary based on manpower available. 20 O. And how much can you directionally bore in? 21 MS. SHEMWELL: I have a question. Pardon me. 22 What part of Sommerer's testimony are you --23 MR. ZUCKER: He was concerned that we didn't do 24 a before and after and so we're looking at exactly what we did 25 to make the decision.

1	MS. SHEMWELL: Okay. Thank you.
2	MR. ZUCKER: Thank you.
3	MR. KEEVIL: I do think I did hear the before
4	and after what may be in question, but you're talking about, I
5	believe a different before and after than what Mr. Sommerer was
6	talking about in his testimony.
7	MR. ZUCKER: Well, he talked about a before and
8	after design schematics and planning narratives.
9	JUDGE BUSHMANN: Is there an objection about the
10	scope of the question?
11	MR. KEEVIL: Yes. The testimony relates to the
12	before and after the old and new systems. It doesn't say old
13	and new replacement methodology.
14	JUDGE BUSHMANN: It seems like we're starting
15	getting far afield from the scope of the direct. If you can
16	kind of close that off and move along.
17	MR. ZUCKER: Okay.
18	BY MR. ZUCKER:
19	Q. Last question: Is the new is the method you
20	chose more efficient than having the than having done the
21	insertion method?
22	A. Absolutely.
23	Q. And does it cost less?
24	A. Yes.
25	MR. KEEVIL: The previous question was the last

1	question.
2	MR. ZUCKER: No. That one was the last
3	question.
4	JUDGE BUSHMANN: Any other questions in
5	rebuttal?
6	MR. ZUCKER: Yes, sir.
7	JUDGE BUSHMANN: Go ahead.
8	BY MR. ZUCKER:
9	Q. Okay. Mr. Sommerer on Page 4 of his testimony
10	on the remand cases refers to previous plastic inserts into cast
11	iron. Do you see that?
12	A. Yes.
13	Q. And he seems to indicate that when we did the
14	insert of plastic into cast iron that okay so then there
15	was plastic made in cast iron and now we are running new main
16	and he seems to indicate we're replacing plastic when we're
17	trying to make it look like we're replacing cast iron. Is that
18	what you got out of his testimony?
19	MS. PAYNE: I object. That was an incredibly
20	leading question.
21	MR. ZUCKER: Well, I'm just trying to
22	MS. PAYNE: Testify yourself?
23	MR. ZUCKER: No. I'm just trying to set up what
24	I am rebutting.
25	JUDGE BUSHMANN: I'll allow you to explain the

testimony you're going to ask about and then you can ask the 1 2 question. BY MR. ZUCKER: 3 0. Is that your understanding? 5 Α. I understand his testimony. Yes. 6 0. Okay. Is it accurate that the Company -- when 7 the Company did put in its new main that it replaced -- that it 8 said that that is replacing cast iron rather than plastic? 9 MS. SHEMWELL: Again, leading. THE WITNESS: Can I answer? 10 11 JUDGE BUSHMANN: Overruled. Go ahead and 12 answer. 13 THE WITNESS: So when we're replacing a section of cast iron, the cast iron footage that we count is the portion 14 15 that has gas on it, so that is what we consider, you know, 16 in-service pipe. If there is also associated plastic that gets 17 retired that has gas on it, in-service plastic, we count that 18 footage. So we are counting both footages, different material. 19 BY MR. ZUCKER: 20 0. Let me ask it this way: When we did the 21 insertion of plastic in the cast iron, did we retire the cast 22 iron? 23 Α. Yes. 24 And so we would now count that section as O. 25 plastic?

1	Α.	Correct.
2	Q.	And so when we directionally bored a new plastic
3	main in, that wo	uld be counted as plastic replacing plastic?
4	Α.	Correct.
5	Q.	And would be reported that way to the Staff?
6	Α.	Correct.
7	Q.	Okay. On Page 5 of Mr. Sommerer's testimony he
8	testifies that w	hat he thought were patches he now believes are
9	longer pieces of	plastic. Do you see that?
10	Α.	Yes.
11	Q.	Okay. And what would you say about the amount
12	of plastic being	replaced plastic main being replaced versus
13	cast iron or bar	e steel main in terms of the amounts?
14	Α.	Typically the amount of plastic that is involved
15	with these proje	cts, these ISRS projects for cast iron, you
16	know, it varies	from job to job obviously, but on whole it's 10
17	percent or less	based on my review of footage would be plastic.
18	Q.	Okay. And is that consistent with Staff witness
19	Bolin's testimon	y?
20	Α.	I believe so, yes.
21	Q.	And you said that you had been replacing plastic
22	through these pa	tches or insertions since the early '70s?
23	Α.	Yes.
24		MS. SHEMWELL: I'm sorry. I'm having trouble
25	following where	you are in two testimonies.

Yes. If you look at the remand 1 MR. ZUCKER: 2 testimony of Mr. Sommerer, I am on Page 5. 3 MS. SHEMWELL: Okay. Thank you. BY MR. ZUCKER: 4 5 0. Did you testify earlier that we've been doing 6 the patches or insertions since the early '70s? 7 Α. Yes. 8 0. So that would be 40 years? 9 Α. Approximately, yes. 10 And we have been doing the accelerated 0. 11 replacement for how long? 12 Α. Since about 2011. MR. ZUCKER: I believe that's all I have, Your 13 Honor. Thank you. 14 15 JUDGE BUSHMANN: Cross-examination by Staff? 16 MS. PAYNE: A few questions. Thank you. 17 CROSS-EXAMINATION BY MS. PAYNE: 18 Good morning, Mr. Lauber. You discussed the 0. 19 plastic insertion process. Do you have an understanding of the 20 live insertion process? 21 Α. Yes. 22 And are customers taken off of service in the 0. 23 course of that process? 24 At times, they are, yes. Α. Generally, would you say that they are? 25 Q.

Generally, just briefly. But yes, they can be. 1 Α. 2 O. Okay. So when you say briefly it's a shorter 3 process than what you described as the other type of insertion? They would be out of the service of Α. Yeah. 4 5 service a much shorter period. 6 0. Okay. 7 It is also, I would like to add. Α. 8 That's okay. Q. 9 A very inefficient process. Α. 10 I know my answer. Thank you. I wasn't asking Ο. 11 about efficiency. I don't think anyone was. Additionally, you 12 were discussing the practice of insertion has been common after 13 2011. Was it common prior to 2011? 14 Α. Yes. Could you restate the question? 15 sorry. 16 The insertion process of inserting plastic into Ο. 17 cast iron, was that a common plastic that Spire, formally 18 Laclede, used prior to 2011? 19 Α. Yes. 20 Ο. Okay. Additionally, what is your understanding 21 on the term takeaway capacity? 22 Α. If you are referring to the term that we use as 23 carry away capacity -- I'm not sure -- but takeaway and carry 24 away kind of mean the same thing. We use that associated with 25 our overpressure protection of our low pressure system.

1	Q.	Would you say that the historic MGE takeaway
2	capacity is being	changed as a result of the new distribution
3	design being used	Spire West?
4	Α.	I am not familiar with that terminology as it
5	really relates to	Missouri West, so I wouldn't be able to answer
6	that question.	
7	Q.	Okay. Thank you. That's all I have.
8		JUDGE BUSHMANN: Cross by Public Counsel?
9		MS. SHEMWELL: Nothing. Thank you.
LO		JUDGE BUSHMANN: Commissioner questions.
l1	QUESTIONS BY CHAI	RMAN HALL:
L2	Q.	Good morning.
L3	Α.	Good morning, Chairman.
L4	Q.	Could you turn to Page 2 of your direct
L5	testimony.	
L6	Α.	Okay.
L7	Q.	And particularly Lines 14 through 18. I'll give
L8	you a chance to l	ook at it and then I have a question for you.
L9	Α.	Yes, sir.
20	Q.	Okay. The way I read that and your testimony
21	going on to Page	3 and 4 is that you previously provided
22	testimony that th	ere was no incremental increase to the Company
23	as a result of re	placing the plastic patches; is that correct?
24	Α.	That's correct.
25	Q.	So that testimony was in the record that went up
	I	

on appeal. Actually, I'm not going to ask you to answer that. 1 2 So, is it safe to say that the record was full of -- the record contained the same testimony that you're 3 providing here on that issue? 4 I don't believe it contained testimony related 5 6 to analysis that we performed that actually showed that there 7 was no cost incurred. 8 Q. Okay. Explain that. 9 Α. I have to think here. May it's as simple as this and it's probably a 10 0. 11 point worth raising: That you in the previous case you made the 12 argument that there was no incremental cost for replacing the 13 plastic. In this case you are providing analysis that supports that opinion? 14 15 That's my understanding, yes. Yes. Α. 16 And that analysis is the attachment to your 0. 17 testimony; is that correct? 18 Actually, I believe it is attached to Craig Α. 19 Hoeferlin's testimony. 20 CHAIRMAN HALL: Okay. I have no further 21 questions. Thank you. 22 COMMISSIONER KENNEY: No questions. 23 JUDGE BUSHMANN: Any recross from Staff? 24 MS. PAYNE: Briefly. 25 RECROSS-EXAMINATION BY MS. PAYNE:

1	Q.	Mr. Lauber, in the schedule that is attached to
2	your testimony,	it's your testimony previously provided in this
3	case, looking at	Page 11 beginning on Line 17 or beginning on
4	Line 19. Could	you just read Lines 19 to 21 of that testimony?
5	A.	Are you referring to this case or
6	Q.	The previous case.
7	A.	the previous case?
8	Q.	It was filed as the schedule to your testimony
9	in this case?	
10	A.	Okay. Page 11.
11	Q.	Lines 19 to 21?
12	A.	And you'd like me to read it?
13	Q.	Please?
14	A.	There's no basis for a disallowance of any
15	amount because bo	oth OPC's entire position on this issue rests on
16	the false assumption that the Company has incurred some	
17	additional costs	in connection with its incidental replacement
18	of these plastic	facilities.
19	Q.	Thank you. Is that reference what you were
20	referring to just now when Chairman Hall asked you that	
21	question?	
22	A.	Yes.
23		MS. PAYNE: Thank you. No further questions.
24		JUDGE BUSHMANN: Cross by Public Counsel.
25		MS. SHEMWELL: None. Thank you.

1	JUDGE BUSHMANN: Redirect?
2	MR. ZUCKER: Yes, Your Honor.
3	REDIRECT EXAMINATION BY MR. ZUCKER:
4	Q. Good morning again, Mr. Lauber. Staff attorney
5	Ms. Payne asked you about a live insertion process. Was that
6	something that the Company considered in going forward with its
7	ISRS with its cast iron replacement program?
8	A. Yes, because we actually piloted that process in
9	probably the late '80s or early '90s. It involved using foam to
LO	actually stop off the low pressure around the annular space of
11	the new plastic pipe that was inside of it so that you can keep
L2	those mains if you lower both pipes, you know, in-service and
L3	gas at the same time. But as I attempted to describe it was a
L4	very inefficient process and we abandoned that in the '90s.
L5	Q. And was it inefficient from a cost standpoint?
L6	A. Yes.
L7	MR. ZUCKER: That's all I had, Your Honor.
L8	JUDGE BUSHMANN: Thank you, Mr. Lauber. You may
L9	step down.
20	THE WITNESS: Thank you.
21	JUDGE BUSHMANN: We are ready for our next
22	witness.
23	MR. PENDERGAST: Thank you. Your Honor, at this
24	time we will call Eric Lobser to the stand.
25	(Witness sworn.)

1	JUDGE BUSHMANN: You may be seated.
2	ERIC LOBSER having been first duly sworn testified as
3	follows:
4	DIRECT EXAMINATION BY MR. PENDERGAST:
5	Q. Mr. Lobser, would you please state your name and
6	business address for the record?
7	A. Eric Lobser. Business address is 700 Market
8	Street, St. Louis, Missouri, 63101.
9	Q. And are you the same Eric Lobser who has
LO	previously caused to be filed in this proceeding direct
11	testimony consisting of ten pages which has been pre-marked as
L2	Company Exhibit Number 5?
L3	A. Yes.
L4	Q. Do you have any corrections or adjustments to
L5	make to your direct testimony?
L6	A. No.
L7	Q. If I were to ask you the same questions today
L8	that appear in your direct testimony, would your answers be the
L9	same?
20	A. Yes.
21	Q. And are those answers true and correct to the
22	best of your knowledge and belief?
23	A. Yes.
24	MR. PENDERGAST: At this time I would move for
25	admission of Exhibit 5 and tender Mr. Lobster for

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cross-examination.
 1
 2
                      JUDGE BUSHMANN: Any objections to that exhibit?
     Hearing none, it's received.
 3
                      (WHEREIN; Spire Exhibit 5 was received into
 5
     evidence.)
 6
                      JUDGE BUSHMANN: Do you have any rebuttal
 7
     questions you wanted to ask?
 8
                      MR. PENDERGAST: No, we didn't, Your Honor.
 9
                      JUDGE BUSHMANN: Cross-examination by Staff?
10
                      MS. PAYNE: No questions. Thank you.
11
                      JUDGE BUSHMANN: Public Counsel?
12
                      MR. CLIZER: Yes. We have a few questions.
13
     CROSS-EXAMINATION BY MR. CLIZER:
14
              0.
                      Just to get started Spire is claiming that the
15
     -- sorry. Can you hear me? Spire is claiming that it would not
16
     have been safe to use the plastic components already in the
17
     ground. Correct?
18
                      I don't believe that is what they are stating.
19
     I believe -- I am not an engineer, but I believe that their
20
     statement is more that it is less safe to have all those
21
     additional fitting and couplings with reusing the plastic.
22
                      So it will be less safe to reuse the plastic
              Q.
23
     components?
24
                      I believe that's what they were stating, but I'm
              Α.
2.5
    not an engineer.
```

1	Q. All right. You would agree that it is possible
2	for Spire to calculate the cost to replace the old system?
3	A. Under which methodology?
4	Q. Just is it possible? Well, let me ask it this
5	way: Has Spire come up with a number of how much it spent to
6	install new to install a new system?
7	A. If I'm understanding your question correctly,
8	that's what was in the ISRS file.
9	Q. Correct. So that number can be readily
10	determined?
11	A. Yes.
12	Q. And that system was put in place to replace the
13	old system?
14	A. Correct.
15	Q. So that is the cost to replace the old system?
16	A. Yes.
17	Q. Okay. You also agree that we could determine
18	the percentage of plastic in the old system?
19	A. That's being replaced? Is that the question?
20	Q. Yes?
21	A. Yes.
22	Q. Thank you. In your testimony we discussed the
23	Missouri Energy Efficiency Investment Act, or MEEIA?
24	A. Correct.
25	Q. Is your testimony that you apply under the MEEIA

1	statute?	
2	A. No, it's not.	
3	Q. Okay. Is the cost of avoidance mechanisms that	
4	you discussed in regard to MEEIA, are those also found in ISRS?	
5	A. I'm sorry. What mechanisms?	
6	Q. Are the cost of avoidance mechanisms	
7	A. Cost of avoidance. Sorry.	
8	Q found in the MEEIA, do those appear in the	
9	statute?	
10	A. No, they do not.	
11	Q. You also discussed the ratepayer impact measure.	
12	Does ratepayer impact measure appear in the ISRS statute?	
13	A. It does not.	
14	Q. In part of your direct testimony there's a	
15	question that says based on cost of avoidance principles is	
16	there an argument to be made that the Company's ISRS charges	
17	should be increased above the level sought by the Company to	
18	which you responded conceptually, yes. With regard to that	
19	question and answer, are the cost that are being avoided the	
20	cost of connecting to the old system or the cost of reusing the	
21	plastic in the old system?	
22	A. They're both the cost to connect to the old	
23	system as well as future costs related to replacements that	
24	would occur with that reused plastic.	
25	O. So Spire is saying that it had a choice between	

1	reusing the old plastic and not by choosing not to avoided
2	cost?
3	A. Correct.
4	Q. Would Spire have reused the old plastic it
5	believed it was necessary for ISRS eligibility?
6	A. That's a good question because it would require
7	that we look at the cost of other alternatives and in this case
8	we had alternatives that cost less and so it would barring
9	other factors that would be involved in this, would seem an
LO	improper, potentially imprudent choice to go with a more
11	expensive methodology that then brought less future benefits.
L2	Q. So Spire had no intention to reuse the old
13	systems regardless of whether they qualified for ISRS?
L4	A. Well, it was based off of an analysis of
L5	comparing the two viable options and so where it could
L6	economically and operationally reuse the plastics, it would do
L7	so.
18	Q. Even though that would have resulted in a less
L9	safe system?
20	A. Relative to the full replacement of the system,
21	but it would not result in an unsafe system.
22	Q. So you would have sacrificed the safety of the
23	system if it was economically viable?
24	A. I don't believe that is how I would characterize
25	it.

1	MR. CLIZER: Thank you. I think that's it.
2	JUDGE BUSHMANN: Questions by commissioners?
3	CHAIRMAN HALL: I have no questions. Thank you.
4	JUDGE BUSHMANN: Redirect?
5	MR. PENDERGAST: Thank you.
6	REDIRECT EXAMINATION BY MR. PENDERGAST:
7	Q. Mr. Lobser, you were asked a couple of questions
8	about whether or not it's possible to determine the percentage
9	of plastic retired?
10	A. Correct.
11	Q. I believe you said, yes, it is possible to do
12	that?
13	A. Yes.
14	Q. Does determining the percentage of plastic
15	retired have any particular significance to the cost associated
16	with that retirement of plastic?
17	A. None that I am aware of and I have looked for
18	that in the cases of OPC and Staff, but I'm not sure how those
19	two are necessarily related.
20	Q. And to determine what relationship if any there
21	is between the retirement of plastic and the actual cost
22	included in the ISRS, do you need to do the kind of evaluation
23	that Mr. Lauber and Mr. Hoeferlin have done?
24	A. Yes. You would have to compare the two
25	alternatives available to the Company and determine what is the

1	cost of the decision to replace that plastic.
2	Q. Okay. And are you aware of Mr. Hoeferlin's said
3	there was not a data request submitted by the Staff or OPC
4	regarding the nine-plus analyses that were done on various
5	projects and what impact the retirement of plastic had on the
6	cost and charges in the ISRS?
7	A. Was I aware that there were no DRs or what was
8	the
9	Q. Were you aware of whether there were any DRs
10	submitted by Staff or OPC on that?
11	A. Not related to those nine, I don't believe so,
12	no.
13	Q. Okay. And you were asked a couple of questions
14	about prudence. And are you aware is the term "prudence"
15	mentioned in the ISRS statute?
16	A. Yes. It's part of the statute that then looks
17	at the prudency of those costs in a general rate proceeding to
18	determine whether there should be any adjustments made, but it's
19	also mentioned as the part of the review that occurs as ISRSs
20	are filed that that would not be reviewed during that process.
21	Q. Okay. And are you aware of whether anybody,
22	Staff, OPC, or other party proposed any prudence disallowances
23	in the these rate cases associated with ISRS investments?
24	A. No.
25	Q. And from the standpoint that the ISRS statute

mentions prudence and talks about prudence being reviewed in a 1 2 rate case and your testimony is that it would have been more expensive and less safe to not retire plastic or it would not be 3 operationally or economically reused. Do you believe that the 4 prudent thing to do was what the Company did? 5 6 Α. Yes. 7 And did the Company have the option of not doing 0. 8 anything? 9 Not doing any replacements? Α. 10 Yes? Q. 11 It had to have a replacement program that Α. No. 12 it put into implementation to replace cast iron and bare steel. And in making that determination on how to do 13 0. it, what options did the Company have available to it? 14 15 Essentially, the two viable options were to Α. reuse the plastic in place or to replace it. There was the 16 17 prior approach that was taken as a piecemeal approach, but it 18 had long since determined that that operationally and 19 economically was really not a viable option. So it compared the 20 approach of replacing to reusing the plastic. 21 Okay. And in those instances where the Company Ο. 22 decided that it needed to replace rather than trying to reuse 23 the plastic, was that governed by which method cost less? 24 I don't know all of the factors that were in Α. 25 play, but I believe that was one of the significant and perhaps

1	the deciding factor was that it achieved the same, if not better	
2	outcomes, with lower costs.	
3	Q. Okay. And based on the analysis the Company has	
4	performed, certainly on an overall basis, replacing plastic	
5	where it would not be economically or operationally reused has	
6	resulted in reduced cost?	
7	A. Correct.	
8	Q. And does it follow then the Company's ISRS	
9	charges are lower than they otherwise would have been because of	
10	the retirement of this plastic?	
11	A. Correct. If it had decided to reuse the plastic	
12	in those situations the ISRS would have been higher.	
13	Q. And put another way with that be that the cost	
14	associated with retiring the plastic are negative?	
15	A. Correct.	
16	MR. PENDERGAST: Thank you. I have no further	
17	questions.	
18	JUDGE BUSHMANN: That concludes your testimony,	
19	Mr. Lobser. You are excused.	
20	Ready for our last witness from Spire.	
21	MR. ZUCKER: The Company calls Glenn W. Buck.	
22	(Witness sworn.)	
23	JUDGE BUSHMANN: You may be seated.	
24	GLENN W. BUCK having been first duly sworn testified as follows:	
25	DIRECT EXAMINATION BY MR. ZUCKER:	

1	Q.	Good morning, Mr. Buck?
2	Α.	Good morning, Mr. Zucker.
3	Q.	And can you state your full name for the record?
4	Α.	My name is Glenn W. Buck.
5	Q.	I'm not going to ask you to spell it because
6	there's only one	way to spell Buck.
7	Α.	Just like Jack, buddy.
8	Q.	And did you file testimony in these ISRS cases
9	on last Wednesda	y, August 22nd?
10	Α.	I did.
11	Q.	Okay. And do you have any changes to that
12	testimony?	
13	Α.	I do not.
14	Q.	And if I asked you the same questions in that
15	testimony if	I asked you those questions today would your
16	answers be the same?	
17	Α.	Yes, sir.
18	Q.	And are they true and correct to the best of
19	your knowledge,	information, and belief?
20	Α.	Yes.
21		MR. ZUCKER: I offer Exhibit 6 into the record.
22		JUDGE BUSHMANN: Any objections? Hearing none,
23	it's received.	
24		(WHEREIN; Spire Exhibit 6 was received into
25	evidence.)	

1	JUDGE BUSHMANN: Since this is your last
2	witness, do you also want to offer 1 and 2?
3	MR. ZUCKER: Yes. And this would be the witness
4	who sponsored them.
5	JUDGE BUSHMANN: Are there any objection to the
6	receipt of Exhibits 1 and 2 to the record?
7	MS. SHEMWELL: Yes. Our objection is that the
8	petition does not comply with the ISRS statute. The application
9	does not comply with the ISRS statute in that it includes
10	plastic pipe that the Western District has determined is not
11	available under ISRS.
12	JUDGE BUSHMANN: Overruled. 1 and 2 are
13	received into the record.
14	(WHEREIN; Spire Exhibits 1 and 2 were received
15	into evidence.)
16	JUDGE BUSHMANN: Any rebuttal for this witness?
17	MR. ZUCKER: Thank you, Your Honor. Very
18	briefly.
19	REBUTTAL BY MR. ZUCKER:
20	Q. Mr. Buck, have you looked at Staff witness, Kim
21	Bolin's testimony?
22	A. Yes, I have.
23	Q. And have you looked at her calculation of
24	plastic replaced versus other materials replaced?
25	A. Yes, I have.

1	Q. And do you have any comment about that?
2	A. Sure and part of this goes to the question of
3	blanket work orders. If you look it Spire West, so for example,
4	Bolin this is 3009, 3010 case. Bolin schedule KBB-3, Page 3
5	of 3. If you look down at the bottom of it you will see totals
6	that they have feet of main replaced for Spire West was 475,000
7	feet approximately. Feet of services replaced were 128,000.
8	What makes that's what differentiates Spire
9	West from Spire East is Spire West went through a service line
10	replacement program in the '90s where they replaced a lot of
11	yard lines. So most of these Spire East or Spire West,
12	sorry, service territories service lines are all fairly new and
13	there all already plastic for the most part. I'll get to the
14	other ones in a moment. But they don't really do full service
15	line replacements there or most of these when they're connecting
16	up to a new main, they do a tie-over, which is also known as a
17	transfer.
18	So you'll see a substantially less plastic
19	service line replaced on the west side of the state than you do
20	on the east. So for example, if you look at KBB-D2, Page 4 of 4
21	it looks like. We got 356,000 feet of main replaced and 356,000
22	feet of service line replaced. For the West you see it is
23	roughly 1/4 of that in comparison to the main.
24	The second thing I did want to add is that they
25	have at this point taken the service lines and or all of the

blanket work orders they have basically attributed the disallowance, if you want to call at that, related to the blanket work orders. They used -- basically they weighted the average percentage of these specific work orders they looked to and as was already was addressed the blanket work orders really are not done tying in main work orders. They are done for specific reasons.

2.5

So for example service lines, we have a service work order 695300. It's for replacement of service lines that are less than -- half-inch or less in the south district. And that is all ones and two replacements and they're being done for specific reasons because those service lines had a defect or I shouldn't say a defect. They had a problem that they had with them, which I addressed in my direct testimony at Page 5, Line 22 through Page 7, Line 2.

And as you'll see for some of those blanket work orders -- and in this specific case -- this is not one work order I discussed, which is 695300 -- we did an analysis over 120 tickets, which we provided the work papers for this when I provided my testimony. We looked at over a hundred tickets to determine why those particular services were removed. And in this case we found that of the 120 of them we had 12 or -- 21 of them were for copper -- or for erosion inspection related costs. There was corrosion on the riser. Forty-three of them were regular leaks on either copper or steel. Forty-six of them were

pigs -- sorry -- copper pigtails, which is like copper that 1 2 literally looks like a pigtail attached to the service and they use that go down to the main. That's now plastic now, but when 3 4 they first did it, it was copper. And so they are replacing that at the same time. Those are the types of things that we 5 can work blanket work orders. 6 7 We also have blanket work orders that are -- for 8 example, we'll go out and we'll be chasing leaks. So we'll go 9 out we'll have a leak call from a main job. And normally they 10 go out and they fix the leak and it would be less than 20 feet 11 of main they would expensive it. That's normal. That's normal 12 activity and that's uniform system accounts says to do. Well, if you replace more than 20 feet under our rules we have to 13 capitalize it. Rather than creating a new emergency work order 14 15 as the case may be, they charge it to a blanket -- what is 16 called a maintenance work order, but it's not really for 17 maintenance. It really is for capitalization of mains 20 feet 18 or longer. 19 And Staff has eliminated now a large percentage 20 of those too in the same relationship to the other specific work 21 orders that they did. 22 So are blanket work orders part of the cast iron Q. 23 main or bare steel main replacement program? 24 MR. KEEVIL: I'm going to object as not being 25 rebuttal. He is explaining his own direct testimony as near as

1	I can tell.
2	JUDGE BUSHMANN: How is this follow the rebuttal
3	of a direct witness, Mr. Zucker?
4	MR. ZUCKER: Yes, this I believe Mr. Buck
5	testified that this was in Ms. Bolin's testimony or Staff's
6	testimony in which Staff removed costs of blanket work orders.
7	JUDGE BUSHMANN: Overruled.
8	BY MR. ZUCKER:
9	Q. So should Staff have removed the cost of blanket
10	work orders?
11	A. No.
12	Q. And why is that?
13	A. For the reasons I just stated. There are
14	specific jobs that are for example and by the way I should
15	say some of the others in the 121 were plastic. They were
16	plastic that was caused perhaps when you put a plastic line out,
17	it was placed there was a tree there and the tree roots
18	starts to grow and displaces the plastic and it causes a leak,
19	for example. That's something we replace also.
20	For the reasons I stated. For Spire West
21	they're all tie-ins and whether you are doing replacing
22	steel, whether you're replacing cast iron or whatever it is, you
23	have to find some way to get these service lines from the house
24	to the new main. You have to transfer the old main to the new
25	main and you could have as I believe Mr. Lauber and

Mr. Hoeferlin testified, you're going to have some replacement 1 2 costs or some plastic that gets retired at that point that 3 basically gets sacrificed. And it could be because the old main was on the left side of the street and now it's on the right 5 side of the street so the portion of the service line crossing 6 underneath the road is no longer necessary so you abandon it 7 there. 8 Or it could just be that it's being disconnected at the curb box and instead of having to go six feet down to 9 10 connect to a main, it goes three feet out but it also doesn't 11 have to go underneath the street. 12 Okay. Let me ask you another direct question 13 about the blanket work order issue. Are the facilities that are included in the blanket work orders worn out or in deteriorated 14 15 condition? 16 For the blankets I would believe so, yes. Α. 17 O. And that would include the plastic that's in the 18 blankets? 19 Α. That's correct. 20 MR. ZUCKER: I think that is all I have for 21 rebuttal. 22 THE WITNESS: Thanks, Mr. Zucker. 23 JUDGE BUSHMANN: Cross by Staff. 24 CROSS-EXAMINATION BY MR. KEEVIL: 2.5 Q. Mr. Buck, you just stated that you believe the

1 plastic included in the blanket work orders are either worn out 2 or deteriorated condition if I understood you correctly; is that correct? Was that your testimony? 3 Α. Yes. 5 Ο. Okay. How do you define worn out or 6 deteriorated for purposes of that answer? 7 Well, in this case I would generally say the Α. 8 plastic is probably more deteriorated because, for example -- in 9 other words stick with the tree root incident where the tree is 10 -- you've got go a piece of plastic --11 How do you define worn out or deteriorated for 12 purposes of your answer? 13 For purposes of my answer that means it is no Α. 14 longer in the safe established condition to provide service. 15 And that could happen by tree roots? Ο. 16 This isn't like a third-party damage where Α. 17 somebody struck a line. That is something that happens over 18 time where a fitting gets moved or -- which could cause a slow 19 leak --20 O. A fitting gets moved? 21 What? A fitting gets loose, I said. Α. 22 Loose? I'm sorry. I thought you said moved. Q. 23 Α. No. 24 So how many of them -- you keep going back to Ο. 25 tree roots. How many of your plastic replacements were due to

1	tree roots?	
2	Α.	Honestly, I did not do the analysis on this
3	other than to lo	ok at what they came up with.
4	Q.	Okay. So you did not do an analysis to
5	determine what w	as replaced specifically under these under
6	the blanket work	order that you are referring to?
7	Α.	No. I'll leave that to the engineers.
8	Q.	Okay. Thank you. Nothing further.
9		JUDGE BUSHMANN: Cross by Public Counsel.
10	CROSS-EXAMINATIO	N BY MR. CLIZER:
11	Q.	Good morning.
12	Α.	Good morning.
13	Q.	Yes. It is still morning. My name is John
14	Clizer, by the w	ay.
15	Α.	Nice to meet you, sir.
16	Q.	In your direct testimony you discuss
17	inappropriate ad	justments related to service line transfer
18	renewals.	
19	Α.	Could you point me to a page, please?
20	Q.	Page 7.
21	Α.	Thank you.
22	Q.	Actually, I think you might have mentioned it
23	slightly in rebu	ttal, too, but it doesn't matter. You said
24	these service li	ne replacement renewals were due to the fact
25	that Spire was c	hanging the design of its system from a low

1 pressure to and intermediate pressure; is that correct? 2 quote the question. 3 Α. Give me a moment to read it, please. 4 Q. Sorry. 5 MR. ZUCKER: I'm sorry. Mr. Clizer, can you 6 tell me where you are? 7 THE WITNESS: He's at Page 7, Lines 8 through, I 8 believe 26. 9 BY MR. CLIZER: 10 Actually, I would start at 10 through 13. Q. 11 Okay. Well, there's a question there. It's Α. 12 starts at otherwise. 13 Fair enough. I apologize. 0. 14 MR. ZUCKER: Thank you. 15 THE WITNESS: Your question now, please? BY MR. CLIZER: 16 17 0. Spire was using his opportunity -- sorry --18 Spire was using its requirement to replace the cast iron and 19 steel as an opportunity to be design the system. Correct? 20 Α. That's more of an engineering question. 21 In your testimony you state it's moving from a 0. 22 low pressure system to a high pressure -- intermediate pressure 23 system; that is correct? 24 That's correct. Yes, it is. Α. 25 Q. And would you consider that a change of the

1	design?	
2	Α.	I would consider that to actually a more
3	efficient way of	replacing the system.
4	Q.	Is the design the same?
5	Α.	To put main on one side of the street versus
6	both sides of th	e street?
7	Q.	Yes?
8	Α.	I would say that is probably a design change,
9	yes.	
LO	Q.	So that would be a redesign. Correct?
11	Α.	It's a design change.
L2	Q.	Right. And so Spire was using its replacement
13	program to redes	ign the system. Correct?
L4	Α.	It was using its replacement program to replace
15	cast iron and st	eel in a more efficient fashion.
L6	Q.	Correct. I'm sorry. I lost my train of thought
L7	for a split seco	nd. So it was redesigning the system as part of
L8	its placement?	
L9	Α.	I struggle with the term redesign because I
20	didn't design it	in the first place so I did not redesign it.
21	Q.	Low pressure was sorry the old system was
22	a low pressure c	losed loop system. Correct?
23	Α.	It was a low pressure system on Spire East in
24	the city area.	We have a lot of this Spire East area is not
25	low pressure, bu	t specifically where the cast iron is, yes.

```
It's a low pressure system.
 1
 2
              Ο.
                      Right. And it was changing to an intermediate
 3
     system.
              Correct?
                      As part of switching out the cast iron and
              Α.
     steel, yes.
 5
 6
              Ο.
                      Right. So pursuant to the switching out the
 7
     cast iron and steel Spire was redesigning the system?
                      MR. ZUCKER: I think it's been asked and
 8
 9
     answered, Your Honor.
10
                      JUDGE BUSHMANN: Sustained.
11
                      MR. CLIZER: Fair Enough.
12
     BY MR. CLIZER:
13
                      On Page 5 of your testimony Lines 18 to 21 you
              0.
     make mention of work order 902101. And you characterized that
14
15
     as a relocation to comply angle of repose; is that correct?
16
                      Yes. That's correct.
              Α.
17
                      MS. SHEMWELL: I would like to mark this exhibit
18
     as Exhibit 202.
19
                      (WHEREIN; OPC Exhibit 202 was marked for
20
     identification.)
21
                      MR. CLIZER: Sorry. I'm a little new to this.
                      MS. SHEMWELL: You will describe this as work
22
23
     order 902101.
24
     BY MR. CLIZER:
2.5
                      This is the work order that you are referring
              Q.
```

1	to. Correct?
2	A. Yes. It appears to be.
3	Q. All right.
4	MR. CLIZER: I'd like to tender this exhibit?
5	JUDGE BUSHMANN: Any objection to the receipt of
6	Exhibit 202?
7	MR. ZUCKER: He's identified it as an accurate
8	version?
9	JUDGE BUSHMANN: I believe so.
10	THE WITNESS: I'm still looking at it.
11	MR. ZUCKER: Give him a moment to look at it.
12	THE WITNESS: Okay. Yes. It appears to be.
13	MR. ZUCKER: No objection, Your Honor.
14	JUDGE BUSHMANN: Any objections from Staff?
15	MR. KEEVIL: Is this the complete this is a
16	portion.
17	THE WITNESS: It shows Pages 1 through 5 and
18	there are five pages here, so I would assume it's complete.
19	MR. KEEVIL: No objection.
20	JUDGE BUSHMANN: 202 is received.
21	(WHEREIN; OPC Exhibit 202 was received into
22	evidence.)
23	BY MR. CLIZER:
24	Q. At the top of the work order on the first page
25	it says WO type description, which I assume stands for work

1	order type descr	iption?
2	Α.	Yes.
3	Q.	And it says work order replacement mains and
4	services. Do yo	u agree with me?
5	Α.	I would agree that that is what that says.
6	Q.	And underneath at the bottom of that first box
7	where it says No	tes, it says: This main is being replaced due
8	to being placed	on angle of repose.
9	Α.	Yes.
10	Q.	Do you agree with that? I'm turning to Page 2.
11	In the bottom bo	x marked Class Codes in the second line where it
12	says ISRS reason	and it says: 02 cast iron angle of repose, I
13	assume, that's A	OR
14	Α.	Yes.
15	Q.	replacement?
16	Α.	That's correct.
17	Q.	Correct.
18		MR. CLIZER: I think that's all of my questions.
19		JUDGE BUSHMANN: Commissioner questions?
20		CHAIRMAN HALL: Yes.
21	QUESTIONS BY CHA	IRMAN HALL:
22	Q.	Greetings.
23	Α.	Good morning.
24	Q.	Could you turn please to Page 3 of your direct
25	testimony?	

1	A. I am there, sir.
2	Q. Okay. Looking at Line 7 to 22, I interpret this
3	to be a number of specific concerns that you have with Staff's
4	methodology to implement, the Western District's opinion; is
5	that correct?
6	A. Assume that you agree that that methodology
7	needs to be done, I agree that these are some of the flaws I
8	found with how they did it, yes.
9	Q. So you discovered other flaws?
LO	A. Well, I still think that the premises they
11	have
L2	Q. I understand that
13	A. Yes.
L4	Q. I mean, but you the way you began that answer
15	if you accept the premise that we need to figure out what
L6	percentage reduction is appropriate which I know the Company
L7	does not agree with but if we accept that premise, these are
L8	problems that you have identified as identified with Staff's
L9	methodology; is that correct?
20	A. That's correct. I might add though that there
21	are other instances where it appears plain and simple
22	mathematical errors. I don't think it raised themselves to the
23	level of being in testimony.
24	Q. Okay. Well, have you quantified any of these
25	flaws with Staff's methodology?

For the blankets I would actually say Kim Bolin 1 Α. 2 actually already has because she separated the blanket work orders out within her testimony. Set those out separately. For 3 most of the rest of these I honestly have not gone back and 4 5 tried to quantify it because frankly I didn't think it was 6 appropriate. I -- it's --7 O. Okay. 8 Α. I don't agree with the method that --9 0. Well, I would have found it helpful. But okay, 10 so the -- with regards to the blanket work orders, you believe 11 that nothing should be excluded; is that correct? 12 That is correct. Can I go back to that question Α. 13 you just had for a moment? 14 0. Sure. 15 The reason why I didn't actually -- to get Α. 16 further -- the reason why I didn't quantify it -- this actually 17 goes back I believe the question you asked me in the original 18 cases, which is oftentimes we are retiring more cast iron or 19 steel that we are installing. Let's say if we retired --20 O. I understand that. 21 Α. I quess --22 I obviously agree that --Q. 23 That's a conundrum for me at that point, so I Α. 24 don't know what to do with the leftover footage. I really don't. 2.5

1	Q. Okay. So concerning the blanket work orders.
2	And I'll turn now to Page 6 of your testimony. You discussed a
3	sample of a hundred of these individual tickets; is that
4	correct?
5	A. I was about it was I think 120, but I only
6	broke down 110.
7	Q. So those are the only blanket work orders that
8	you looked at? The ones the 110 right here; is that correct?
9	A. Those are the only specific jobs that's one
10	blanket work order. There's multiple ones.
11	Q. Okay.
12	A. But within that one blanket work order there's
13	literally hundreds of these and the engineering staff did a
14	sample of those and gave me what they looked at as the results.
15	Q. So what I'm is it your position or
16	understanding or both that all of the infrastructure replaced
17	with regards to the blanket work orders were worn out and
18	deteriorated?
19	A. Worn out or deteriorated. And generally, I
20	would say that for the steel and copper it's certainly probably
21	worn out. For plastic I would say it was a deteriorated
22	condition.
23	Q. So if you had uncovered a leak that you believed
24	was the result of a third-party vandalism or a third-party
25	incident, you would not have included it in this ISRS blanket

work order; is that correct?

- A. That's not eligible, no, sir.
- Q. Are there any other types of projects that you would not include in a blanket -- in an ISRS blanket work orders because it is not eligible? What I'm getting at is I'm trying to understand the Company's position that everything in the blanket work orders is ISRS eligible. I'm trying to understand what evidence there is in the record to support that?
- A. I think the short answer is I don't know of anything else that would be of the sort that would not be eligible. With that said, again, I depend on the engineers to help me with these. I don't necessarily have the expertise to know it on my own. Now again, I supplied work papers to the Staff with all of these and more examples of the items that went into that particular work order. So not only is there this, but there's a sample that is a larger sample size than this. This was all I asked the engineers to look at.
- Q. Back to Page 3 on Lines 16 through 18, one of the flaws you identified is that some of the plastic that was replaced might be or is worn out or deteriorated?
- A. And that's based largely on the depreciation analyses that had been done. So for example with Spire East that taking the average service life of plastic service is going to be 44 years. For Spire West it will be 40. And so we looked at the services that were retired and found that there were

1	certain percentage of them that were from 1978 or earlier.
2	Q. Right. And I so going forward if the
3	Commission were to determine that plastic patches are not ISRS
4	eligible and there should be some type of percentage reduction
5	going forward, would the Company be able to identify that
6	plastic that's being replaced that is worn out or deteriorated?
7	A. Under the scenario that the methodology that we
8	are using to replace the systems currently?
9	Q. No. Under the one I just proposed.
10	A. I would suggest that there are other ways to
11	handle it. For example, if we're doing it as part of a larger
12	project it will be cost efficient to do it that way
13	Q. Yeah. Well
14	A. I was going to say if it's not ISRS eligible,
15	there are other authorities that can be used to sit there and
16	help defer them. Otherwise, frankly it puts us in a little bit
17	of a Catch-22 situation because if we don't replace the plastic
18	now
19	Q. Well, you have safety requirements and prudency
20	requirements to replace that plastic, I believe. And I believe
21	you have some colleagues that have already testified to that
22	affect. So putting that aside
23	A. Okay.
24	Q what I'm trying to understand is if the
25	Commissioner were to determine that plastic patches that are not

1 worn out or deteriorated are not ISRS eligible and should result 2 in some type of percentage reduction, would the Company be able to identify those patches that are worn out or deteriorated? 3 For plastic, honestly no, because generally 5 we're abandoning them in place so you would have to dig them up 6 to see if they are in a worn out or deteriorated condition. 7 think the short answer to that would be no. 8 Q. I'll be interested to hear the redirect on that 9 issue. 10 Thank you, sir. Α. Okay. 11 JUDGE BUSHMANN: Recross by Staff? 12 RECROSS EXAMINATION BY MR. KEEVIL: 13 Regarding this issue that the Chairman was just 14 questioning about Mr. Buck on Page 3, Lines 16 through 18, I 15 suppose, I thought you said initially that was based primarily 16 on depreciation lives. 17 Α. That's correct. 18 Ο. That's correct. So you would not have to dig 19 them out and look at them to determine this in your opinion, or 20 would you? 21 I don't think that would be a logical way 22 to do it nor I don't think it would be efficient. 23 Q. You just answered the question. Thank you. 24 if it is based on the depreciable service lives, were you here 25 earlier during Mr. Hoeferlin's testimony?

1	A. Yes, I was.	
2	Q. Okay. I thought I heard Mr. Hoeferlin say that	
3	these plastic lines are lasting as long as the old cast iron and	
4	bare steel lasted? And we're talking, like, 80 or 100 years	
5	potentially; is that correct?	
6	A. That could be, but that's not what depreciation	
7	experts are showing right now.	
8	Q. Okay. So basically then thethey may be	
9	lasting significantly longer than the depreciable lives that	
10	you're statement is based on. Correct?	
11	A. That's potentially correct. Yes.	
12	Q. You also in response to some Chairman questions	
13	I can't find it where you talking here it is. Page 6,	
14	where you were talking about work order projects you examined	
15	under the blanket work orders. Just to clarify, hopefully:	
16	This analysis I believe you said is based on one blanket work	
17	order. Correct?	
18	A. It's on one of the blanket work orders.	
19	Q. Okay. But you looked at approximately a 120	
20	projects under that blanket work order. Correct?	
21	A. The engineers did. I did not.	
22	Q. Okay. Now, how many blanket work orders total	
23	were there in the ISRS filings, if you recall?	
24	A. Boy, okay. So there's probably five on the main	
25	job, five of the main work orders and there's probably	

because we have South and a North that's 4 East. So I'm just 1 2 sticking with East right now because West is a little bit 3 different. But on the East there's probably -- my quess would 4 be six or seven for both South and North. And they range from 5 -- like for example some of it is half-inch plastic. Some of it 6 is two-inch plastic. 7 Ο. Okay. No. I just want --8 Α. The average range --9 -- to know approximately how my blanket work 0. 10 orders --11 That is right off the top of my head. Α. 12 Now, I believe you said in response to a Ο. 13 question from the Chairman that you had looked at the -- about 14 120 projects -- going back to this one particular work order 15 that you addressed in your testimony. You looked at 16 approximately 120 projects under that specific work order? 17 Α. That's correct. 18 0. Okay. And then I believe you also said you 19 provided your work papers from that to Staff; is that correct? 20 Α. To Staff and the other parties. 21 Right. But work papers are provided after or at 0. 22 the time of the filing of direct testimony; is that correct? 23 Α. That's correct. 24 Okay. In other words, Staff would not have Ο. 25 received those work papers until last Wednesday at the earliest?

1	A. Nor did they ask for them.	
2	Q. Right. Okay. Did Staff asked for blanket work	
3	orders, to your knowledge?	
4	A. In fact I gave them that exact one.	
5	Q. So they asked for the blanket work orders and	
6	you I gave them one?	
7	A. I gave them 695300.	
8	Q. All right. Did you look at any of the other	
9	work orders in a similar manner that you looked at this one that	
10	you referred to in your testimony?	
11	A. Did I ask for an engineering analysis of the	
12	other ones? No, I did not. I spoke with our accounting or our	
13	property record folks to see the types of work that went into	
14	those, but I did not actually ask for an engineering analysis.	
15	Q. Okay. And your response on Page 6 is based on	
16	that engineering analysis that you are referring to; is that	
17	correct?	
18	A. That's correct. Yes.	
19	Q. Okay. And just to make it clear, you are not an	
20	engineer?	
21	A. God, I hope not.	
22	Q. Thank you. Nothing further.	
23	JUDGE BUSHMANN: Recross by Public Counsel?	
24	MR. CLIZER: We're good.	
25	JUDGE BUSHMANN: Redirect?	

MR. PENDERGAST. I'm not sure if Mr. Zucker was 1 2 planning on conducting redirect from the restroom. THE WITNESS: I don't think we're all going to 3 4 go in there. 5 MR. PENDERGAST: No. I think I have an idea of 6 what he might've asked. 7 REDIRECT EXAMINATION BY MR. PENDERGAST: 8 Q. You were asked a number of questions about 9 depreciable lives of plastic plant; is that correct? Or service lines and mains? 10 11 Α. That's correct. 12 Okay. And you're aware the Western District Ο. 13 Court of Appeals it referenced the average service lives of 14 services on both Spire West and Spire East as well as mains on 15 those two operating divisions? 16 That's correct. Α. 17 Ο. Okay. And can you tell me how those 18 depreciation lives that were determined by the Court are 19 constructed and developed at the commission? 20 They're developed through depreciation studies 21 that are done every five years or every three years if you file 22 a rate cases. It's an actuarial study as the case may be 23 looking at basically the survivor curves of various types of 24 pipe where it devel-- so it looks at basically vintage of pipe 25 when it was tired versus when it was replaced and comes up with

something called the Iowa curves that someone developed in 1953 1 2 or something. Mr. Robinett will know a lot more about this than I would. But based on the shape of the curve they can determine 3 what the overall depreciation rate -- depreciation rate would 5 So based on the average service lives and the shape of the 6 curve and the information on cost removal and salvage, they'll 7 come up with an overall rate and average service life and that's 8 what -- then that's put forth for the Commission to consider and 9 once approved that becomes our depreciation rate for that 10 particular account. 11 Okay. So the Company conducts a rather 0. 12 extensive depreciation study. There's a lot of data. It comes up with a recommendation on what the depreciation rate and 13 14 estimated service lives should be for various kinds of 15 facilities; is that correct? 16 That's correct. Α. 17 Ο. Okay. And do other parties also have an 18 opportunity to look at that and come up with their own 19 recommendations? 20 Α. Absolutely. 21 And then in the final analysis do the 0. 22 depreciation rates and useful lives get established by the Commission saying I approve these? 23 24 Yes. Α.

Okay. For services, the average service life is

25

0.

today, based on this depreciation process, 40 years and 44 on 1 2 the other? It was 44 for West. I'm sorry. 44 for East and 3 Α. 40 for West. 4 5 0. And once again the service life or the useful 6 life, that is on average how long we can expect these facilities 7 to last before they wear out? 8 Α. Sure. And I think it is important to note that 9 if you're going out there and you are replacing a system and you 10 come across a plastic service that is 42 years old, but it 11 doesn't have any leaks on it, I'm not sure you shouldn't at 12 least consider removing that at that point because what better 13 opportunity would you have than to be there when it's basically at the end of its service life. 14 15 And so you can use the useful service life as Ο. 16 kind of a rule of thumb as opposed to try to dig down and reveal 17 the pipe in say, Geez, is this worn out and deteriorated yet? 18 Yes. Correct. Α. 19 Okay. And you actually included in your 0. 20 testimony how much of a pipe was the service lines where past 21 their average service life? 22 Α. It was approximately 8 percent, I believe 23 it was for plastic services, not for mains. Mains, I don't 24 think we had any mains that were close to their service life. 25 MR. PENDERGAST: Your Honor, if I could be

permitted to return this to Mr. Zucker, he is a master of 1 2 timing, to see if he had any additional questions. 3 JUDGE BUSHMANN: Certainly. 4 MR. ZUCKER: Just a couple, Your Honor. REDIRECT EXAMINATION BY MR. ZUCKER: 5 6 0. Mr. Buck, Mr. Clizer was asking you questions 7 about the main replacement program and the change in the pressure in the system. Do you recall that from your testimony 8 9 on Page 7? I do. 10 Α. 11 And can you clarify whether the main replacement Ο. 12 program drove the pressure change or whether the pressure change 13 determined how we did the main replacement program? 14 Α. The main replacement program had to happen. And 15 at that time that we started to do the program -- when we 16 decided to do it in a systematic fashion, we decided to sit 17 there and upgrade the pressure to intermediate pressure. So the 18 system or the program drove the pressure changes is the way I 19 understand it. It didn't go the other way around. 20 Ο. And the blanket work order that you looked at, 21 is that representative of blanket work orders? 22 Α. It is of the steel -- it is of the plastic ones, 23 Sorry. It is of the services. Eventually I will get that yes. 24 right. 25 The surface lines? Q.

1	A. Right.	
2	MR. KEEVIL: Which work order are we talking	
3	about there.	
4	THE WITNESS: 695300.	
5	MR. KEEVIL: Okay. I thought you were talking	
6	about the one Mr. Clizer introduced into evidence.	
7	MR. ZUCKER: No. I'm sorry.	
8	THE WITNESS: That was angle or repose.	
9	MR. ZUCKER: Okay. That is all I have. Thank	
10	you.	
11	JUDGE BUSHMANN: Mr. Buck, thank you. That	
12	concluded your testimony, sir.	
13	THE WITNESS: Thank you.	
14	JUDGE BUSHMANN: You may step down.	
15	Why don't we take a break for lunch. We will be	
16	at recess until one o'clock.	
17	(A RECESS WAS TAKEN.)	
18	(WHEREIN; Commission Exhibits A and B were	
19	marked for identification.)	
20	(WHEREIN; Staff Exhibits 100, 101, 102, 103,	
21	104, 105, and 106 were marked for identification.)	
22	(WHEREIN; OPC Exhibits 200, 201, and 202 were	
23	marked for identification.)	
24	(WHEREIN; Spire Exhibits 3, 4, 5, and 5 were	
25	marked for identification.)	

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JUDGE BUSHMANN: Back on the record. We're
 1
 2
     ready for our first Staff witness.
                      MS. PAYNE: Staff will call Kim Bolin to the
 3
 4
     stand.
                      (Witness sworn.)
 5
                      JUDGE BUSHMANN: Please be seated.
 6
     KIM BOLIN having been first duly sworn testified as
 7
 8
     follows:
 9
     DIRECT EXAMINATION BY MS. PAYNE:
10
                      Will you please state and spell your name for
              Q.
11
     the court reporter?
12
                      My name is Kimberly Bolin, and Bolin is spelled
              Α.
13
     B-O-L-I-N.
14
                      And Ms. Bolin, how are you employed? By whom
              0.
15
     are you employed and in what capacity?
16
                      I am employed Missouri Public Service Commission
              Α.
17
     as a utility regulatory auditor.
18
                      And did you prepare or cause to be prepared in
              0.
19
     this proceeding direct testimony that is currently prefiled as
20
     Exhibits 100 and 101?
21
                      Yes, I did?
              Α.
22
                      Do you have any changes or corrections to make
              Q.
23
     to that testimony?
24
                      No, I do not.
              Α.
25
                      And are all the answers contained in that
              Q.
```

1	testimony true and correct to the best of your knowledge?	
2	A. Yes, they are.	
3	Q. And if were to ask you the same questions today	
4	would your answers be the same?	
5	A. Yes, they would.	
6	MS. PAYNE: At this time I will go ahead and	
7	move for the admission of Exhibits 100 and 101.	
8	JUDGE BUSHMANN: Any objections? Hearing none,	
9	they are received into the record.	
10	(WHEREIN; Staff Exhibits 100 and 101 were	
11	received into evidence.)	
12	REBUTTAL BY MS. PAYNE:	
13	Q. And at this time Ms. Bolin, do you have some	
14	rebuttal testimony to provide?	
15	A. Yes, I do.	
16	Q. On Page 3 of Mr. Buck's testimony he listed what	
17	he considered to be certain errors to Staff's ISRS refund	
18	calculation. He claims that Staff failed to recognize that in	
19	many of the work orders the amount of cast iron and steel that	
20	was replaced exceeded the amount of new plant installed; is this	
21	correct?	
22	A. That is correct. We did not review if there was	
23	more pipe that was replaced with less pipe. We strictly looked	
24	at the percentage of plastic pipe that was retired.	
25	O. Did Staff exclude any mandated relocations?	

1	A. No, we did not.	
2	Q. Did Staff remove any ISRS eligible costs that	
3	were necessary to comply with angle of repose requirements?	
4	A. If the angle of repose was included in a	
5	mandatory relocate that was issued by governmental authority, we	
6	did not remove it. However, we did remove cost of angle of	
7	repose in if they were included in other main replacement	
8	categories. We found Company's work papers that were arranged	
9	that way so I am not an engineer. I just assumed that was	
10	the correct thing to do.	
11	Q. When you saw angle of repose on a work order,	
12	did you remove that amount?	
13	A. Only if it was in with the relocation. Excuse	
14	me. We did not remove it if it was in with the relocation. If	
15	it was in with all the other main replacements, we did remove	
16	it.	
17	Q. Thank you. Did Staff exclude any cost of	
18	transferring or connecting service lines to a new main?	
19	A. The only items we excluded were pipe that was	
20	retired. If the pipe was reused we did not exclude it, but if	
21	there was a portion of the pipe that was retired we excluded it.	
22	Q. Thank you. Did Staff receive all of the	
23	relevant work orders for the 2016 and 2017 ISRS filings?	
24	A. We did receive some of the blanket work orders	
25	and we did not receive work orders for under \$25,000 for	

projects totaling \$25,000, excuse me. And in the 2018 case, we 1 2 did receive work order authorizations but they -- some of them were estimated work order authorizations. The final total 3 4 amount of plastic or any type of pipe that was retired was not 5 recorded in those. 6 O. Thank you. Did Staff exclude any blanket work 7 orders that were incurred to meet safety requirements unrelated to the Company's placement program as Mr. Buck alleged in his 8 9 testimony? 10 A blanket work order didn't detail if it was Α. 11 related to the safety replacement item. It just detailed what 12 pipe was retired. Thank you. There's been a lot of discussion 13 0. 14 today about a blanket work order. Can you tell me what exactly 15 is a blanket work order? 16 They're not for a specific project. A blanket Α. 17 work order is -- it also does not have a specific end date to 18 the work order. 19 0. Thank you. 20 MS. PAYNE: May I approach the witness? 21 JUDGE BUSHMANN: You may. 22 BY MS. PAYNE: 23 Q. Is what I just handed you an example of a blanket work order? 24 25 Yes, it is. It's blanket work order number Α.

1 695300. I think we've been discussing that this morning. 2 O. And was this blanket work order provided to Staff by Spire? 3 I should call this a blanket work order Α. authorization. Yes, it was provided by Spire. 5 6 Ο. When this was provided to Staff by Spire, did 7 Mr. Buck state anything in the email that is attached to that 8 that would lead you to believe that the Company expected Staff 9 to analyze blanket work orders in the manner for which he reprimands Staff in his direct testimony? 10 11 Α. He did go on to say that blanket work orders 12 never close. There's no way to distinguish from the work order authorization sheets what is being added and subtracted in the 13 periods for the ISRS involved. He also said there's no 14 15 attribution as to why they placed or when since the work order 16 doesn't ever closed and he was not really sure what good these 17 would do. 18 0. Thank you. Now, Mr. Buck has alleged in his 19 testimony that many of the errors he found in Staff's 20 calculation could be corrected from the blanket work orders that 21 were provided. In that blanket work order, do you see that 22 level of detail that Mr. Buck articulates? 23 Α. I do not see the level of detail that was 24 provided in Mr. Buck's direct testimony. 2.5 And in-line with some of the discussion that --Ο.

1		
1	can cost of a blanket work order include things from several	
2	different ISRS filings?	
3	A. Yes, they can.	
4	MS. PAYNE: At this time I would like to	
5	approach and offer this exhibit into the record.	
6	MR. ZUCKER: Do you have a copy of it?	
7	MS. PAYNE: Absolutely.	
8	JUDGE BUSHMANN: This number would be 107	
9	(WHEREIN; Exhibit 107 was marked for	
10	identification.)	
11	MS. SHEMWELL: Is this public?	
12	THE WITNESS: Yes.	
13	COMMISSIONER KENNEY: Thank you.	
14	MS. PAYNE: And I will explain briefly that	
15	there are three parts to this. The top sheet is the email that	
16	was included by Spire with this. The second stapled portion is	
17	a work paper that Mr. Buck provided in conjunction with his	
18	testimony. And the final stapled section is the actual blanket	
19	work order that was provided to Staff. And it was just	
20	described.	
21	JUDGE BUSHMANN: Any objections to receipt of	
22	Exhibit 107?	
23	MR. ZUCKER: Just a moment, Your Honor.	
24	JUDGE BUSHMANN: Sure.	
25	MR. ZUCKER: No objection, Your Honor.	

1	JUDGE BUSHMANN: Anything from OPC?
2	MS. SHEMWELL: No. Thank you.
3	JUDGE BUSHMANN: Exhibit 107 is received into
4	the record.
5	(WHEREIN; Staff Exhibit 107 was received into
6	evidence.)
7	MS. PAYNE: Thank you.
8	BY MS. PAYNE:
9	Q. Now, Mr. Buck has also alleged that Staff
10	excluded costs that were related to plastic facilities that were
11	at or near the end of their useful lives; is that correct?
12	A. Yes, that is.
13	Q. And did Staff in fact exclude those cost?
14	A. Yes, we did. Just because I'm not an
15	engineering expert. I've never done a depreciation study. Just
16	because my understanding is just because an asset has lived
17	has a useful life of a certain time period, does not mean it
18	is worn out and deteriorated.
19	Q. Is there anything that was provided in the work
20	order authorization sheets that explained if a main or a service
21	was worn out or deteriorated?
22	A. No, there was not.
23	Q. Are there replacement programs that mandate cast
24	iron and steel be replaced?
25	A. Yes, there is.

1	Q. Did Staff consider that in its calculations?
2	A. Yes, we did.
3	Q. Did Staff ever consider the age of a pipe when
4	it was performing its calculations?
5	A. No, we did not. One of the criteria is if it
6	the pipe is worn out and deteriorated. There are programs for
7	replacement of cast iron and steel. And so we didn't look at
8	the vintage of plastic, cast iron, or steel.
9	Q. Is there a plastic pipe replacement program
10	similar to those you just mentioned?
11	A. No, there's not.
12	Q. Did Staff remove any installation cost without
13	removing the associated deferred taxes?
14	A. Yes. In our original filing in this case we
15	did. Since that filing we have corrected that error and it
16	should be reflected in our direct testimony.
17	Q. Thank you. Did Staff inappropriately reduce
18	ISRS calculation by double counting any income tax deductions?
19	A. In our original filing we had a different
20	calculation. We were following the methodology that we had used
21	in previous ISRS cases and was agreed to in previous ISRS cases.
22	It was basically a splitting of the difference between Staff's
23	position on taxes and Company's positions on taxes. For this
24	case only will we have decided not to contest this issue.
25	Q. Now Mr. Buck in his direct testimony on Pages 8

and 9 also criticize Staff for not considering the prudency of 1 2 the Company's replacement plan and taking that into consideration when it developed its calculation. Does Staff 3 believe that whether the plan is prudent or not is something 4 that we needed to consider here? 5 We don't believe we need to consider that here. 6 Α. 7 Prudency will be determined in the next rate case. For example, 8 the 2016 and '17 ISRS plan additions are now included in the current rates for the company. The next rate case prudency will 9 10 be determined here. And if it is determined that the program is 11 prudent, plastic, cast iron, steel -- every type of pipe will be 12 included in the next rate case in the rates. 13 Despite all the criticism that the Company had 14 of Staff's calculations has it provided Staff or the Commission 15 with any quantification of these supposed errors? 16 No, they have not. Α. 17 Ο. Did you review the testimony of Spire's other 18 three witnesses in this case? 19 Yes, I did. Α. 20 Ο. Do you have any rebuttal to make of that 21 testimony? 22 No, I did not. We did not consider any cost Α. 23 savings in our calculation. We strictly looked at the 24 percentage of plastic replaced. 2.5 Did Staff consider cost savings to be a concern Ο.

1	in this case?	
2	Α.	No, not in this case.
3	Q.	Did you review the testimony of OPC's witness
4	Mr. Robinett?	
5	Α.	Yes, I did.
6	Q.	And did you have any opinion on his calculation
7	that he recommends?	
8	A.	His calculation is very similar to Staff's. His
9	is more based on	the nine and 14 work orders that were provided
10	in the original 2	2016 cases. Ours are provided on more work
11	orders.	
12	Q.	Does Staff believe its calculations to be more
13	accurate?	
14	A.	Yes.
15	Q.	Do you have anything else you wish to share at
16	this time?	
17	A.	No, I do not.
18		MS. PAYNE: With that I will go ahead and tender
19	this witness for cross.	
20		JUDGE BUSHMANN: Cross by Public Counsel?
21	CROSS-EXAMINATION BY MS. SHEMWELL:	
22	Q.	Do you agree that Public Counsel's calculation
23	came somewhere in	n the middle of Staff's Option 1 and Option 2?
24	A.	I believe it did, yes.
25	Q.	Thank you.

1	MR. CLIZER: Good afternoon. My name is John
2	Clizer by the way. Nice to meet you.
3	THE WITNESS: Nice to meet you.
4	CROSS-EXAMINATION BY MR. CLIZER:
5	Q. I know you kind of discussed a little bit of the
6	idea that depreciation is really a good factor, but obviously
7	Spire has made that argument. Sorry it's not a good factor
8	in determining when something is worn out and depreciated, but
9	Spire has made that argument. Correct?
LO	A. I believe they have.
11	Q. Right. Did they ever provide any testing to you
12	regarding the steel and cast iron mains being replaced to show
L3	that they were worn out or deteriorated?
L4	A. Not that I am aware of.
L5	Q. And you said the work orders didn't provide any
L6	indication?
L7	A. The work order authorizations do not.
L8	Q. Are you aware of what the depreciation average
L9	lives sorry. The average lifespans that were set for cast
20	iron and steel mains in Spire's last rate case are?
21	A. I'm not quite sure of the number. I heard 40
22	and 44 years. I don't know if that is plastic. I'm not sure.
23	MR. CLIZER: Judge, we've taken notice of the
24	Western District Court of Appeals opinion. Correct?
25	JUDGE BUSHMANN: Correct.

MR. CLIZER: Can I note that in footnote 3 the 1 2 Western District Court of Appeal's opinion they state Laclede depreciates plastic mains over 70 years and plastic life over 40 3 4 and -- I -- sorry. That's probably everything I wanted to do. 5 I'm sorry. 6 The Commission has taken notice of the Report 7 and Order of the 2016 and 2017 cases. Correct? 2017 rate case. 8 Sorry. 9 JUDGE BUSHMANN: The amended Report and Order. 10 MR. CLIZER: The amended Report and Order. And 11 the Report and Order stipulation agreement between Staff and 12 Spire? 13 JUDGE BUSHMANN: I believe it speaks for itself. 14 MR. CLIZER: Okay. Sorry. One moment. I have 15 a lot of papers in front of me. There we go. BY MR. CLIZER: 16 17 Ο. Ms. Bolin, are you familiar with the Stipulation 18 and Agreement that was issued in the 2016/2017 rate case? 19 I briefly read it when it came out, but I was 20 not involved with that case so I'm not 100 percent on everything 21 that was in it. 22 MR. CLIZER: Permission to approach the witness. 23 JUDGE BUSHMANN: All right. BY MR. CLIZER: 24 25 Q. I just handed you what's essentially the first

two pages of the partial stip and agreement that was entered 1 2 into in that rate case. MS. PAYNE: Can we clarify exactly which rate 3 4 Case? 5 MR. CLIZER: I apologize. The last general rate 6 case for Spire, which was GR-2017-0215 and GR-2017-0216. 7 MS. PAYNE: Thank you. 8 BY MR. CLIZER: 9 0. On the second page of the stip and agreement 10 states the signatories agree that depreciation rates remain 11 unchanged. Would you agree with that? 12 Yes, I will. Α. 13 And can you see the attachment that's been 0. 14 included, Attachment 4 for Laclede Gas Company GR-2013-071 15 depreciation rates? 16 I have it here in front of me, yes. 17 Ο. And would you agree that it says that mains 18 steel and mains cast iron are both -- both have a service life 19 of 80 years? 20 Α. Yes, that's what this says. MR. CLIZER: I would like to tender this exhibit 21 22 as OPC's 203. 23 JUDGE BUSHMANN: It's already in the record since I've taken official notice of it. 24 25 MR. CLIZER: I'm not sure. Has it been taken

official notice of the stip and agreement for the rate case? 1 2 JUDGE BUSHMANN: Partial stipulation and agreement filed on December 13th, 2017. 3 4 MR. CLIZER: That's it. I'm sorry. Sorry. It's already in the rate case. I apologize profusely. 5 BY MR. CLIZER: 6 7 0. Okay. In that case, in your direct testimony in the GO-2016 and 2017 cases --8 9 Α. Okay. 10 -- you attached a work order authorization, work 0. 11 order 900621? 12 Yes, I attached it. Α. 13 Thank you. On Page 11 of that attached work 0. 14 order -- I apologize actually. Page 10 of the attached work 15 order, it lists the retirements? 16 Yeah. It starts the listing of retirements. Α. 17 0. Thank you. Can you identify among the steel 18 mains, 12-inch that are being retired what the oldest main 19 vintage is? 20 Α. It appears to be 1950. Given that the service life for steel mains is 21 0. 22 80 years, would that been have -- would that main have reached 23 the end of its service life at the time it was depreciated in 2018? 24 2.5 It would not have reached its service life. Α.

1	Q.	With regard to the retirement of cast iron mains
2	can you identify	what the largest dollar amount retired was?
3	A.	Cast iron mains?
4	Q.	Correct?
5	A.	There appears to be a vintage of 1947, 12-inch
6	cast iron main a	nd it has a retirement amount of \$14,527.19.
7	Q.	Based on a 80-year service life, would that cast
8	iron main reach	the end of its service life at the time it was
9	retired in 2018?	
10	Α.	No, it would not.
11	Q.	Thank you very much. I'm sorry for the delay.
12		MR. CLIZER: We have no further questions.
13		JUDGE BUSHMANN: Cross by Spire?
14	CROSS-EXAMINATIO	N BY MR. PENDERGAST:
15	Q.	Good afternoon, Ms. Bolin?
16	Α.	Good afternoon, Mr. Pendergast.
17	Q.	You talked about a number of the criticism the
18	Company has made	regarding the Staff's approach; is that
19	correct?	
20	Α.	That is correct.
21	Q.	In the Company's view what it believes is an
22	inappropriate us	e of percentages to adjust ISRS charges?
23	Α.	Among many things.
24	Q.	Okay. Would you agree with me that that is a
25	criticism that y	ou once shared?

- In the original 2016 case, we did not -- we 1 Α. 2 believed it was prudent to -- your program was prudent to do. We still may believe it is prudent, but it's just not to be 3 included in ISRS cost. 4 5 Ο. Well, let me go a little further on that. You 6 not only agreed that it was prudent, but you expressed 7 reservations about the propriety of using a percentage-based 8 method, did you not? 9 You are correct. I did. Α. 10 Okay. So when you talk about the Company's 0. 11 criticisms, some of those are criticisms that you once shared; 12 is that right? 13 My hesitation in that case to do just a strict Α. 14 percentage was due to the Company replacing -- the Company's 15 assertion that it replaced more pipe with less pipe. Now that 16 the Western District Court of Appeals has come out we believe 17 the percentage is appropriate to use. 18 Okay. I understand what you're saying about the 0. 19 Western District Court of Appeals opinion, but the fact that 20 gave you pause back in the original ISRS cases is mainly that we 21 were installing less pipe than we were replacing. That fact has
  - A. That has not changed.

22

23

not changed, has it?

Q. Okay. You mentioned that you excluded ISRS cost for plastic that was retired in connection with angle of repose

1	where it wasn't mandated by a government entity; is that	
2	correct?	
3	A. That is correct. That is what our work papers	
4	have done.	
5	Q. And are you aware of whether there is a safety	
6	requirement by the Commission that you address angle of repose	
7	instances where they involve cast iron?	
8	A. I'm not an engineer. I'm not aware of what the	
9	safety of angle of repose	
10	Q. Okay. So excluding plastic retirements related	
11	to angle of repose, you did not acquaint yourself with whether	
12	there was an independent safety requirement to do that	
13	regardless of whether it is mandated by a local government unit	
14	or it just needs to be addressed?	
15	A. It was not specified in the ISRS rules. That	
16	was an item like a relining, a service line insertion, joint	
17	encapsulation or a item that was a relocation mandated by	
18	government authorities. It was included in with the other main	
19	replacements in the Company's work papers, so we did not adjust	
20	them.	
21	Q. Okay. And all I'm trying to establish is in	
22	excluding those like you didn't consult with counsel or you	
23	didn't make any independent evaluation about whether there is	
24	another safety requirement that requires that to be done?	
25	A. We believed it to be the same as any other main	

1	replacement.
2	Q. Okay. You had that change general belief?
3	A. Yes.
4	Q. Okay. And you also mentioned prudence and how
5	prudence of these ISRS expenditures can be evaluated in the
6	Company's next rate case. Right?
7	A. That is correct.
8	Q. And was the prudence of the last four ISRS cases
9	before these two most recent ones also subject to review for
10	prudence at the Company's last rate case?
11	A. They should have been.
12	Q. And do you know if anybody proposed any
13	disallowance on the basis of any imprudent expenditure?
14	A. I did not work the case myself, but I have
15	reviewed some testimony and I don't remember seeing that
16	testimony from anybody.
17	Q. And do you know if any other adjustments were
18	made to the Company's ISRS charges before they were rolled into
19	base rates?
20	A. I'm not aware of any.
21	Q. Okay. Now, Page 2 of your direct testimony you
22	state beginning at Line 19
23	A. Which piece of direct testimony?
24	Q. I think this is on the new cases?
25	A. Okay.

1	Q. Staff based its recommendation to remove the
2	cost of the replacement of plastic main service on Western
3	District Court of Appeals decision that reversed or remanded the
4	Commission's Report and Order in those prior ISRS cases; is that
5	correct?
6	A. That is what I have said.
7	Q. Okay. Do you have a copy of that Western
8	District Court of Appeals opinion?
9	A. Yes, I do.
10	Q. Excellent. Now when you say that Staff's
11	recommendation is based on the Western District Court of
12	Appeals' opinion, you're not suggesting that that opinion set
13	forth, endorsed, or otherwise identified this percentage-based
14	method for adjusting ISRS charges, are you?
15	A. It did not set out a method to calculate the
16	amount of plastic that should be removed from the ISRS.
17	Q. Okay. I think it is important to make it clear
18	that that is not something that the Western District Court of
19	Appeals said; that is a method that the Staff has developed to
20	implement that opinion as it interprets it. Would that be fair?
21	A. That is correct. That is our method to
22	determine to follow this order and we conducted a method
23	based on information we had.
24	Q. Okay. And in that opinion the Court said
25	basically that nobody contested that the plastic facilities were

not in a worn out or deteriorated condition; is that correct? 1 2 Α. Which page is that on? 3 0. Let's see. It would be Page 7, I think. It's 4 on Page 5. 5 Α. I see it. 6 Ο. Do you see that? And then when it makes that 7 statement it has a footnote; is that correct? 8 Α. Footnote 3. 9 0. And there the Court refers to depreciation rates 10 for various assets of Spire East and Spire West; is that 11 correct? 12 It has for mains and service lines, yes. Α. And this is the same footnote that the OPC 13 0. counsel was discussing with you a moment ago; is that correct? 14 15 Α. I'm not sure if it's the same because this has 16 service lines. I do believe this is what he was talking about. 17 0. Okay. And in that, why do you think the Court 18 of Appeals put a footnote in there talking about the testimony 19 about depreciable lives? 20 MS. PAYNE: Objection; calling for speculation. 21 MR. PENDERGAST: I'll withdrawal. That's a good 22 point. 23 BY MR. PENDERGAST: 24 Ο. Can you tell me what useful life is under -- in 25 a depreciation methodology?

1	A. I am not a depreciation expert. From what I
2	understand, it is an estimate of the average life of a certain
3	type of plant.
4	Q. Okay. And by average some will last longer,
5	some may not last that long; is that correct?
6	A. That is my understanding.
7	Q. For example, some of the mains that were taken
8	out that Mr. Clizer talked about that hadn't quite reached their
9	average service life, it's not going to be an average if you
10	expect every main or every service life to reach the average, is
11	it?
12	A. I would agree with you.
13	Q. At in fact, you address that at one point in
14	your rebuttal, in your testimony in the original ISRS cases; is
15	that right?
16	A. I probably did. I don't remember from those
17	pieces of testimony.
18	Q. Fair enough. So if one uses the average life as
19	an indicator of whether something is worn out and deteriorated,
20	is that something that Staff disagrees with?
21	A. Could you repeat that question?
22	Q. Yeah. Does Staff disagree with the notion that
23	using whether something is at or near its average useful life an
24	asset, is a factor to take into account in determining whether
25	it may be worn out or deteriorating?

1	A. No, we do not.
2	Q. You do not. Okay. So if you're going to make
3	that determination, would you recommend the tear it up, look at
4	it, do a visual and see whether or not it is worn out or
5	deteriorated?
6	A. I would not recommend that either. That's not
7	prudent.
8	Q. Yeah. In fact you testified in your original
9	testimony that that would be a pretty costly thing, didn't you?
10	A. I did.
11	Q. Okay. In constructing your method for
12	disallowing ISRS costs, you just didn't look at how old these
13	plastic facilities were, did you?
14	A. No, we did not.
15	Q. That was a factor that you found completely
16	irrelevant notwithstanding it earned a footnote in the Western
17	District Court of Appeals opinion?
18	A. We did not believe it proved that it was worn
19	out or deteriorated. We didn't include it.
20	Q. Okay. Let me ask you another question: Did the
21	Court also if you have your thing there footnote 5 state
22	we recognize that the replacement of worn out and deteriorated
23	components will at times necessarily impact and require the
24	replacement for nearby components that are not in a similar
25	condition. Our conclusion here should not be construed to be

barred ISRS eligibility for such replacement work that is truly 1 2 incidental and specifically required to complete replacement of the worn out or deteriorated components. Do you see that? 3 I see that reference and there's more to that 5 footnote. 6 Ο. Sure. It says you can't use that to just go 7 ahead and replace anything. Right? 8 Α. That they would not be -- to components that are 9 not worn out or deteriorated simply because they are 10 interspersed in the same neighborhood system of such components 11 being replaced or because a utility use -- is using the need to 12 replace worn out or deteriorated components as an opportunity to 13 redesign a system. 14 Well, are you reading to suggest that plastic is 0. 15 always barred from being included in an ISRS no matter whether 16 it's nearby or truly incidental? 17 MS. PAYNE: Object; that's asking for a legal 18 conclusion. 19 MR. PENDERGAST: She said she based her 20 recommendation on this Western District Court of Appeals' 21 opinion, so --22 JUDGE BUSHMANN: I'll overrule it. She can 23 answer if she knows. 24 THE WITNESS: Could you repeat the question? 2.5 BY MR. PENDERGAST:

Having read that paragraph, did you agree 1 Ο. Sure. 2 with me or not that the court was acknowledging that there is some plastic, if it is nearby or truly incidental that can be 3 included in ISRS? 4 The court may be agreeing with that, but we did 5 Α. not have the information to make that determination. 6 7 Okay. Well, let me turn to your schedule if I Ο. 8 I think this is in the old ISRS cases. And if you could can. 9 go to schedule KKB-B3, Page 3 of 5. Let me know when you have 10 that? 11 You said Page 3 of 5? Α. 12 0. Yes. 13 Okay. I'm there. Α. Okay. And here you give various work orders and 14 Q. 15 the amount of cast iron steel that was retired and what plastic 16 was retired and what percentage that was of the project; is that 17 correct? 18 That is correct. Α. 19 Okay. And if I look at some of these, for 0. 20 example, 00135, that shows that 3,285 feet of cast iron and 21 steel was replaced. Correct? 22 Α. 3,284. 23 Q. 284. I'm sorry. And included in that was 48 24 feet of plastic; is that correct? 25 Α. That is correct.

1	Q. Which was 1.44 percent of the entire project; is
2	that correct?
3	A. That is correct.
4	Q. And did it ever occur to you that when we were
5	talking about small percentages like that that maybe that might
6	be the definition of truly incidental and nearby plastic that
7	should not be excluded?
8	A. We didn't have the information to prove that it
9	was.
10	Q. Well, you know I am looking at these percentages
11	right there. How small does the percentage have to be before
12	you think it is this incidental?
13	MS. PAYNE: Objection; that's argumentative.
14	JUDGE BUSHMANN: Sustained.
15	BY MR. PENDERGAST:
16	Q. Okay. If I go down this list and I look at
17	these relatively small percentages one right after another, you
18	would have excluded all of this plastic no matter how small the
19	percentage?
20	A. That is correct.
21	Q. In other words you didn't make any effort in
22	developing your method to come up with some kind of standard or
23	measure to allow incidental or truly incidental or nearby
24	plastic to be included. You just got rid of all of it?
25	MS. SHEMWELL: Objection; argumentative.

MR. PENDERGAST: I'm asking her whether she got 1 2 rid of all that -- didn't make any effort to come up with a method to comply with the court's footnote here. 3 JUDGE BUSHMANN: I'll allow the answer to the 4 5 question. 6 THE WITNESS: Our method made no determination 7 on what was incremental and was not incremental. BY MR. PENDERGAST: 8 9 0. Okay. Let me ask you a question. Let's go back to the same work order that we had before where we had 48 feet 10 11 of plastic. Can you tell me what impact retiring that 48 feet 12 of plastic had on the overall cost of that project? The retirement of lines are not included in 13 Α. 14 The retirement is left in the ground. What is included 15 in ISRS is the replacement of that plastic. 16 0. Yes, I agree. And can you tell me what impact 17 retiring that 48 feet of plastic had on the cost of installing 18 that plant? It removed 1.4 -- for our calculation is 1.44 19 20 percent of the cost of installing --21 I know that --0. 22 -- that project. Α. 23 Q. -- that's what your calculation produces. 24 I am asking you is are you saying it increased the cost of that 2.5 project by that much?

MS. PAYNE: Objection; witness has answered this 1 2 question. JUDGE BUSHMANN: I will overrrule it. 3 4 THE WITNESS: I'm not saying -- we just removed 5 1.44 percent of that cost of that project. BY MR. PENDERGAST: 6 And I appreciate that answer. You just removed 7 Ο. 8 that amount, but you didn't assess what impact that had on the 9 actual cost of the project? 10 No, we did not. Α. 11 Okay. And if I went right along every single Ο. 12 one of these, would your answer be the same? Yes, it would. 13 Α. Okay. Ms. Bolin, as a general matter of good 14 0. 15 regulatory policy if a utility has a less expensive way of doing 16 something that produces as good a product or better should the 17 utility do that? 18 Α. We would hope a utility would do things in the 19 most prudent manner. Prudency is not a factor in ISRS. 20 0. You mean it's --21 It's not considered. Α. 22 -- not mentioned --Q. 23 It's not considered. Α. 24 -- in ISRS. You --0. 25 Α. Prudency is decided in the next rate case.

Okay. Do you know if the word "prudence" is 1 Ο. 2 mentioned in ISRS? I'm sure it is mentioned in the statute 3 Α. 4 somewhere. Okay. Bur your view is that, you know, prudence 5 0. is our irrelevant to this issue; is that correct? 6 7 Based on the Western District Court of Appeals Α. 8 opinion, we believe --9 0. Okay. You --10 -- it to not be a factor in determining plastic Α. 11 removed. 12 Ο. Okay. Okay. And should the impact of the 13 plastic percentage or the plastic that was retired on the actual 14 cost of the replacement project be a factor? 15 Could you clarify that question? Α. 16 0. Yeah. I think we just established that you 17 haven't done any analysis to determine what impact these plastic 18 percentage retirements had on the overall cost of the project. 19 Right? 20 Α. We merely applied the percentage of plastic 21 retired to the overall project cost. 22 Okay. And so given that, you don't know whether Q. 23 it increased the cost or decreased the cost? 24 I do not. Α. 25 Q. Okay.

MR. PENDERGAST: I have no further questions. 1 2 Thank you, Ms. Bolin. 3 THE WITNESS: Thank you. JUDGE BUSHMANN: Questions by commissioners. 4 CHAIRMAN HALL: Yes. 5 6 QUESTIONS BY CHAIRMAN HALL: 7 Good afternoon. Ο. 8 Α. Good afternoon. 9 I believe you indicated that you did not analyze 0. 10 any of avoided costs related to the plastic replacement; is that 11 correct? 12 We analyze just the percentage of plastic that Α. was included, that was retired in a work order to the total 13 14 replacement cost of the project. 15 So you didn't look at whether or not replacing 0. the plastic -- how that may have impacted the cost of the 16 project? 17 18 That is correct. We didn't have the information Α. 19 to do that. 20 Ο. Okay. So you are aware that the Company did 21 that analysis and that is contained, set forth as Exhibit --22 Exhibit 2 of Mr. Hoeferlin's direct testimony. Do you have that 23 in front of you? 24 I have it. Let me get to it. Α. 25 Q. Okay.

1	A. CRHD1?
2	Q. Yes. I believe so?
3	A. I have that in front of me.
4	Q. What is your understanding about what this
5	exhibit demonstrates?
6	A. This exhibit demonstrates for a few selected
7	work orders the amount of the feet of plastic replaced and the
8	feet of plastic installed and the approximate cost to replace
9	the plastic and the approximate cost to utilize the plastic.
10	Q. And I believe that with one exception it shows
11	that it was cheaper to replace the plastic; is that correct?
12	A. That is correct. There is one exception.
13	Q. Are you familiar enough with this analysis to be
14	able to provide us some guidance as to whether or not this is an
15	analysis that could be duplicated on an ongoing basis with all
16	ISRS projects?
17	A. If they're able to do these few, I would hope
18	they would be able to do it for all of them.
19	Q. So in other words, it's not a complex analysis?
20	A. It doesn't appear to be. The only thing would
21	be the approximate cost to replace.
22	Q. I assume so what they're doing is they're
23	figuring out the number of additional feet and then just
24	extrapolating from that an additional cost?
25	A. They probably are. I'm not sitting on that,

1	though.
2	Q. Is that of reasonable approach from your
3	perspective or is this outside your expertise?
4	A. This may be outside my area of expertise.
5	Q. Turning to your testimony, your direct testimony
6	in particular schedule D6 I'm sorry D8.
7	A. In the '16 cases? Yes.
8	Q. No. In the remand.
9	A. In the remand cases? Okay. I've got it in
10	front of me.
11	Q. So you in these four cases you went through
12	all of the work orders and determined the amount of plastic?
13	A. All of the work orders that were provided to us.
14	Q. Okay. Is that all of well, I putting the
15	blanket orders aside, does this include all of the other work
16	orders?
17	A. It is not include work orders for projects
18	totaling under 25,000 and in the 2018 case some of the work
19	order authorizations were estimated due to the recent
20	completion.
21	Q. Okay.
22	A. We did not use those in the 2018 case.
23	Q. So where's the analysis for the 2018 cases?
24	A. It is attached to my direct testimony in the
25	2018 cases. I have two separate pieces of testimony.

1	Q. Can I get a copy of that? Do you have that
2	somewhere?
3	COMMISSIONER KENNEY: Which one?
4	CHAIRMAN HALL: The second one she is talking
5	about.
6	MR. ZUCKER: Would you like this copy.
7	CHAIRMAN HALL: Sure.
8	THE WITNESS: Actually, if you want to know the
9	dollars you may have to look at Caroline Newkirk's and Ali
10	Arabian's.
11	BY CHAIRMAN HALL:
12	Q. So explain to me again, I'm sorry, what you did
13	for the 2018 cases?
14	A. The 2018 cases we used the same methodology, but
15	in the 2018 cases there were several work order authorizations
16	that still had estimates of what was replaced. So we did not
17	use the estimates. When applied the average from the actuals to
18	those.
19	Q. Okay. Concerning the blanket work orders for
20	both the 2018 cases and the 2016/'17 cases, do you believe that
21	there were do you have reason to believe there was plastic
22	replaced?
23	A. Yes, there is plastic replaced. In fact, the
24	one when we just entered into evidence showed the plastic
25	services were replaced.

1	Q. Which one was that? Which exhibit is that?
2	A. It was a blanket work order. I don't remember.
3	JUDGE BUSHMANN: 107.
4	MS. PAYNE: 107.
5	BY CHAIRMAN HALL:
6	Q. So in 107 what amount of plastic did you
7	exclude?
8	A. I don't know that I'll have to look at that.
9	I'm not sure what we excluded. I'm not sure which ISRS it fell
LO	under.
L1	Q. Were you involved in the in the decision as
L2	to the best approach to implement the Western District's opinion
L3	in terms of the percentage methodology that Staff is that
L4	Staff has endorsed in this case?
L5	A. I was one of the people, yes.
L6	Q. Were there any other ideas? I mean, in essence
L7	and the reasonable why I'm asking is because first of all I
L8	appreciate Staff's effort to implement a difficult decision to
L9	implement.
20	A. Thank you.
21	Q. There clearly are problems with the methodology
22	and they've been aired publicly all day today. I'm struggling
23	with any other methodology that makes more sense. So I'm
24	wondering if there were some other approaches that were
25	discussed and maybe rejected because they were not as good as

1	the one you ende	d up endorsing?
2	Α.	There weren't really any other ones set out
3	based on the inf	ormation we had. This was the only method we
4	could come up wi	th.
5	Q.	I believe in response to questions earlier, you
6	did not make an	effort to determine whether or not some of the
7	plastic patches	replaced were worn out or deteriorated?
8	Α.	That is correct.
9	Q.	And you did not make an effort to determine
10	whether or not s	ome of the plastic patches were incremental or
11	incidental?	
12	Α.	Yes. We didn't define what incremental would
13	be.	
14	Q.	How hard would it have been to do that or would
15	those have been	some arbitrary standards that?
16	Α.	That would probably be arbitrary and we would
17	probably be argu	ing here about what is incremental and what is
18	not incremental.	
19	Q.	I have no further questions. Thank you.
20	Α.	Thank you.
21		JUDGE BUSHMANN: I have a couple.
22	QUESTIONS BY JUD	GE BUSHMANN:
23	Q.	In your testimony in the 2016 and 2017 cases,
24	schedule KKB-D8,	on the very last page
25	Α.	I'm there.

1	Q. I understand you were talking about looking at
2	the work orders in determining the percentage of plastic lines
3	that should have been excluded. Can you tell me how you applied
4	that to reach the revenue requirement?
5	A. We applied if we actually had the actual work
6	order percentage we applied that to the project cost for that
7	work order. If we didn't, we used the average and applied the
8	average to the work orders in which we didn't have that
9	information. Then came up with what we believe should be ISRS
LO	without plastic.
11	Q. So moving to the next column over, how did you
L2	calculate a refund then?
L3	A. The refund? I'm sorry. The first column should
L4	really say annual revenue requirement and so should the fourth
L5	one and the fifth one. That would make a little more sense.
L6	The refund ones, we looked at how many months they have been
L7	collecting ISRS and divided the revenue requirement by 12 and
L8	then times how months the ISRS was in effect.
L9	Q. So there is a time factor that's built into your
20	calculation that doesn't appear on the face of the document?
21	A. That is correct. I believe the '16 cases were
22	in effect for 15 months and '17 were in effect for 11 months.
23	And that is figured into the amount of refund.
24	Q. During that
25	A for that option

1	Q period of time from when the ISRS began to
2	with rate case the rates became effective in the rate case,
3	that was the period of time that you factored in to determine
4	the refund?
5	A. Yes, it is.
6	Q. Was it more than carrying costs? It was also
7	something else in addition to that?
8	A. There were no carrying cost. This was strictly
9	just the cost of the project that were included in ISRS.
10	Q. Okay. That's all the questions I have.
11	JUDGE BUSHMANN: Recross my Public Counsel?
12	MS. SHEMWELL: None, thank you.
13	JUDGE BUSHMANN: Recross by Spire.
14	MR. PENDERGAST: Thank you.
15	RECROSS-EXAMINATION BY MR. PENDERGAST:
16	Q. Ms. Bolin, Chairman Hall asked you a number of
17	questions about alternative methodologies that could potentially
18	have been
19	JUDGE BUSHMANN: Is your microphone on?
20	BY MR. PENDERGAST:
21	Q about alternative methodologies that could
22	potentially could have been pursued and he mentioned the
23	analysis, the engineering analysis that the Company did. And
24	your take on it, you know, at least initially is it is something
25	that could be repeatable and done in the future?

1	A. If the Company chooses so, yes, they could do
2	it.
3	Q. Okay. And under that approach the Company
4	looked at the projects that Public Counsel had originally
5	identified in the last cases and did its cost comparison
6	analysis; is that right?
7	A. That's what it appears.
8	Q. And from almost all the projects except one it
9	showed a cost savings, but on the one project it showed that it
10	was slightly more expensive to replace than reused plastic; is
11	that correct?
12	A. That is correct. Two percent more.
13	Q. Two percent more, but at least, you know, it
14	identifies and isolates what the real cost impact is of retiring
15	versus reusing plastic, does it not?
16	A. I believe this says approximate cost. These are
17	estimated costs.
18	Q. Sure. Sure. And would you, as a staff member,
19	feel it's appropriate and important to have that kind of
20	information?
21	A. It would for our methodology we did not need
22	that information.
23	Q. I understand, but as a general rule?
24	A. We'll always look at information that the
25	Company is willing to provide.

And maybe we can ask Mr. Sommerer this, but in 1 O. 2 his testimony he talked about the usefulness of doing various kinds of schematic, you know, analysis of how your planting or 3 putting in a plant and why are you putting it in. Do you recall 4 5 that? 6 Α. I remember reading that, yes. 7 Okay. And you don't disagree with Mr. Sommerer O. 8 about the usefulness of that? 9 Α. You have -- I don't disagree with Mr. Sommerer. 10 We might, but you don't. Okay. Thank you. 0. 11 have nothing further. 12 JUDGE BUSHMANN: Redirect by Staff. 13 MS. PAYNE: Thank you. 14 REDIRECT EXAMINATION BY MS. PAYNE: 15 Mr. Bolin, Mr. Pendergast was just asking you 0. 16 about information related to cost savings, et cetera. In the 17 ISRS filings that you've handled going back to the 2016/2017 18 does the Company generally provide information like that when it 19 provides its ISRS filings to Staff? 20 Α. No, it does not. 21 And he was asking you about the -- and Chairman Ο. 22 Hall as well was asking you about the schedule attached to 23 Mr. Hoeferlin's. You were mentioning that those for 24 approximations; is that correct? 2.5 Α. That is correct.

In your review of the schedule -- I understand 1 0. 2 that it is not your testimony -- would you say that that is intended to reflect an entire -- the entirety of the ISRS totals 3 or is that a sample? 4 5 Α. That is just a example. 6 Ο. And it might necessarily have been handpicked by 7 the Company to reflect what best benefited its case? 8 Α. I thought I believed it is one of the ones that OPC identified in the '16 case. 9 Okay. Thank you. There was a lot of discussion 10 0. 11 about the -- different things like the angle of repose and 12 incremental plastic. To clarify at one point I think you said incidental plastic. Did you intend to say incremental? 13 14 Α. I intended to say incremental. I'm sorry. 15 Thank you. When the Company has provided the Ο. 16 work orders in relation to its ISRS filings, the work order authorization sheets I should say -- is there usually a level of 17 18 detail that permits Staff to know all of the time whether things 19 like the angle of repose or incremental plastic were 20 contemplated in those projects? 21 I don't necessarily agree with the incremental. 22 I will say that for the angle of repose it will have the 23 initials AOR behind the description. 24 Okay. Let's see, there was some mention of Ο. Staff's prior position. Just to clarify for the beginning and 25

end of it all, did Staff's position change from the 2016 cases 1 2 to what we are currently arguing today? I'm not sure I understand what you mean by our 3 Α. 4 positions. 5 0. That's okay. Did Staff previously believe that 6 the plastic was ISRS eligible? 7 We did in the 2016 case, yes. Α. 8 Q. And our position changed from that? 9 We changed our -- well, we are trying to comply Α. with -- give the Commission a way to comply with the Western 10 11 District Court's opinion. 12 So this is all directly related to the remand of 13 the decision by the Western District? 14 Α. Yes, it is. 15 And is that position established between Staff Ο. 16 and Staff counsel based on our interpretation of the Western District remand? 17 18 Yes, it was. Α. 19 Thank you. Mr. Pendergast asked you if 0. 20 utilities should use a cheaper method when it finds that that is 21 appropriate. Do you believe the utility should also follow the 22 law? 23 Α. I believe they should use the most prudent way and also follow the law. 24 And finally, there was some discussion of the 25 Q.

Staff's calculation of things like incremental plastic and such. 1 2 At any point in the remand of this case has Spire tried to quantify the plastic that were in the ISRS filings for 2016, 3 2017 or 2018? 5 Α. Try to --6 Ο. Have they provided any type of calculation to 7 Staff or to the Commission? To prove -- I'm sorry. 8 Α. 9 0. I'm sorry. Let me step back. At any point have you seen Spire provide a calculation of the plastic that was 10 11 included to the Commission or to Staff in relation to the 12 Western District remand? 13 No, I have not. Α. 14 Do you believe the Company has had the 0. 15 opportunity to do so? 16 Yes, they have. Α. I have nothing further. Thank you. 17 0. 18 JUDGE BUSHMANN: Thank you, Ms. Bolin. 19 concludes your testimony. You may step down. Why don't we take the next Staff witness. 20 MS. PAYNE: Staff would call witness Dave 21 22 Sommerer to the stand. 23 (Witness sworn.) 24 DAVID SOMMERER having been first duly sworn testified as 2.5 follows:

1	DIRECT EXAMINATION BY MR. KEEVIL:
2	Q. Will you please state your name for the record,
3	sir.
4	A. David Sommerer, S-O-M-M-E-R-E-R.
5	Q. And are you the same let me backup by whom
6	are you employed and in what capacity?
7	A. I am employed by the Missouri Public Service
8	Commission as the manager of the Procurement Analysis
9	Department.
10	Q. Have you caused to be prepared three sets of
11	testimony, one for the GO-2018-0309 case, which has been
12	premarked as Exhibit 103, one for GO-2018-0310 case, which has
13	been marked Exhibit 105, and another piece of testimony for the
14	four the 2016 and 2017 cases, which has been marked as
15	Exhibit 106?
16	A. Yes.
17	Q. Is that testimony true and accurate to the best
18	of your information and belief?
19	A. Yes.
20	Q. If I ask you the questions contained therein
21	would your answers be the same today?
22	A. Yes.
23	MR. KEEVIL: Judge, I have to ask you a
24	question, a procedural question. Are we giving all of the
25	exhibits to the court reporter at this time or apparently not

since I have a bunch of them sitting on my desk here. How has 1 2 that been handled. How would you like that to be handled? 3 JUDGE BUSHMANN: Before you leave here you can 4 make sure she's got them all. 5 MR. KEEVIL: But not necessarily right now? JUDGE BUSHMANN: That will be fine. 6 7 BY MR. KEEVIL: 8 Q. Do you have any corrections to your testimony, 9 Mr. Sommerer? 10 Α. No. 11 MR. KEEVIL: With that, I would offer Exhibit 12 103, 105 and 106. JUDGE BUSHMANN: Any objections to the receipt 13 14 of those exhibits? Hearing none, they are received. 15 (WHEREIN; Staff Exhibits 103, 105 and 106 are 16 received into evidence.) 17 REBUTTAL BY MR. KEEVIL: 18 Mr. Sommerer, do you have any rebuttal testimony 0. 19 to the prefiled testimony of the other parties? 20 Α. Yes. 21 If I could direct you to the direct testimony 0. filed by Mr. Hoeferlin on behalf of Spire. On Page 10 Line 22 22 23 -- excuse me -- let me make sure that is the right page. Yes, 24 yes. Sorry. 25 Page 10, Line 22, Mr. Hoeferlin states it seems

- inequitable to me that the same state that used the ISRS statute 1 2 to encourage accelerated safety replacement would now disallow those ISRS costs especially when that accelerated replacement 3 was done in such a cost-efficient manner. Do you see that, sir? 4 5 Α. Yes. 6 Ο. Do you agree with the statement of 7 Mr. Hoeferlin? 8 Α. No, not entirely. To the extent that 9 Mr. Hoeferlin was characterizing that disallowance as a 10 permanent disallowance, I would say there's always the 11 opportunity to look at that replacement cost in the context of a 12 general rate case. So I wanted to make that clarification. 13 All right. Near the bottom of Page 13 and the 14 top of Page 14 of his testimony still with Mr. Hoeferlin here, 15 he says the Company has given annual presentations to the Staff 16 and OPC regarding the MGE's one- and three-year plans for
- 19 A. Yes. Really it's a clarification to say that if 20 the presentation that Mr. Hoeferlin gave back in September 26,

carrying out these programs. Excuse me. Do you have a comment

21 2012, the Commission agenda was a live presentation and agenda

with regard to that statement?

17

18

- 22 and to my knowledge that presentation was never updated at some
- 23 subsequent agenda, nor based upon my review was there ever an
- 24 MGE or a Spire West presentation provided to the Commission at
- 25 agenda the likes of which we saw back in September of 2012.

- Q. Thank you. Do you have an overall comment regarding Mr. Hoeferlin's direct testimony?

  A. Yes. I don't think that Mr. Hoeferlin's
- Yes. I don't think that Mr. Hoeferlin's Α. testimony is as complete as what it could be. I didn't see a 4 5 discussion of the plastic main inserts and I believe the idea of 6 the program prior to 2011 and the fact that they were using the 7 plastic main insertion method is critical to really 8 understanding the history of their replacements. If you're 9 grappling with whether these are mere patches, very small 10 patches that are 50 feet in length or they're longer main 11 insertions which were qualified as replacements under the 12 pre-2011 program, I think it's just important to bring out that 13 distinction.
  - Q. Thank you. If I can have you look at Mr. Lobser's testimony. On Page 4 beginning on Line 5 Mr. Lobser states as the Company's witnesses have demonstrated the practice of retiring plastic facilities rather than reusing them has permitted the Company to avoid costs rather than incur them. Do you agree with that statement entirely?

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A. No, not completely. Mr. Lobser's characterize the practice of retiring plastic facilities I believe in their entirety and based upon Mr. Hoeferlin's presentation in 2012 and other documents, I think the Company was going to take an approach -- a measured approach where if they could save a main because it wasn't worn out, a header main for example, they

would go ahead and do that and that was described as a situational, dependent method of looking at whether or not a rather lengthy historical main could be reused. And that's my understanding of their approach. I wanted to make it clear in my view based upon what I've scene is they haven't gone in and replaced every piece of vintage plastic on the system.

2.5

- Q. Do you agree with Mr. Lobser's contention on Page 9 beginning with the Q and A. The Q's on Line 11, Answer begins on Line 14, where he discussed his doubts about Staff's calculation method due to what he refers to as reservations that the witnesses for OPC and Staff have previously expressed regarding the propriety of such method?
- A. No. I think although he was correct in saying there were reservations throughout the transcript, throughout those records on using simple percentages, I don't believe that that provides evidence that that is an inappropriate method. I think ultimately it is an imperfect method, but it's difficult to find a better method based upon the information that is available.
- Q. Earlier today Mr. -- I believe it was Mr. Lauber in response to some questions from Mr. Zucker addressed your direct testimony on Page 2, beginning at Line 8, where you say a more sophisticated approach to allocating plastic out of the ISRS calculation would require extensive before and after design information from Spire Missouri that might explain the

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differences from the old and new systems. The issue arose as to
 1
 2
     what exactly you were referring to there as old and new systems.
     Could you explain that, sir?
 3
                      Yes. In Spire East the Company is replacing its
 5
     low pressure cast iron system and it had a certain design really
 6
     that went back all the way to the early 1900s. Over the years
 7
     although header main was added and supply feeder systems were
 8
     looped around the city, that basic design I believe, to a
 9
     certain extent stayed in place. The newer design is for an
10
     intermediate system that's intermediate pressure, it's a
11
     60-pound system. It's really a different system. It's not
12
     trying to maintain a low pressure system. It's not reusing the
     old regulator stations. It's really, a for lack of a better
13
     term, sea change in terms of the distribution system. So that's
14
15
     what I was trying to emphasize with that piece of testimony.
16
              0.
                      Thank you.
17
                      MR. KEEVIL: I think that is all I have, Judge.
18
     With that I will tender the witness for cross-examination.
19
                      JUDGE BUSHMANN: Very good. Cross-examination
20
    by Public Counsel.
21
                      MS. SHEMWELL: We have no questions. Thank you.
22
                      JUDGE BUSHMANN: Cross by Spire Missouri?
23
                      MR. ZUCKER: Thank you, Your honor.
     CROSS-EXAMINATION BY MR. ZUCKER:
24
2.5
              Ο.
                      Good afternoon, Mr. Sommerer?
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1	Α.	Good afternoon, Mr. Zucker.
2	Q.	Are you an engineer?
3	Α.	No.
4	Q.	Have you ever testified in a gas safety case?
5	Α.	No.
6	Q.	You did testify in the ISRS cases that are now
7	back here on rem	and. Correct?
8	Α.	I have real testimony, yes.
9	Q.	And that testimony supported the Company's cost
10	estimate?	
11	A.	That testimony my testimony was to support
12	Staff's rate des	ign for the revenue requirement.
13	Q.	And you are the highest level witness for Staff,
14	is that true?	
15	A.	Well, I don't supervise the auditing section.
16	That would be Mr	. Oligschlaeger, but as a manager I would say
17	I'm the highest	level.
18	Q.	Okay. And you were not present, I assume, at
19	discussions betw	een what was then Laclede Gas and the Missouri
20	Public Service C	ommission safety staff on accelerating the cast
21	iron replacement	<pre>program; is that correct?</pre>
22	A.	That is correct.
23	Q.	And do you know John Kottwitz?
24	Α.	Yes, I do.
25	Q.	Is he an engineer?

1	Α.	I believe he does engineering work. I'm not
2	specifically famil	liar with his educational background, but he's
3	one of our operat:	ional experts in gas safety.
4	Q. (	Okay. He's on the safety staff?
5	Α.	Yes.
6	Q.	And Kathleen McNelis is on the safety staff?
7	Α.	Yes.
8	Q.	And she is in engineer?
9	Α.	Yes.
10	Q.	And Greg Williams is on the safety Staff?
11	Α.	Yes.
12	Q.	And he's an engineer?
13	Α. Α.	Again, I am not familiar with his background,
14	but he's one of th	he technical experts on the safety Staff.
15	Q. A	And Clint Foster's on the safety staff.
16	Correct?	
17	Α.	That's my understanding, yes.
18	Q.	And He's and engineer?
19	ī	MR. KEEVIL: I'm going objective to this as to
20	relevance. Clinto	on Foster has only worked a few years and he
21	couldn't have been	n in any meeting that they had back in 2000
22	whenever it was M	r. Hoeferlin claims they had this meeting. I
23	don't see the rele	evance of Mr. Zucker's questioning regarding
24	staff members. Th	here's been no evidence showing that they were
25	even at this meet:	ing that transpired.

1	MR. ZUCKER: I'm about to get to my final
2	question.
3	JUDGE BUSHMANN: You may ask it.
4	BY MR. ZUCKER:
5	Q. Can you tell me why no one from the safety staff
6	is testifying in this case today?
7	A. The Staff doesn't believe that we have a safety
8	issue in the context of this ISRS case.
9	Q. So Staff doesn't believe that the cost involved
10	in the acceleration of a cast iron replacement program is a
11	safety issue?
12	A. Generically speaking, it certainly deals with
13	pipeline safety programs, but we don't have any issue in terms
14	of whether the programs were applied correctly or whether there
15	is some safety violation or whether the gas safety department is
16	concerned about some cost. All of those areas we believe were
17	really not the subject of today's proceeding.
18	Q. Okay. Would you to Page 4 of your testimony?
19	I'm sorry, the testimony that covered the remand case.
20	A. I'm there.
21	Q. Are you aware that when the Company retires
22	plastic as part of its cast iron replacement program, that the
23	Company provides a credit to depreciation expense that is used
24	to immediately lower the ISRS revenues?
25	A. That's my understanding.

1	Q.	You talk farther down Page 4. You talk about
2	and on Page 5 an	insertion technique that the Company used prior
3	to the accelerate	ed cast iron replacement program.
4	A.	Yes.
5	Q.	Do you see that?
6	A.	Yes.
7	Q.	And is it your understanding that when plastic
8	was inserted witl	nin the cast iron that the cast iron was
9	retired?	
LO	A.	That's my understanding, yes.
11	Q.	Okay. Was it your understanding when you wrote
L2	this testimony?	
L3	A.	Generally speaking, I would say yes. In between
L4	the time that I $^{\circ}$	wrote the testimony and today I was able to go
L5	back to PHMSA rep	ports and look at the instructions for how much
L6	is considered to	be cast iron main versus plastic main and PHMSA
L7	has explicitly sa	aid in the last couple of years that when a
L8	company inserts p	plastic that main is considered plastic. It is
L9	not considered a	cast iron main anymore.
20	Q.	Okay. I appreciate that. And you understand
21	that that is how	Spire East treats the plastic insertion, treats
22	it as plastic?	
23	A.	Yes.
24	Q.	So when we gave Staff information as to the
25	amount of plastic	c replaced, the plastic inserted in the cast

1	iron was included in that?
2	A. That is my understanding, yes.
3	Q. Okay. You talked also on Pages 5 to 6 of your
4	testimony about patches. Do you recall that?
5	A. Yes.
6	Q. Okay. And you indicated that what you
7	thought used to be patches you think are now longer than that.
8	Correct?
9	A. That's correct.
10	Q. Okay. Did you have you looked at Ms. Bolin's
11	statistics in her testimony?
12	A. In a general way, yes.
13	MR. ZUCKER: Permission to approach the
14	Chairman? I want to get my testimony back.
15	JUDGE BUSHMANN: Oh, granted.
16	BY MR. ZUCKER:
17	Q. You have Ms. Bolin's testimony with you?
18	A. I do not.
19	Q. I think your attorneys are going to help you out
20	here.
21	MR. KEEVIL: Which one are you looking for?
22	MR. ZUCKER: I think Mark has it.
23	MR. KEEVIL: Okay.
24	BY MR. ZUCKER:
25	Q. Let me know when you're ready.

1	Α.	I am ready.
2	Q.	So just looking at the mains on the left side of
3	the page in sche	dule KKB-D4. I'm sorry. Let's go back to
4	KKB-D3.	
5	A.	I'm there.
6	Q.	Okay. And at Page 5 of 5?
7	A.	Okay.
8	Q.	Under feet of mains the amount of the
9	percentage of pla	astic that was replaced was 6.35 percent. Do
10	you see that?	
11	A.	Yes.
12	Q.	Do you agree with that number?
13	A.	Yes.
14	Q.	All right. And so if 6.35 percent's plastic,
15	approximately 93	.65 percent would be cast iron and steel.
16	Doesn't sound ri	ght to you?
17	Α.	Yes.
18	Q.	Let's move on to take KKB-D4. Page 4 of 4.
19	A.	I'm there.
20	Q.	Okay. This is for Spire East; is that correct?
21	A.	Yes.
22	Q.	And the plastic under feet of mains the
23	plastic percenta	ge is approximately 12 percent; is that correct?
24	Α.	Yes.
25	Q.	And you agree with that number?

1	A.	Yes.
2	Q.	Let's do the same thing with KKB-D5, Page, I
3	think, 3 of 3?	
4	A.	I'm there.
5	Q.	Plastic percentage is 9.08 percent?
6	A.	Yes.
7	Q.	And you agree with that number?
8	Α.	Yes.
9	Q.	And then right below that on D6, the plastic
10	percent to 5.98 ]	percent of main; is that correct?
11	Α.	Yes.
12	Q.	In essence, when Spire East and Spire West are
13	replacing main i	n their cast iron main and bare steel main
14	programs, would	you agree that they are getting over 90 percent
15	of main in genera	al of cast iron and bare steel and less than 10
16	percent of plast	ic?
17	A.	I would say based upon these numbers that that
18	is a correct cha	racterization.
19	Q.	And this work that let's take Spire East for
20	example is do	ing, are you aware that the work in the cast
21	iron main progra	m is all in the same general area?
22	A.	My understanding is that it is within the city
23	limits of St. Lo	uis.
24	Q.	Okay. That is the older part of Spire East
25	territory?	

1 Α. That's correct. 2 Q. And that is where the cast iron is? Α. 3 Yes. 4 And you agree that what Spire East is performing 0. 5 is a cast iron main replacement program? 6 Α. That's part of what they are doing. They're 7 also upgrading the pressure of their system. It has that 8 ancillary benefit. 9 0. What I meant to ask was there isn't a plastic 10 replacement program. Correct? 11 Α. That's correct. 12 If -- I'm going to give you an example. Let's 0. 13 say -- you are aware that what Spire is doing -- Spire East and 14 Spire West is effectively in most cases boring in a main over a 15 long distance -- let's say a block -- and they're boring it in at a location that differs from where the cast iron is? 16 17 Α. That's my understanding. 18 0. Okay. And so let's say that -- we'll take a 19 block, we'll call it Block A. And on Block A Spire East bores 20 in its new plastic main and it costs a hundred thousand dollars. 21 Okay. And let's say that the cast iron underneath that street 22 was a 100 percent cast iron, there was no plastic. Okay? 23 Α. Okay. 24 Okay. All right. In the next scenario same Ο. 25 block, same exact scenario, same cost of installation, hundred

1	thousand dollars, but this time there is 10 percent plastic in
2	the cast iron main; 10 percent plastic, 90 percent cast iron.
3	A. Okay.
4	Q. In that scenario the change in the amount of
5	plastic did not increase the cost of the main placement, did it?
6	A. No.
7	MR. ZUCKER: One moment, Your Honor. I think
8	that's all I have. Thank you.
9	JUDGE BUSHMANN: Questions by Commissioners?
LO	QUESTIONS BY CHAIRMAN HALL:
L1	Q. If the Commission were to determine that going
L2	forward it is appropriate for the Company to do an avoided cost
L3	analysis for any plastic patch replacement, is that something
L4	that you believe would be that the Company would be able to
L5	comply with?
L6	A. Yes.
L7	Q. Why do you say that?
L8	A. Based upon the work order analysis that
L9	Mr. Hoeferlin had attached to his testimony, it seemed like that
20	was a fairly straightforward analysis and he was capable of
21	doing it for nine work orders. So my assumption would be that
22	they could extend that analysis to more work orders.
23	Q. At the same time, do you think that such an
24	analysis would show that virtually all of the plastic
25	replacements resulted in a cost reduction?

1	A. I think that would be the likely result of that
2	analysis, yes.
3	Q. So if there was one project which showed that
4	plastic patch replacement actually increase costs scratch
5	that.
6	No further questions. Thank you.
7	THE WITNESS: Thank you.
8	JUDGE BUSHMANN: I just have a couple.
9	QUESTIONS BY JUDGE BUSHMANN:
LO	Q. I don't know if you are the correct witness to
11	answer this question, but if the Commission decided that refunds
L2	would not be incorporated into the 2018 cases, what would be the
L3	correct ISRS amounts for those two cases? If it is in your
L4	testimony you can just point me to it.
L5	A. I believe that the number is contained in the
L6	auditing witness testimony. It should be in Kim Bolin's
L7	testimony, would be my understanding.
L8	Q. So a similar question about rate design, which I
L9	think is your area. If those refunds were not included in the
20	2018 cases, would your recommendation for ISRS rate design be on
21	appendix B, on schedule MDS-D2, excuse me, in both the 2018
22	cases, DMS-D2?
23	A. I don't think you can go directly to those
24	schedules because the revenue requirement has been updated by
25	the auditing section and the schedule that you see GO-2018-0309

```
DMS-D3 has a net number. So that -- 194,252 negative number
 1
 2
     that you see in rate design schedule is netted with the refund
     amount from the remand cases. And if you then go to my
 3
     testimony DMS-D3 I see that it has not been vetted. For
 4
     example, Spire Missouri West case GO-2018-0310, DMS-D3 this is
 5
 6
     subject to check, but I believe that the updated revenue
 7
     requirement without the remand amount for Spire West is
 8
     $4,052,629.
 9
              0.
                      And so what would the Commission look at to
10
     determine a rate design if in the case they decide a refund
11
     should not be included?
12
              Α.
                      If the Commission decides that a remand should
13
     not be included in the rate design I believe I would have to
14
     update my schedules for Staff witness Kim Bolin's new revenue
15
     requirement because as I look at this DMS-D2, Page 8 of 12,
16
     that's the original Staff recommended rate design that hadn't
17
     been updated for the Staff witness update.
18
                      So that will be out of date at this point?
              0.
19
                      That is out of date.
              Α.
20
                      JUDGE BUSHMANN: That's all the questions I had.
21
                      Recross by Public Counsel.
22
                      MS. SHEMWELL: No questions. Thank you.
23
                      JUDGE BUSHMANN: Recross by Spire.
24
                      MR. ZUCKER: Thank you, Your Honor.
2.5
     RECROSS EXAMINATION BY MR. ZUCKER:
```

1	Q. Mr. Sommerer, did you get a chance to look at
2	the work papers that Spire sent on Wednesday the 22nd, that
3	support the calculations on the back of Mr. Hoeferlin's
4	testimony that show a roughly 5 percent savings by the
5	replacement method that we have chosen?
6	A. Yes, I did.
7	Q. Did those look pretty involved to you or pretty
8	simple?
9	A. The basic theory of the calculation looked
10	fairly straightforward in that it involved the Company's
11	standard cost engineering estimates on how they look at the cost
12	of estimating a job. I believe that it may require some fairly
13	detailed analysis to look at how many connections, how many
14	joints would be necessary to perform the replacement using a
15	save-the-plastic approach versus going through parkway and
16	bypassing the vintage plastic.
17	Q. That is fair. Thank you.
18	MR. ZUCKER: That's all I had. Thank you, Your
19	Honor.
20	JUDGE BUSHMANN: Redirect by Staff?
21	MR. KEEVIL: Very briefly, Judge.
22	REDIRECT EXAMINATION BY MR. KEEVIL:
23	Q. Sticking with the subject of Mr. Zucker's
24	question there this really goes to the Chairman's question to
25	you about Mr. Hoeferlin's I think what he referred to what

the Chairman referred to as the avoided cost analysis performed 1 2 by Mr. Hoeferlin. How many work orders or work order authorizations did Mr. Hoeferlin look at to develop that, if you 3 can tell from looking at the thing Mr. Hoeferlin provided? 5 My recollection is the nine from the Office of 6 Public Counsel and perhaps the one instance that Mr. Lauber had performed in previous testimony, so there may be ten. 7 8 Q. Nine or ten basically? 9 Α. Yes. 10 Do you know how many work orders authorizations Ο. 11 that Staff reviewed in this case, approximately, if you don't 12 know the exact number. I don't recall. 13 Α. Were there somewhere in the hundreds? 14 0. 15 I believe there were in excess of a hundred work Α. 16 orders, yes. 17 0. Okay. Going back to this rate design issue that 18 the judge asked you about, on your schedules -- let's see -- in 19 Case Number -- okay. Let's start with the 310 case and work our 20 way back. If you start with the 310 -- the direct testimony of 21 the 310 case, the schedule DMS-D3 shows the total rate design 22 rates being designed to recover \$4,052,629. 23 Α. I have \$4,052,629. 24 Ο. Right. And that is a net figure. Correct,

which nets the 2018 ISRS with the -- what Staff calculated to be

2.5

1	the refund from the 2016 and 2017 cases. Correct?
2	A. Correct.
3	Q. Okay. So the if the refunds are not
4	included, which is what I think what the judge was asking, the
5	rates would need to be for the 310 case would need to be
6	designed to recover I believe it \$5,411,794. Is that your
7	understanding?
8	A. Subject to that being Ms. Bolin's current
9	revenue requirement, I would say yes.
LO	Q. Actually, I think it might be Mr. Arabia or
11	Ms. Newkirk.
12	A. As corrected. Okay.
L3	Q. Now, going to the 309 case, same schedule. I
L4	think it is the same schedule. Yeah. This would be a Spire
L5	East case. Actually, the ISRS would need to be designed under
L6	Staff's proposed approach would need to be designed to recover
L7	or refund, I should say, refund the \$194,252; is that
L8	correct?
L9	A. That's correct.
20	Q. So that is clearly a net number between the 2018
21	Case and 2016 and '17 cases. Correct?
22	A. Yes.
23	Q. And in the event that there is no refund
24	included the Spire East division should be allowed to recover an
25	ISRS of 2,607,608; is that correct?

1	A. That is my understanding, yes.
2	Q. Mr. Zucker had you looking at Ms. Bolin's
3	testimony, specifically schedule KKB-D5. This would be her
4	remand case testimony.
5	A. Yes.
6	Q. And you look at, like I said, KKB-D5, Page 3 of
7	3 on that feet of mains. He focused you on the 9.08 percent
8	total down there at the bottom. Could you tell me what the
9	percent of plastic was for work order number 800938?
10	A. 800938 has a 100 percent plastic.
11	Q. So to say that these are merely incidental
12	all simply incidental plastic work orders, would you agree with
13	that?
14	A. No. It appears that it varies greatly between
15	work order.
16	Q. Thank you.
17	MR. KEEVIL: That is all I have, Judge.
18	JUDGE BUSHMANN: Mr. Sommerer that completes
19	your testimony.
20	MR. KEEVIL: Judge, if I didn't previously, I'd
21	like to offer Mr. Sommerer's testimony Exhibit 103, 104 and 106.
22	MS. SHEMWELL: 105 and 106.
23	JUDGE BUSHMANN: 103, 105, and 106 have been
24	admitted.
25	MR. KEEVIL: They have. Thank you.

JUDGE BUSHMANN: Why don't we take a short 1 2 break. We'll be at recess until three o'clock. (A RECESS WAS TAKEN.) 3 JUDGE BUSHMANN: Let's back on the record. 4 Before we get to the next witness there was one thing I wanted 5 6 to take up. I had mentioned this to counsel earlier today. The Commission's had two exhibits, Commission Exhibit A and 7 Commission Exhibit B that it is intending to offer into the 8 9 record. Exhibit A would be initial brief of the Office of the Public Counsel that was filed in the Western District Court of 10 11 Appeals in the 2016 case that is before us today. 12 Exhibit B is the reply brief of the Office of the Public Counsel in that case. The reason that this may be 13 important is because one of the things that I asked you to brief 14 15 this morning was the impact of Section 386.520 on the 16 Commission's statutory authority to require a refund in the 2016 case and the 2017 case. And there were requests made in here 17 18 that may affect the arguments about what the court instructed or 19 did not instruct the Commission to do on remand. 20 become something that you may want to consider when you are 21 briefing that. I'm going to offer that into the record in order 22 to make sure that the record is complete and that we have as 23 much information as possible. 24 So any parties have any problem with or 25 objections to having those two documents in the record? Hearing

1	none, the Commission	
2	MS. SHEMWELL: I don't have any problem. I	
3	think we to have a complete record we might need to have the	
4	other briefs as well. I'm just not sure.	
5	JUDGE BUSHMANN: Well, any other party that	
6	feels the need to offer their briefs in that case, that would be	
7	fine. I would be willing to put that into the record of the	
8	hearing also. You can do that as a late filed exhibit or before	
9	the end of the day, either way.	
10	Right now though, I'm going to enter into the	
11	record and admit into the record Commission Exhibit A and	
12	Commission Exhibit B.	
13	(WHEREIN; Commission Exhibits A and B are	
14	received into evidence.)	
15	JUDGE BUSHMANN: I think we are ready for our	
16	next Staff witness.	
17	MR. JOHNSON: Staff calls Caroline Newkirk.	
18	(Witness sworn.)	
19	JUDGE BUSHMANN: You may be seated.	
20	CAROLINE NEWKIRK having been first duly sworn testified as	
21	follows:	
22	DIRECT EXAMINATION BY MR. JOHNSON:	
23	Q. Good afternoon, Ms. Newkirk.	
24	A. Good afternoon.	
25	Q. Would please state your name for the court	

```
reporter?
 1
 2
              Α.
                      It's Caroline Newkirk, C-A-R-O-L-I-N-E,
 3
     N-E-W-K-I-R-K.
                      And by whom are you employed and in what
              Q.
 5
     capacity?
                      I'm employed by the Missouri Public Service
 6
 7
     Commission as a utility regulatory auditor.
 8
              Q.
                      And did you prepare direct testimony in Case
     Number GO-2018-0309 that is marked as Staff Exhibit 102?
 9
10
              Α.
                      I did.
11
                      And at the time you drafted your testimony was
              0.
12
     it true and accurate to the best of your knowledge and belief?
13
                      It was.
              Α.
14
              Q.
                      Do you have any corrections or changes to that
15
     direct testimony?
                      I do not.
16
              Α.
17
              0.
                      And are the answer contained -- excuse me -- and
18
     if I were to ask you the same questions today would your answers
19
     be the same?
20
              Α.
                      They would.
21
                      Ms. Newkirk, have you reviewed the prefiled
              0.
22
     testimony in these matters?
23
              Α.
                      I have.
24
                      And do you have any rebuttal testimony that you
              Ο.
25
     would like to provide today?
```

1	Α.	I do not.
2		MR. JOHNSON: Judge, at this time I move to
3	admit Staff Exhi	bit 102.
4		JUDGE BUSHMANN: Any objections? Hearing none,
5	102 is admitted.	
6		(WHEREIN; Staff Exhibit 102 was received into
7	evidence.)	
8		MR. JOHNSON: I tender the witness for
9	cross-examination.	
10		JUDGE BUSHMANN: First cross would be by Public
11	Counsel.	
12		MS. SHEMWELL: Thank you. No questions.
13		JUDGE BUSHMANN: Spire Missouri?
14		MR. ZUCKER: Thank you, Your Honor.
15	CROSS-EXAMINATIO	N BY MR. ZUCKER:
16	Q.	Good afternoon, Ms. Newkirk.
17	Α.	Good afternoon.
18	Q.	Can you confirm for me that you received the May
19	and June additio	ns, additions through June 30 on July 18th?
20	Α.	Let me check real fast. What date did you say?
21	Q.	July 18th.
22	Α.	I have July 27th for the work order charge
23	details for May	and June of 2018.
24	Q.	How about the work order authorization sheets?
25	Α.	Let's see. I've got work order authorizations

```
for over 25,000 was July 26.
 1
 2
              Ο.
                      Okay. When you sent questions to Spire, can you
     confirm that you received the answers within a day or even the
 3
     same day?
 5
              Α.
                      I belief in general for the most part that is
     correct.
 6
                      Were you and the room when Mr. Sommerer
 7
              0.
     testified about work order number 008790?
 8
 9
              Α.
                      I was.
10
                      I'm not sure that's the right one. No. That's
              Q.
11
     the wrong one. Hold on. I'm sorry. 800938?
12
                      I was in the room when he testified. I don't
              Α.
13
     recall the exact number, but --
                      MR. ZUCKER: Okay. Thank you.
14
15
                      Permission to approach.
16
                      JUDGE BUSHMANN: You may.
     BY MR. ZUCKER:
17
18
                      Does this look like a work order authorization
              Ο.
19
     sheet that you would receive from Spire?
20
              Α.
                      It does.
                      And can you tell me the work order number on
21
              Ο.
22
     that?
23
              Α.
                      800938.
24
                      Okay. And can you tell me what the work order
              Ο.
25
     type description is?
```

1	A. It is a relocation for a main MGE Spire East.	
2	Q. Okay. So it's a relocation	
3	MR. JOHNSON: Judge, I'm going to object to this	
4	line of questioning. I believe these work orders pertain to the	
5	remand cases and Ms. Newkirk provided testimony based only on	
6	the 2018-0309 case.	
7	JUDGE BUSHMANN: Your response, Mr. Zucker.	
8	MR. ZUCKER: Well, she's just identifying what's	
9	on the screen there.	
10	JUDGE BUSHMANN: What is relevant to the case	
11	that she's testifying about?	
12	MR. ZUCKER: The case she's testifying about. I	
13	guess the case she's testifying about also has relocations.	
14	This is an example of a relocation work order.	
15	JUDGE BUSHMANN: I'll give you all a little	
16	leeway to develop that line questions.	
17	MR. ZUCKER: I will be fast, Your Honor. Thank	
18	you.	
19	BY MR. ZUCKER:	
20	Q. So this is about a relocation; is that correct?	
21	A. It appears to be, yes.	
22	Q. And what city does it say there, under asset	
23	location?	
24	A. It looks like Jackson city, Lees's Summit.	
25	Q. Okay. Thank you. That's all I had. Thank you.	

1	JUDGE BUSHMANN: Commission questions?
2	QUESTIONS BY CHAIRMAN HALL:
3	Q. Good afternoon.
4	A. Good afternoon.
5	Q. I am looking at your direct testimony in the
6	2018 case and I'm looking at your direct testimony in the 2018
7	case and my understanding is that your testimony concerns Spire
8	East. Correct?
9	A. Correct.
LO	Q. Okay. So did you do a calculation for the
11	amount that Spire East's ISRS should be reduced as a result of
L2	the ineligibility of plastic replacement?
L3	A. Yes.
L4	Q. Okay. Where is that contained in here?
L5	A. This, the final number that we came up with?
L6	Q. Let's start with that?
L7	A. Okay. Let me look. I believe we attached a
18	corrected revenue requirement that's attached as schedule
L9	CNN-D2. Then the very last number is the total ISRS revenues at
20	the 2.6 approximately 2.6 million.
21	Q. How much did the Company request?
22	A. Let me look. I am not sure if I have that
23	number or not. I'm looking still.
24	MR. JOHNSON: If I may, I believe that number is
25	listed on Staff's memorandum attached to schedule CNN-D1 to

Ms. Newkirk's testimony. It's at the bottom of Page 6 of 17. 1 THE WITNESS: Okay. It's about 4.8 million. 2 BY COMMISSIONER HALL: 3 So Staff is recommending roughly a \$2.2 million Ο. 5 reduction for Spire East; is that correct? 6 Α. That's correct. 7 And a portion of that is related to the O. 8 ineligibility of plastic; is that correct? 9 Α. Correct. Where is that amount? 10 0. 11 Let's see here. Besides the revenue over Α. 12 collection, I believe it's all due to the plastic. I don't 13 think we made any other adjustments besides the plastic. 14 Q. Okay. So where is the revenue over collection 15 amount? 16 The line right above the 2.6 million is about Α. 17 2.7 million. 18 So it is roughly 110,000; is that correct? 0. 19 I mean, it appears to be from this, without Α. 20 looking at my work paper for sure. I'm sorry. Without looking 21 at my work paper for sure, I'm hesitant to pick a number off of 22 this page. But that sounds right. 23 Q. If the over collection is 2,217,000 -- because -- 537 and then the amount that you are recommending is 24 2.607608, don't you just subtract the two and --25

I believe so. I mean this is -- we have feeder 1 Α. 2 pages that go to this, but that's my understanding. Okay. So is there a -- where did the 110,000 3 0. calculation come from? 4 We took all of the additions from Missouri East 5 Α. and looked at all work order authorizations that we had. We 6 7 requested anything over 25,000 and looked at the percentage of 8 plastic retired when compared to steel and cast iron. 9 And did you do that calculation or did Ms. Bolin 0. do the calculation? 10 11 I did the calculation for Spire East. Α. 12 Ο. And are you aware of whether the over collection 13 amount is in dispute? 14 Α. Am I aware that it is in dispute? 15 Yeah. And I am not saying it is. Is it in 0. 16 dispute is my question? 17 Α. It sounds like it from the case so far, but --18 MR. KEEVIL: Mr. Chairman, let me interrupt here 19 just a second here. I think there's some confusion because 20 you're talking about probably two different over collections. Ι 21 think what you are referring to Mr. Chairman -- correct me if I'm wrong -- is -- if I am I'll shut up. I think you're looking 22 23 at the 2016/2017 refunds. Is that what you're looking at? 24 CHAIRMAN HALL: I am looking at schedule CNN-D2. 25 MR. KEEVIL: Right.

CHAIRMAN HALL: For the total ISRS revenues is 1 2 2607608. MR. KEEVIL: Right. And the number above it is 3 actually a reconciliation figure of prior ISRSs. 4 CHAIRMAN HALL: Okay. And that would include --5 6 I'm sorry. 7 MR. KEEVIL: It is not the plastic issue. 8 BY CHAIRMAN HALL: 9 0. Okay. That is what I -- okay. So is it fact true that there is a -- that Staff is contending that there is 10 11 110,000 amount of ineligible plastic at issue in 2018 for Spire 12 East? 13 Without looking at my work paper, I'm sorry, I Α. 14 can't --15 Well, maybe we need to look at work papers Ο. 16 because this is kind of important. 17 Α. Okay. It looks like it was 2.-- almost 2.2 18 million. 19 What was 2.2 million? I'm sorry. Q. 20 Α. The amount disallowed for plastic. 21 Ο. Okay. Where are you? Where are you looking at 22 that number? 23 Α. It looks like we had about 7.9 before we took 24 into account the reduction from the remand cases and so that 25 brought it down 4.8 and then the 2.1 was how much we took off

1	the plastic to get down to the 2.6.
2	Q. Where is 2.1 on this document?
3	A. I don't know that that number is just in its own
4	line on this exact document.
5	JUDGE BUSHMANN: Why don't we take a short
6	recess and have Ms. Newkirk and probably our next witness also
7	dealing with Spire West there is certain information that the
8	Commission is needing to know and we need to figure out based on
9	the documents that we have where that is. So why don't we just
LO	take a short break.
11	Mr. Chairman, did you want to identify in
L2	particular certain things you are looking for?
L3	CHAIRMAN HALL: I'm trying to understand the
L4	amount of the reduction in the 2018 Spire East ISRS that is a
L5	result of Staff's view of ineligible plastic and then the
L6	balance of that reduction, if that if a portion of that is
L7	related to the '16 and '17 plastic ineligibility or if it is
L8	unrelated to the '16 and '17 plastic ineligibility issue. Does
L9	that make sense?
20	THE WITNESS: Yes.
21	COMMISSIONER KENNEY: And what percentage that
22	is of the total ISRS.
23	JUDGE BUSHMANN: Why don't we go out we'll
24	take a off the record and be in recess for about five
25	minutes.

1	(A RECESS WAS TAKEN.)	
2	JUDGE BUSHMANN: Okay. We're back on the	
3	record. And the Chairman was questioning Ms. Newkirk.	
4	QUESTIONS BY CHAIRMAN HALL:	
5	Q. So we are looking schedule CNN-D2?	
6	A. Okay.	
7	Q. I am trying to understand if this document	
8	contains the amount of ineligible plastic that Staff believes	
9	should be deducted from the Company's ISRS application?	
10	A. What it includes is the amount that we came up	
11	with that we think the ISRS should be. And so the amount that	
12	we deducted would be the difference between what the Company had	
13	in their application and this very bottom number.	
14	Q. Okay. So the Company the Company's request	
15	was what?	
16	A. 4807507.	
17	Q. And that was on so that's the 4.8 million?	
18	A. Yes.	
19	Q. So in Spire East's request it already took into	
20	account any over collection in its 4.8 request?	
21	A. I believe so, yes.	
22	Q. So is there a document somewhere that shows	
23	Staff's calculation of the 2.2 million of ineligible plastic?	
24	A. There's a tab on here where we applied the	
25	percentages to the additions that routes into this final revenue	

1	requirement tab	that I can provide if you'd like.
2	Q.	And you did that calculation?
3	Α.	I did the calculation for the additions, which
4	is not the reven	ue requirement, but the actual dollars.
5	Q.	Well, who did the 2.2 million dollar calculation
6	for the ineligib	le plastic?
7	Α.	I mean I think it flows in from when we do
8	the additions ca	lculation.
9	Q.	I guess whatever documents you have that show
10	that 2.2 million	dollar calculation
11	Α.	Okay.
12	Q.	I think we need to have that in the record.
13	Α.	Okay.
14		MR. JOHNSON: We can do a late-filed exhibit
15	quickly.	
16		CHAIRMAN HALL: Okay.
17		COMMISSIONER KENNEY: I have a question on that
18	issue.	
19	QUESTIONS BY COM	MISSIONER KENNEY:
20	Q.	So on Appendix A, schedule CNN-D1 that you show
21	that the Spire E	ast requests an increase of the 4.8 million of
22	the ISRS filing,	and you are saying that does that number
23	show the deducti	on of the 2.7 over collection?
24	Α.	I believe so, yes.
25	Q.	So if that over collection was still in there,

1	so it would be about seven five?	
2	A. Yes.	
3	Q. So the 2.6 is the amount of that seven five, so	
4	roughly, what's that, 30 percent?	
5	A. I believe if this is answering your question	
6	we both took it into consideration.	
7	Q. What does that mean?	
8	A. Both of our numbers.	
9	Q. Took what into consideration?	
10	A. The over collection.	
11	Q. All right. Forget the over collection. We can	
12	just add that back in. But the 2.6 would be Spire's number plus	
13	the over collection. That would be the number or the percentage	
14	or whatever percentage of that is that would be that came	
15	out of the 4 ISRS number. Correct? Because I'm looking at the	
16	Number now, 4.5, 2.6. That's like 50-some-odd percent?	
17	A. Yes.	
18	Q. I look at Ms. Bolin's schedule and it's all over	
19	the place, but it's s not 50 percent.	
20	A. I believe it's 45.7 percent, yes. We disallowed	
21	45.7 percent.	
22	Q. That's what you disallowed for the total ISRS?	
23	A. Yes.	
24	Q. Okay. Thank you. That answers my question.	
25	A. Okay.	

1	Q. Thank you. That's East and West?
2	A. East.
3	Q. Just east. Thank you.
4	QUESTIONS BY CHAIRMAN HALL:
5	Q. Okay. And I guess this might be subject to an
6	asked and answered objection, but did you or did Ms. Bolin or
7	did somebody else do the work order by work order calculation
8	for the amount of plastic that was to be disallowed per project?
9	A. That is the part I did, the looking at the
LO	individual work order authorizations.
11	Q. And can you tell me again what process you
L2	employed in making those calculations?
L3	A. Yes. We requested all work order authorizations
L4	for all projects that were 25,000 and above and we set up our
L5	spreadsheet to show the amount of feet retired of each kind of
L6	pipe; steel, cast iron, plastic. And then we took a percentage
L7	to come up with the amount of plastic when compared to all other
L8	types of pipe that was retired.
L9	We then applied that percentage to the total
20	overall cost for the replacement of that pipe for that
21	particular work order. If we had actual, we used actuals. If
22	we didn't have an actual for that work order authorization, we
23	used an average of all of our actuals.
24	Q. And what percentage of the work orders would you
25	say you either had to use estimated?

1	Α.	I can tell you that. For Missouri East the work
2	orders we had wit	h actual percentages was 39 percent and we used
3	54 percent of	them were using averages. That just left 7
4	percent of work o	rders that get full recovery for because of the
5	mandates.	
6	Q.	Have you been involved in other ISRS cases?
7	Α.	Yes.
8	Q.	Is that a typical process in other ISRS cases to
9	use estimated num	bers?
LO	Α.	In the past the only time we have used estimated
11	numbers I shou	ld say the only estimated numbers we would have
L2	been would have b	e in regards to the feet retired. They're not
L3	estimate of cost	but estimates of feet retired. In prior ISRSs
L4	we've never had t	o look really at the feet portion. We've
L5	always looked at	the cost. So this will be the first one that
L6	that's come into	play.
L7	Q.	So estimates for the number of feet, not
L8	estimates for the	cost?
L9	Α.	Correct.
20	Q.	In prior cases and in
21	Α.	And in this case, yes.
22	Q.	Your work papers that you used to come up with
23	this 2.2 million	dollar figure, were those shared with the
24	Company and with	OPC?
25	Α.	I believe they were.

1	Q. And then maybe one last question. The over
2	collection amounts on the same document, the 2.7 over
3	collection
4	A. Yes.
5	Q. Does that over collection include over
6	collections due to ineligible plastic or are those over
7	collection just like any other over collection in any other ISRS
8	case?
9	A. I believe it is the second scenario that you
LO	said, but I'm not for sure. I didn't put that exact number in
11	on this page.
L2	Q. Who would be able to answer that question?
L3	A. I'm sure Kim Bolin would know.
L4	Q. Okay. I think that's all I have. Thank you.
L5	QUESTIONS BY JUDGE BUSHMANN:
L6	Q. You may have already answered this question and
L7	if so, I apologize. The number that you referred to as total
L8	ISRS revenues on schedule CNN-D2, about 2.6 million?
L9	A. Yes.
20	Q. Does that number have in it factored into it any
21	of the refunded from the 2016or 2017 cases that Staff had
22	recommended be included in the '18 cases?
23	A. I'm sorry. Can you say the last part of that
24	again?
25	Q. I'm just wondering if that number includes any

1	of the proposed refunds that Staff had asked for from the 2016		
2	and the 2017 case	es or if that's independent of that?	
3	Α.	We did it both ways, so I'm not sure on this	
4	one. I just know	that we did the same way as the Company on	
5	this last version	, but I am not sure.	
6		JUDGE BUSHMANN: Okay.	
7		Any recross from Public Counsel?	
8	RECROSS EXAMINATI	ON BY MS. SHEMWELL:	
9	Q.	The amount that you're calling over collection,	
10	Ms. Newkirk, Staf	f do Staff and the Company agree on that	
11	dollar amount of	over collection?	
12	Α.	I believe so, yes.	
13	Q.	Do you know if that is a result of customer	
14	growth or some other factor like that that has nothing to do		
15	with plastic main	ıs?	
16	А.	I do believe it has nothing to do with the	
17	plastic.		
18	Q.	Thank you.	
19		JUDGE BUSHMANN: Anything further?	
20		MS. SHEMWELL: That's all. Thank you.	
21		JUDGE BUSHMANN: Spire Missouri?	
22		MR. ZUCKER: No questions, Your Honor.	
23		JUDGE BUSHMANN: Redirect by Staff.	
24		MR. JOHNSON: Hopefully very briefly.	
25	REDIRECT EXAMINAT	ION BY MR. JOHNSON:	

Not to belabor the point, Ms. Newkirk, but you 1 Ο. 2 had several questions regarding your ultimate recommended 3 revenue requirement. The Company in their application asked for total revenues of about 4.8 million dollars? 4 5 Α. That's correct. 6 Ο. In turning to your schedule CNN-D2, at the 7 bottom, total ISRS revenues it lists two -- about 2.6 million 8 dollars. Can you briefly explain how you determined that final 9 number? 10 Like I said, I mainly did the additions, which Α. 11 is not I guess the same language as revenue requirement per se. 12 Like I told the Chairman, we applied the plastic percentages to 13 each of the work orders that we had actuals for and averaged the ones that we didn't have actuals for. And that was how we came 14 15 up with our amount to disallow. And then the amount that we 16 proposed as the 2.6 million would be what the Company had asked 17 for minus for disallowance of that plastic and that was the 18 difference. 19 And I believe you stated earlier that if you 0. 20 were to take the original 4.8 million requested by the Company 21 and subtract the 2.6 million recommended revenue requirement of 22 Staff, that results in about \$2.2 million? 23 Α. Correct. 24 And just to be completely clear, what is that Ο. 25 2.2 million dollars number represent -- or what does that

1	represent?	
2	Α.	The amount that we are excluding because of the
3	plastic.	
4	Q.	And is that the only adjustment that Staff made?
5	Α.	Yes.
6	Q.	Thank you, Ms. Newkirk.
7		JUDGE BUSHMANN: Thank you. You may step down.
8		Next witness.
9		MR. JOHNSON: Staff calls Ali Arabian.
10		(Witness sworn.)
11		JUDGE BUSHMANN: Please be seated.
12	ALI ARABIAN having been first duly sworn testified as	
13	follows:	
14	DIRECT EXAMINATION BY MR. JOHNSON:	
15	Q.	Good afternoon.
16	A.	Good afternoon.
17	Q.	Could you please state your name and spell it
18	for the court rep	porter?
19	A.	My name is Ali Arabian, A-L-I, A-R-A-B-I-A-N.
20	Q.	And Mr. Arabian by whom are you employed and in
21	what capacity?	
22	A.	Missouri Public Service Commission as a utility
23	regulatory audito	or.
24	Q.	And did you prepare or cause to be prepared the
25	direct testimony	in Case Number GO-2018-0310 that is marked as

1	Staff Exhibit 10	4?
2	Α.	Yes.
3	Q.	And at the time you drafted your testimony was
4	it true and accu	rate to the best of your knowledge and belief?
5	Α.	Yes.
6	Q.	And do you have any corrections or changes to
7	your direct test	imony?
8	Α.	No.
9	Q.	If I were to ask you these same questions today
10	would your answe	rs be the same?
11	Α.	Yes.
12	Q.	Mr. Arabian, had you reviewed the prefiled
13	testimony in these matters?	
14	Α.	Yes.
15	Q.	Do you have any rebuttal testimony that you like
16	would like to pr	ovide today?
17	Α.	No, I don't.
18		MR. JOHNSON: Judge, at the time I move to admit
19	Staff Exhibit 10	4.
20		JUDGE BUSHMANN: Any objection?
21		MR. ZUCKER: No objection.
22		MR. JOHNSON: I tender the witness for
23	cross-examinatio	n.
24		JUDGE BUSHMANN: 104 is admitted.
25		(WHEREIN; Staff Exhibit 104 was received into

1	evidence.)	
2		JUDGE BUSHMANN: Cross by Public Counsel?
3		MS. SHEMWELL: No questions. Thank you.
4		JUDGE BUSHMANN: Spire Missouri?
5		MR. ZUCKER: We don't have any questions either.
6	Thank you.	
7		JUDGE BUSHMANN: Commissioner questions.
8	QUESTIONS BY CHA	IRMAN HALL:
9	Q.	Good afternoon.
10	Α.	Good afternoon.
11	Q.	So I am looking at schedule AA-D2 to your direct
12	testimony.	
13	A.	Yes.
14	Q.	And the bottom figure there, the 5.4 million
15	dollar figure, th	nat is the amount that Staff is recommending for
16	Spire West's ISR	S; is that correct?
17	A.	Correct.
18	Q.	And the Company requested 7,085,762; is that
19	correct?	
20	A.	Correct.
21	Q.	So the difference there 1,672,968.
22	A.	Correct.
23	Q.	Is that well, is that correct?
24	A.	Correct.
25	Q.	So is that the amount that Staff believes

1	corresponds to ineligible plastic?
2	A. Yes. That about excludes plastic.
3	Q. Okay. Did you do the calculation for that 1.6
4	1.7 million ineligible plastic?
5	A. Yes. I took the difference between what they
6	Company wanted and what we came up with.
7	Q. Well, in terms of what we and I assume that
8	means what Staff came up with were you the individual who did
9	the cal who determined the ineligible plastic amount?
10	A. Yes.
11	Q. Okay. So can you tell me how you did that?
12	A. I took the difference between what the ISRS
13	they wanted the company wanted and the difference of what we
14	got.
15	Q. Well, I can assume somebody from Staff, you or
16	somebody else, went through all of Spire West's work orders and
17	determined the amount of plastic on each work order and then did
18	a corresponding reduction to the amount of Spire West's ISRS
19	application amount; is that correct?
20	A. Correct.
21	Q. And are you the individual who do that?
22	A. Yes.
23	Q. Okay. So did you look at every work order
24	during this particular time period?
25	A. We looked at every work order that was provided

1	by the Company t	hat we requested.
2	Q.	What work orders did you request?
3	Α.	We requested everything above \$25,000 sample.
4	Q.	Okay. So the Company provided all of the work
5	orders you reque	sted and you requested all of the work orders in
6	excess of 25,000	?
7	Α.	Not every one, we just did a sample.
8	Q.	You just did a sample. What do you mean by
9	that?	
10	Α.	I think
11	Q.	I was under the impression that you had looked
12	through each work order and made a calculation based on the	
13	amount of plasti	c in each work order. Is that not true?
14	Α.	I think we looked at a sample, yeah.
15	Q.	Do you have work papers that would show this
16	\$1.6 million red	uction as a result of ineligible plastic?
17	Α.	The work paper, the spreadsheet that we have. I
18	don't know if th	at shows it or not.
19	Q.	Is it your understanding that you follow the
20	same process tha	t Ms. Newkirk did for Spire East?
21	Α.	Yes.
22	Q.	So she had work papers that showed her
23	calculation for	the ineligible plastic for Spire East. And so I
24	am hoping that S	taff can also submit the work papers showing the
25	ineligible plast	ic for Spire West?

1		A.	Yes.
2		Q.	And do you know if those work papers were
3	provided	to the	Company and OPC?
4		A.	I believe they were.
5		Q.	And is it your understanding that the only
6	correction	on to th	e Company's requested ISRS amount was related to
7	the inel	igible p	lastic?
8		A.	Yes.
9		Q.	I have no further questions. Thank you.
10			JUDGE BUSHMANN: Do you have other questions?
11			COMMISSIONER KENNEY: Yeah.
12	QUESTION	S BY COM	MISSIONER KENNEY:
13		Q.	I am just trying to understand that plastic
14	number.	On your	schedule AA-D2 under total requirement on
15	capital	is that	5 million, 44 million. Right?
16		A.	Yes.
17		Q.	And then the Company had 7,085,000. Correct?
18		A.	Correct.
19		Q.	And the Company's request was after deducting
20	the over	collect	ions of 1.8 million; is that correct?
21		A.	Correct.
22		Q.	I believe I think a previous witness said
23	that?		
24		A.	Yes. Correct. Yes.
25		Q.	Okay. So you had about so the plastic that

was taken out would have been that 7,085,000 plus the 1.8 1 2 million, so 8,900,000 minus your revenue requirement of the 5.9. So there's about a 3 million; is that correct? About 3 billion 3 in plastic pipe. Would that be correct or am going down the 5 wrong path? 6 Α. I just took the difference between the 7,085,000 and the 5.4 million. 7 That's the difference? 8 Q. 9 Α. That's the difference. 10 Even though the Company had already taken out 0. 11 the 1.8 million in that 7.8 million. At least that's what I 12 understand. Do you have the percentage of plastic? 13 23.6 percent. Α. 14 Q. 23.6. Okay. All right. Thank you. 15 JUDGE BUSHMANN: Recross based on Commission questions. Public counsel? 16 17 RECROSS-EXAMINATION BY MS. SHEMWELL: 18 Does Spire Missouri West have the same issue 0. 19 with over collection as Spire Missouri East? 20 Α. I believe so. 21 And so you took a reduction because of over 0. 22 collection due to customer growth or for whatever reason? 23 Α. I believe so. 24 It had nothing to do with the amount of plastic? Ο. 25 I don't think so. Α.

1	Q.	You think it did not have anything to do with
2	the plastic or	
3	Α.	No.
4	Q.	Thank you.
5		JUDGE BUSHMANN: Spire Missouri?
6		MR. ZUCKER: No questions.
7		JUDGE BUSHMANN: Redirect?
8		MR. JOHNSON: Yes. Thank you, Judge.
9	REDIRECT EXAMINAT	ION BY MR. JOHNSON:
10	Q.	Mr. Arabian, Chairman Hall asked you a question
11	about what you re	viewed to determine the amount of plastic costs
12	to be removed fro	m the Company's request. What documents did
13	you review in det	ermining your calculation?
14	Α.	We reviewed the work order authorizations and a
15	sample of invoice	s.
16	Q.	All right. Invoices. Why did you review the
17	invoices?	
18	Α.	We get the invoices for the costs.
19	Q.	Was anything related to plastic in your review
20	of the invoices?	
21	Α.	No.
22	Q.	And you said you reviewed a sample of the
23	invoices?	
24	Α.	Yes.
25	Q.	And those invoices pertained to costs incurred?

1	Α.	Yes.
2	Q.	In your review of the work orders, what did you
3	look at?	
4	Α.	The footage of steel, cast iron.
5	Q.	How many of the work orders did you review?
6	A.	I don't have an approximate number.
7	Q.	Do you have a percentage perhaps?
8	Α.	No, I don't.
9	Q.	Did you review a sample of the work orders?
10	Α.	I believe so.
11	Q.	You didn't review all of the work orders?
12	Α.	All the work orders above 25,000.
13	Q.	You reviewed every work order above \$25,000?
14	Α.	I believe so. I'm not sure.
15	Q.	Okay. Going to your schedules, the Company in
16	their application	n or how much did the Company request in
17	their application	n for ISRS revenues?
18	Α.	A little over 7 million.
19	Q.	All right. And what was Staff's recommended
20	revenue requirem	ent?
21	Α.	5.4.
22	Q.	And I believe you said earlier that Staff's
23	adjustment for p	lastics was 1.6 million or around there?
24	Α.	Correct.
25	Q.	And how did you determine that number?

1	А.	Took the difference.
2	Q.	Took the difference. Was there any other
3	adjustment made	to the Laclede excuse me Spire East's or
4	Spire West's rec	quested ISRS revenue?
5	Α.	No.
6	Q.	Looking at our schedule one more time, the
7	number directly	above the 5.4 million, 1.834 and change in
8	brackets, what w	as that amount?
9	Α.	1.8.
10	Q.	What does that amount pertain to.
11	Α.	Over collection.
12	Q.	What is that over collection from?
13	Α.	Customer
14	Q.	Is that amount from a prior ISRS period?
15	Α.	I assume so. I'm not sure.
16	Q.	Does that amount have anything to do with cost
17	of plastic repla	cement?
18	Α.	No. I don't believe so.
19	Q.	I have no further questions. Thank you.
20		JUDGE BUSHMANN: That concludes your testimony,
21	sir. You may st	ep down.
22		THE WITNESS: Thank you.
23		JUDGE BUSHMANN: Public Counsel witness?
24		MS. SHEMWELL: Public Counsel calls Robert
25	Schallenberg.	
		,

1	W)	Jitness sworn.)
2	JU	DGE BUSHMANN: You may be seated.
3	ROBERT SCHALLENBERG	having been first duly sworn testified as
4	follows:	
5	DIRECT EXAMINATION	BY MS. SHEMWELL:
6	Q. Mr	. Schallenberg, will you please state your
7	name and spell your	last name for the reporter?
8	A. Ro	bert E. Schallenberg. It's
9	S-C-H-A-L-L-E-N-B-E	Z-R-G.
10	Q. Wh	here are you employed and what you do there?
11	Α. Ι'	m employed by the Office of the Public Counsel
12	and my position is director of policy.	
13	Q. Di	d you prepare testimony for this case that has
14	been marked as Exhibit 200?	
15	A. Ye	es.
16	Q. Do	have any corrections?
17	A. Ye	es. I'm told that the headings on Pages 2 and
18	3 identify the test	imony of the direct testimony of John A.
19	Robinett and that's	s not true. It's mine.
20	Q. Sc	it's the heading at the top on the left that
21	has the incorrect n	name?
22	A. Ye	es. On the second and third page.
23	Q. Yo	ou're testifying in Case Numbers GO-2016-0332,
24	GO-2016-0333, GO-20	17-0201 and GO-2017-0201, as well as
25	GO-2018-0309 and GO	0-2018-0310. Correct?
	i	

1	Α.	Yes.
2	Q.	If I were to ask you the same questions today
3	would your answe	rs be substantially the same?
4	A.	Yes.
5	Q.	Is your testimony true and correct to the best
6	of your knowledge	e and belief?
7	A.	Yes.
8	Q.	Have you reviewed the testimony of the other
9	parties?	
10	A.	Yes.
11	Q.	Do you have any rebuttal testimony?
12	A.	Nothing, that is not repetitive.
13		MS. SHEMWELL: Thank you, Mr. Schallenberg. I
14	tender the witne	ss for cross.
15		JUDGE BUSHMANN: Do you want to offer 200?
16		MS. SHEMWELL: I do. Thank you.
17		JUDGE BUSHMANN: Any objections to Exhibit 200?
18	200 is admitted.	
19		(WHEREIN; OPC Exhibit 200 was received into
20	evidence.)	
21		JUDGE BUSHMANN: Cross-examination by Staff?
22		MR. JOHNSON: No questions. Thank you, Judge.
23		JUDGE BUSHMANN: Spire Missouri?
24		MR. ZUCKER: We don't have any questions either.
25	Thank you.	

1	JUDGE BUSHMANN: Commission questions.
2	COMMISSIONER KENNY: No questions for me.
3	CHAIRMAN HALL: No questions.
4	JUDGE BUSHMANN: No need to recross or redirect.
5	Thank you, Mr. Schallenberg. You may step down.
6	MS. SHEMWELL: Public counsel calls John
7	Robinett.
8	(Witness sworn.)
9	JUDGE BUSHMANN: You may be seated.
10	JOHN ROBINETT having been first duly sworn testified as
11	follows:
12	DIRECT EXAMINATION BY MR. CLIZER:
13	Q. Good afternoon, Mr. Robinett.
14	A. Good afternoon.
15	Q. Would you please state and spell your name for
16	the record?
17	A. John A. Robinett, and it's R-O-B-I-N-E-T-T.
18	Q. Can you state by whom you are employed and your
19	position?
20	A. I am employed by the Missouri Office of the
21	Public Counsel as a utility engineering specialist.
22	Q. Have you prepared have you prepared or caused
23	to be prepared direct testimony that's been prefiled as Exhibit
24	Number 201?
25	A. Yes.

Are there any changes you would like to make to 1 0. 2 your exhibit? 3 Α. No. 4 0. If I were to ask you the same questions today 5 that were asked previously, would your answers be the same? 6 Α. They would. 7 Ο. Are your answers true and correct to the best of 8 your knowledge? 9 Α. They are. MR. CLIZER: I would tender OPC Exhibit 201. 10 11 JUDGE BUSHMANN: Any objection to the receipt of 12 that exhibit? Hearing none, 201 is admitted. 13 (WHEREIN; OPC Exhibit 201 was received into 14 evidence.) 15 JUDGE BUSHMANN: Do you have any rebuttal 16 questions? 17 MR. CLIZER: Yes, actually. 18 REBUTTAL BY MR. CLIZER: Mr. Robinett, is the retired cast iron system --19 0. 20 well, is the cast iron system that Spire is retiring the same as 21 the one it is currently installing? 22 Α. Only in the aspect that it is serving the same 23 people. I mean it's a different pressure system. 24 different design is my understanding. The old system is a low 25 pressure system. It's interlooped and interconnected because it

1 The new pressure -- the new intermediate pressure I has to be. 2 would basically define as kind of a -- for lack of better term it's a dead-end system. They could go down. They don't have to 3 have all of the interconnections for back feeding of the 4 5 pressure. 6 Ο. Were there any changes to the height as part of 7 adopting the new system? 8 Α. My understanding is that from the Company's 9 testimony is that they are now -- the cast iron had to be at a 10 certain height all the way across the neighborhood. And that 11 the plastic pipe has now moved towards the side of the road or 12 in the section of grass in between the sidewalk and the street. 13 Yes, the replacement is at a closer to the surface distance than 14 previously. 15 Did this have an effect on installation of 0. service lines? 16 Yes, it would. In order to reconnect, I think 17 Α. 18 it was in the early 2016 testimony that they had to -- basically 19 you have to move the connection that -- where the services 20 connect to the old main is certainly not where they can connect 21 to the new main that's being installed. 22 Were you in the room today during the testimony Q. 23 of Mr. Glenn Buck? 24 I was. Α. 2.5 Did Mr. Buck state anything regarding your

Q.

		_		_						
Α.	I	think	he	pointed	to	me	as	the	person	probabl

credentials as far as depreciation goes?

- to ask questions to about depreciation in the room.
- Q. In Mr. Buck's testimony on Page 8 he suggests that depreciation average service life can be an indicator for whether a pipe is worn out or deteriorated. Do you agree with Mr. Buck's testimony?
  - A. I agree it could be a; it is not the only.
  - Q. Could you please define depreciation?
- A. The best depreciation definition I have actually comes from the public utility depreciation practices manual that was issued by NARUC in August of 1996. And it defines depreciation as applying to depreciation -- depreciable utility plant means the loss in service value not restored by current maintenance incurred in connection with the consumption or perspective retirement of utility plant in the course of service from causes which are not known to be in current operation and against which the utility is not protected by insurance. Among the causes to be given consideration are wear-and-tear, decay, actions of the elements, inadequacy, obsolescence, changes in art, change in demand, and requirements of public authorities.
  - Q. Can you identify who NARUC is?
- A. NARUC is the National Association of Regulatory Utility Commissioners.
  - Q. Could you explain a little bit about what

depreciation accounting is?

2.5

- A. Likewise they -- the -- NARUC's publication on depreciation also defines depreciation accounting as a system of accounting which aims to distribute cost or other basic value of tangible capital assets less salvation, if any, over the estimated useful life of the unit. And then in parens it says (which may be a group of assets) close paren, in a systematic and rational manner. It is the process of allocation, not evaluation. Depreciation for the year is a portion of the total charge under which a system that is allocated to the year although the allocation may properly take into account occurrences during the year. It is not intended to be a measurement of the effect of all such occurrences.
- Q. Does this have any effect on the allocation of cost?
- A. Yes. I mean it --NARUC goes on further to basically describe that the concept brings it into much clearer focus. It de-emphasizes the concept of depreciation expense as a loss of service value or an allowance and it emphasizes the constant the depreciation expense is the cost of an asset which is allowable to a particular accounting period. This definition also clearly illustrates that the goal of recognizing cost not providing funds for replacing of the asset.

MR. CLIZER: Permission to approach the witness.

JUDGE BUSHMANN: You may.

```
1
     BY MR. CLIZER:
 2
              Ο.
                      Mr. Robinett, what I have just handed you would
     you say that is a fair and accurate copy of the portions from
 3
     the NARUC public utilities depreciation practice in which you
 5
     are relying?
 6
              Α.
                      Yes. It is a portion that I'm relying on.
                                                                  Ιt
 7
     is not the entirety of it.
                      MR. CLIZER: At this time offer OPC's Exhibit
 8
9
     203.
10
                      JUDGE BUSHMANN: First you have to mark it and
11
     you need to give it to the other counsel. You need to get a
12
     copy to the bench and then I will take up any objections.
13
                      MR. CLIZER:
                                   Sorry.
14
                      (WHEREIN; OPC Exhibit 203 was marked for
15
     identification.)
16
                      JUDGE BUSHMANN: Exhibit 203, are you intending
     to offer that into evidence?
17
18
                      MR. CLIZER: Yes, please.
19
                      JUDGE BUSHMANN: Any objections? Hearing none,
20
     it's admitted.
21
                      (WHEREIN; this ruling was later held until
22
     August 28th.)
23
                      MR. ZUCKER: Your Honor, I'm sorry. I'm a
     little slow on the take.
24
2.5
                      JUDGE BUSHMANN: Do you have an issue?
```

1	MR. ZUCKER: I don't think we have any problem
2	with this. The only thing is is since we just got a chance to
3	take a look at it, we'd just like to consult what else NARUC may
4	have said in this report on this subject and if we think it
5	needs to be supplemented by anything else from NARUC to be
6	afforded the opportunity to do that in the next couple of days.
7	I suspect we won't but just out of an abundance of caution we
8	like to kind of consult what NARUC has said on this besides just
9	these few pages and if we think anything needs to be added, to
10	suggest it.
11	JUDGE BUSHMANN: Okay. I'll give you until the
12	end of the day tomorrow on the 28th to make any objection and
13	that will be a formal objection in writing and filed in EFIS.
14	MR. ZUCKER: That's great. Thank you.
15	JUDGE BUSHMANN: In the meantime, I'll withhold
16	ruling on admitting that exhibit after that.
17	MR. CLIZER: Thank you, Your Honor.
18	BY MR. CLIZER:
19	Q. Mr. Robinett, did you rely on any other sources
20	in developing your rebuttal testimony?
21	A. Yes. I relied on two other sources that are
22	commonly used in depreciation. One is the depreciation systems
23	book written by Frank K. Wolfe and W. Chester Fitch.
24	MR. CLIZER: Permission to approach the witness.
25	JUDGE BUSHMANN: You may.

1	MR. CLIZER: Permission to approach the bench.
2	JUDGE BUSHMANN: You don't need to ask. Do you
3	want to mark this as 204?
4	MR. CLIZER: Yes, please.
5	(WHEREIN; Exhibit 204 was marked for
6	identification.)
7	BY MR. CLIZER:
8	Q. Mr. Robinett, is the exhibit you have been
9	handed a fair and accurate copy of the page which you relied in
10	this book?
11	A. It is.
12	MR. CLIZER: In that case, I offer OPC 204.
13	MR. ZUCKER: I may have missed it. What book
14	did this come from, Mr. Robinett?
15	THE WITNESS: Depreciation systems.
16	MR. KEEVIL: Abridged or unabridged?
17	THE WITNESS: As far as I know it's unabridged.
18	MR. ZUCKER: Your Honor, at the risk of adding
19	to my reading list, if we could just treat this as the same
20	fashion and have until tomorrow at the close of business to see
21	whether we have any objection. I suspect we won't.
22	JUDGE BUSHMANN: I hold off ruling until after
23	tomorrow.
24	MR. ZUCKER: Thank you.
25	MS. SHEMWELL: Do you need to borrow our copy?

1	MR. ZUCKER: We very well might. I promise to
2	bring it back.
3	BY MR. CLIZER:
4	Q. From want for the depreciation systems what
5	did you rely on?
6	A. I relied on the first three paragraphs under the
7	concepts of depreciation that basically discussed the concept of
8	depreciation that includes physical condition, decrease in
9	value, and the cost of operation. And specifically I relied on
10	Paragraph 3 which discusses two problems that arise when using
11	the concept of physical condition as a measure depreciation. It
12	states first wear-and-tear do not account for all retirements.
13	In fact, they are often a minor reason for the retirement of
14	property.
15	Second, physical condition that it can
16	second, physical condition can be difficult to measure though it
17	is possible to measure directly the wear-and-tear of railroad
18	track or the corrosion of cast iron pipe, easily measurable wear
19	is not characteristic of most industrial property.
20	Q. Thank you. I believe you mentioned you relied
21	on a third source?
22	A. I did. The third source is a publication from
23	the Edison Electric Institute and the American Gas Association.
24	It is called The Introduction to Depreciation for Public
25	Utilities and Other Industries.

```
MS. SHEMWELL: We'll be happy to provide that to
 1
 2
     Spire for their review if they need it.
                      MR. CLIZER: I would ask this be marked as OPC
 3
     Exhibit 205.
 4
 5
                      WHEREIN; Exhibit 205 was marked for
 6
     identification.)
    BY MR. CLIZER:
 7
 8
              Q.
                      Mr. Robinett, is this a fair and accurate copy
 9
     of the page upon which you have relied and develop in your
10
     rebuttal?
11
                      It is.
                              I mean, it is not the only one from that
              Α.
12
     document, but yes. I also would've relied on Page 3.
13
                      From -- what information did you receive source
14
     or what information did you rely on from this source?
15
                      So the first part -- I'll start with Page 3,
              Α.
16
     which isn't on that exhibit. It's a description of the service
17
     life estimation, how to go about doing it. And then again the
18
     Page 59 is specifically the two paragraphs above the bold
19
     statement Estimates for Future Life Characteristics. It's again
20
     a discussion of the service life and units of property.
21
              Ο.
                      Thank you.
                      MR. CLIZER: I would like to offer OPC Exhibit
22
23
     205.
24
                      JUDGE BUSHMANN: Objections?
25
                      MR. ZUCKER: No objection, Your Honor.
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could hold off on ruling. 1 2 JUDGE BUSHMANN: As with the other two then, any objections will be due by the end of the day tomorrow. 3 hold off ruling on it until then. 4 BY MR. CLIZER: 5 6 Ο. Do you have any rebuttal with regard to the 7 direct testimony of Mr. Hoeferlin? 8 Α. I did specifically -- let me check my page 9 number on it. It's Page 9 of Mr. Hoeferlin's testimony and it 10 is -- my interpretation is it is a citation from him of the 11 Commission's pipeline safety program report and it's discussing 12 at the bottom of that two pipeline incidents and I believe it's 13 from Staff's safety department. It states at the age of the 14 steel pipeline by itself may not be a determining factor. 15 age as well as other integrity factors would need to be included in the review. 16 17 Ο. Thank you. Moving back to the testimony of 18 Mr. Buck, on Page 5 in reference to cast iron and steel pipes 19 that are being replaced Mr. Buck says that no party in this case 20 disputes if they are worn or in a deteriorated condition. Do 21 you agree with this? 22 Α. I do not. I asked several DRs in this case 23 trying to get about the worn out and deteriorated condition of 24 the pipe. 25 Q. So OPC is contesting that the pipes are worn out

1	or deteriorated?
2	A. I don't believe there is evidence in this case
3	that would support the pipes were worn out and deteriorated.
4	Q. You just mentioned several DRs responses that
5	you sent to Spire. Did you receive a response?
6	A. I sent DRs and I did receive responses as well
7	as probably an objection letter or two.
8	MR. CLIZER: I asked this to be marked as OPC
9	Exhibit 206.
10	(WHEREIN; Exhibit 206 was marked for
11	identification.)
12	BY MR. CLIZER:
13	Q. Do you recognize this exhibit?
14	A. Yes. This is an objection letter from the
15	Company in regards to the two five DRs that I asked.
16	Q. What specifically did the Company have to say
17	with regards to whether they were able to demonstrate the pipes
18	were worn out or deteriorated?
19	A. The objection was that the request was overly
20	broad and unduly burdensome because it seeks any and all
21	documentation on all the piping replaced. Notwithstanding this
22	objection Spire states that other than relocations, most of the
23	replacements were performed as part of the Commission mandated
24	replacement programs. This is precisely the type of work
25	contemplated by the ISRS statute. We have long-held that pipes

```
1
     subject to these mandates are by definition worn out or in a
 2.
     deteriorated condition.
              Q. Based on that you would say Spire is merely
 3
     assuming the pipes are worn out and deteriorated?
 4
 5
                      I believe that from my understanding of what the
     objection is is that because there is a ISRS statute, the
 6
 7
     replacements are mandated and they believe that they fit the
     definition.
 8
                      Is that -- never mind. It addition to the
 9
              Ο.
10
     objection letter you actually did receive several DR responses
11
    as well. Correct?
12
              Α.
                      I did.
                      MR. CLIZER: I'd ask that this be marked as OPC
13
14
     Exhibit 206. I apologize. I offer OPC 206.
15
                      JUDGE BUSHMANN: Any objection? Hearing none, e
     206 is admitted.
16
                      (WHEREIN; OPC Exhibit 206 was received into
17
18
     evidence.)
19
                      MR. CLIZER: I would move to mark OPC Exhibit
20
     207, which is the data responses sent to Spire to the Missouri
21
     Office of Public Counsel.
22
                      (WHEREIN; Exhibit 207 was marked for
23
     identification.)
24
     BY MR. CLIZER:
25
                      Mr. Robinett, do you recognize this document?
              O.
```

1	A. I do. This is the responses Spire provided with
2	notice to look to the objection letter also.
3	Q. Is this a fair and accurate copy of the
4	responses you received?
5	A. It is.
6	MR. CLIZER: I would move to admit OPC Exhibit
7	207.
8	JUDGE BUSHMANN: Any objections?
9	MR. JOHNSON: Judge, these DRs seem to reference
10	an appendix. Staff would request the appendix be submitted
11	along with the DR responses.
12	JUDGE BUSHMANN: Your response?
13	MR. CLIZER: We would be happy to provide that
14	appendix, John?
15	THE WITNESS: Judge, I believe this is appendix
16	A to the applications the verified applications is what I
17	believe it is addressing.
18	MR. PENDERGAST: Where are we looking?
19	THE WITNESS: DR8501 the response.
20	MR. JOHNSON: The first one.
21	MR. ZUCKER: Yeah. That's in the application.
22	JUDGE BUSHMANN: Which is already in the record.
23	MR. JOHNSON: In that case, I withdraw my
24	objection.
25	JUDGE BUSHMANN: Exhibit 207 is admitted.

(WHEREIN; OPC Exhibit 207 was received into 1 2 evidence.) BY MR. CLIZER: 3 In DR 8513, which is on the second page, you 0. requested what information that Spire East or West -- what test 5 6 information Spire used to perform on the pipes to determine if 7 they were worn out or deteriorated. What was their response? 8 Α. If it is economically or operational feasible to reconnect a service line to a main that is being installed in 9 10 connection with the Company's cast iron and bare steel 11 replacement programs, it will be reused. If it is not 12 economically or operational feasible to reconnect the service 13 line to a newly installed main a new service line will be 14 installed. As the Company has repeatedly demonstrated such an 15 approach does not result in any incremental increase in either 16 the Company's ISRS cost of the resulting ISRS charges, but instead reduces them compared to the cost that would be incurred 17 18 if an attempt was made to reuse service lines that cannot 19 feasibly or -- feasibly be economically or operationally 20 reconnected to the main. 21 Any effort to perform tests on service lines 22 cannot be economically or operationally reused would serve no 23 purpose, but instead would be an unnecessary and imprudent 24 expenditure of resources. And then it says: Also see the 2.5 response to DR 8505.

Is your understanding of this DR response that 1 0. 2 Spire is not performing testing on the pipe it retires? If they retired the service line, yes, they 3 Α. would not be testing because it was not economically or 4 5 operationally able to be reused. 6 Ο. So is there any evidence in the record that 7 shows the pipes that are being retired are actually worn out or deteriorated? 8 9 Α. I think the only evidence that is in the case is related to the -- I believe it's only alpha designations for 10 11 each ISRS project that are attached to the verified 12 applications. 13 0. Spire sent several work orders to OPC. 14 for its review? 15 It did, as well as to Staff. Α. 16 And these work orders were sent in PDF format? 0. 17 Α. They were. I specifically received them from 18 Spire employee Wes Unseld, I believe is his name. 19 MR. ZUCKER: That was on the Washington Post. 20 Wes Selinger (ph.). 21 THE WITNESS: Wes Selinger. I'm sorry. 22 BY MR. CLIZER: 23 0. These work orders that were sent to you, they 24 were broken up by size of projects and costs. Right? So you 2.5 receive four over 25K and 50K and over; is that true?

1	Α.	Yes, for both East and West.
2		MR. CLIZER: I would move to Mark OPC Exhibit
3	208, which is wor	k order 900992, which would be the first order
4	that appears in t	he Spire Missouri East work ordered for October
5	through April ove	er 50K.
6		(WHEREIN; Exhibit 208 was marked for
7	identification.)	
8	Q.	Mr. Robinett, did you review this work order in
9	preparing your re	buttal today?
10	Α.	I did.
11	Q.	Is it a fair and accurate copy of the work order
12	you reviewed?	
13	Α.	It is.
14		MR. CLIZER: I would move to admit OPC's Exhibit
15	208.	
16		JUDGE BUSHMANN: Any objections?
17		MR. CLIZER: Has it been admitted?
18		JUDGE BUSHMANN: I was giving counsel a chance
19	to review the doc	ument.
20		MR. PENDERGAST: No objection.
21		JUDGE BUSHMANN: 208 is admitted.
22		(WHEREIN; OPC Exhibit 208 was received into
23	evidence.)	
24		MR. CLIZER: I'm going to offer both of them. I
25	would like mark O	PC Exhibit 209, which is work order 900994,

```
which is the very first work order that appears under the pdf
 1
 2
     file spire Missouri East work orders -- sorry -- Spire East May
     through June work orders over 25K.
 3
                      MR. ZUCKER: You Honor, I haven't had an
 5
     objection so far, but at some point, you know, we have enough
 6
     material that we're putting in that I think the question should
 7
    be fairly raised: If this was important material, why wasn't it
 8
     included in my direct filing. OPC had some very slim direct
 9
     testimony and it looks like we're going to substantially exceed
10
     anything they put their direct testimony if we continue to enter
     one exhibit after another. I know, You Honor admonished
11
12
     everybody not to try and use rebuttal as an effort to introduce
     a lot of new information and I don't know how many more exhibits
13
14
     OPC has here, but at some point I think we crossed the line into
15
     inappropriately supplementing the record.
16
                      MR. CLIZER: This is the last probably.
17
                      JUDGE BUSHMANN: All right. Proceed.
18
                      (WHEREIN; OPC Exhibit 209 was marked for
     identification.)
19
20
     BY MR. CLIZER:
21
                      Mr. Robinett, did you review this work order in
              Ο.
22
    preparing your rebuttal for today?
23
              Α.
                      I did.
24
                      Is it a fair and accurate copy of the work order
              0.
25
    you reviewed?
```

1	A. It	is.
2	MF	R. CLIZER: I move to admit OPC's 209.
3	Jt	JDGE BUSHMANN: Any objection?
4	MF	R. ZUCKER: No objection, Your Honor.
5	Jt	JDGE BUSHMANN: 209 is admitted.
6	( V	WHEREIN; OPC Exhibit 209 was received into
7	evidence.)	
8	BY MR. CLIZER:	
9	Q. St	carting with work orders 900992, which is again
10	is OPC's 208, would	d you turn to Page 5? I apologize, Page 10,
11	not 5. These are t	the work order retirements that took place as
12	part of this project	ct?
13	A. Ye	es.
14	Q. Wh	nat do you notice about the vintage of the
15	steel mains that ar	re being retired?
16	A. Th	ne earliest vintage is from 1952. The other is
17	from 1962. And tha	at is important because those fall short of
18	the average service	e life that is currently ordered for those
19	accounts for Spire	East.
20	Q. Ar	re there similarly any cast iron mains that
21	fall short on the s	service line of service life?
22	A. Th	nere are. There's two 1950s and a 1962 that
23	equate to roughly a	a little north of 29,000 of the total of
24	45,000 retired.	
25	Q. Lo	ooking the second work order, OPC's 209, I
	Î	

1 would ask the question with regard to the vintages that appear 2 beginning on Page 8 for steel and cast iron mains. In Exhibit 209 the steel mains, which are 3 Α. 20-inch main, have vintage codes of 1951 and 1967 and for cast 4 iron there is a 1956, 1960s. 5 6 Ο. Thank you, Mr. Robinett. 7 JUDGE BUSHMANN: Any further questions? 8 MR. CLIZER: Yes, sorry. 9 BY MR. CLIZER: Mr. Buck's testimony on Page 7 also discusses 10 0. 11 the inappropriate adjustments related to service line transfers 12 or renewals. Do you agree with his testimony? I think this goes to what we discussed earlier 13 14 in regards to the placement of the system, which is at a higher 15 level, which in some instances will and won't require new service lines to be installed in the new main. 16 17 Ο. Mr. Robinett, Staff witness Sommerer testified 18 regarding the rate design for the proposed 2018 case. Did you 19 have any rebuttal with regard to that testimony? 20 My only concern again is really dependent on 21 Commission decisions and it was undressed in my direct based on 22 the advice of counsel regarding whether an ISRS can be approved 23 if it falls below a certain threshold. And my fear is 24 specifically for Spire East based on the Staff calculated refund 25 if that is ordered to be accounted for with the 2018 ISRS

1 filing. I do not believe that the 2018 will meet the \$1 million 2 threshold. REBUTTAL BY MS. SHEMWELL: 3 Mr. Robinett, do actually have any experience 0. with testing materials? 5 6 Α. I do. I -- as an engineer intern I worked for 7 the MODOT laboratory and did testing on -- my first summer was 8 soils and aggregates. My second summer was general materials, 9 rebar, welded wire, concrete. What were you testing them for? 10 0. Compliance with the specific manufacturer codes 11 Α. 12 in the -- I believe it's ASHTO requirements that are required by MODOT to meet from the vendors. 13 14 Q. Tell the court reporter what you just referred 15 to, ASHTO? I believe it's ASHTO. 16 Α. 17 0. Any other experience? 18 Yes. My first job out of engineering school I Α. 19 worked for an oil service company. I was in charge of writing 20 reports on failed bits that were pulled off production 21 facilities. So as part of that I did die penetrant testing and 22 magnetic particle testing to look for flaws of the return bits. 23 Q. Thank you. I have one final question and then 24 we will tender you for cross. Did OPC make a recommendation in 25 the general rate case for GR-2017-0215 and GR-2017-0216

1	regarding a refund of ISRS?
2	A. We did. We filed I filed an affidavit in
3	support with an amended application for rehearing prior to the
4	tariffs becoming effective in those rate cases.
5	MS. SHEMWELL: That's all I have. I tender the
6	witness for cross.
7	JUDGE BUSHMANN: Cross by Staff.
8	MR. JOHNSON. Briefly specific.
9	CROSS-EXAMINATION BY MR. JOHNSON:
10	Q. Mr. Robinett, are you an attorney?
11	A. I am not.
12	Q. Do you have a law degree?
13	A. I do not.
14	Q. Have you attended law school in any form or
15	fashion?
16	A. No, I have not.
17	Q. Thank you very much.
18	JUDGE BUSHMANN: Cross by Spire.
19	MR. PENDERGAST: Thank you.
20	CROSS-EXAMINATION BY MR. PENDERGAST:
21	Q. I'd like to start out and try to move things
22	along a little bit by referring back to the discussion I had
23	with Staff witness Kim Bolin regarding the percentage method and
24	what it takes into account and what it doesn't take into
25	account. So if you could just tell me whether you sort of agree

with her position on that. Ms. Bolin, I think, testified that 1 2 she wasn't suggesting that the percentage method was something that had been endorsed or instructed or otherwise approved by 3 4 the Western District Court of Appeals. Would you agree with her 5 on that? 6 I don't know that I can make a legal conclusion, 7 but I don't recall reading it in there. 8 Q. Okay. Fair enough. Do you recall reading in 9 there whether or not the court -- since you are the depreciation 10 quy -- did reference at least the depreciable lives of mains and 11 services for Spire East and Spire West? 12 MR. SHEMWELL: Do you need a copy of that? 13 THE WITNESS: That is the wrong ones. 14 MR. PENDERGAST: I'm just referencing footnote 15 3. 16 MS. SHEMWELL: It's on Page 4. 17 THE WITNESS: Okay. It does reference useful 18 average service lives, yes. 19 BY MR. PENDERGAST: 20 0. My only question to you is in applying your percentage method, did you make any adjustment to take into 21 22 consideration the age of either plastic main material or the 23 plastic service line material that was retired? 24 Α. No. 25 Q. Okay. Thank you. And I had some back and forth

with Ms. Bolin over the issue of what the court described as 1 2 truly incidental plastic pipe or nearby plastic pipe that could 3 be eliqible for ISRS inclusion. My question to you is: Did the method you selected try and adjust for what the court would deem 4 truly incidental or nearby plastic pipe? 5 6 MS. SHEMWELL: I'm going to object. Without 7 some sort of definition or frame of reference for truly 8 incidental. MR. PENDERGAST: Well, I just have to go with 9 10 what is in the Court of Appeals opinion, but I'll rephrase the 11 question. 12 BY MR. PENDERGAST: 13 Did you just exclude all plastic? 0. 14 Α. I applied the percentages cited to by the 15 Western District --16 And I -- okay. Go ahead. 0. 17 Α. -- using the Staff work papers from the 2016 and 18 2017 rate case. I applied those percentages to the plant 19 summary pages to then feed to the revenue requirement page. 20 Ο. Okay. Let me ask you this then: As far as you 21 know in simply applying those percentages was any effort made to 22 adjust those percentages to reflect what might be nearby plastic 23 or truly incidental plastic to your knowledge? 24 Α. I strictly applied those percentages. No. They may be under. I don't know. 25 may be over.

Okay. And let me ask you another question and 1 0. 2 maybe this is where your approach differs with Staff. You looked at the two percentages cited in the court's order, which 3 were based on those work orders that Public Counsel had put into 4 5 evidence in the last case; is that right? I believe the cited references are to Ms. 6 Α. 7 Bolin's testimony -- rebuttal testimony from those cases. 8 Q. Okay. But did you just use those two 9 percentages and apply them to all plant? 10 No. Specifically, mains and services only. Α. 11 Okay. But what I'm asking is as I understand it Ο. 12 what the Staff did is they went back and they looked at all of the work orders and they tried to identify what was retired that 13 14 was plastic versus what was cast iron and unprotected steel. 15 And they came up with percentages that overall were different 16 than those percentages. What I'm asking is: Did you do the 17 same thing? 18 I did not. Staff has much more resources than Α. 19 just me. 20 Ο. So what you did was take a percentage of plastic 21 on mains and a percentage of mains on service lines from nine 22 work orders and then you applied them to the universe of work 23 orders that the company did? I did no adjustments in 2018. Those would only 24 Α. 25 relate to '16 and '17 cases.

1	Q. Okay. For the 2016 and '17 cases you took these
2	two percentages that were based on a review of nine work orders
3	and you applied them to all of the ISRS investment for the '16
4	and '17 cases?
5	A. My answer is no only because I applied it only
6	to mains and service lines.
7	Q. Okay. So you applied those two percentages, but
8	only to mains and service lines?
9	MS. SHEMWELL: Asked and answered.
LO	BY MR. PENDERGAST:
11	Q. Okay. And is it your assumption that those
L2	percentages held constant across all work orders and that it was
L3	representative of the experience of all work orders for both
L4	companies?
L5	A. I did not have the time to review these
L6	hundreds, if not thousands, of pages of work orders to provide
L7	with the other load of the cases that we have.
L8	Q. Okay. But you are aware that Staff came in and
L9	Staff looked at work orders and they made some determination of
20	what was plastic, retired and what were other facilities
21	retired. Not that we agree with their approach either, but you
22	didn't try and accept that. You just applied the two
23	percentages in the court's order?
24	MS. SHEMWELL: Objection; asked and answered.
25	MR. PENDERGAST: Okay. I think it has been

1	probably been answered.
2	BY MR. PENDERGAST:
3	Q. Let me ask you another question: If I go back
4	and I look at the percentages you have excluded, would you
5	express any opinion on what say 16 percent of a main that had
6	plastic in that percentage and that percentage was retired, what
7	impact it had on the actual cost of that particular project?
8	Did you try and do that analysis?
9	A. Could you rephrase the question?
10	Q. Sure. If you went back and said I'm using 16
11	percent and I'm applying it to every work project, were you
12	suggesting that that 16 percent of plastic retirements affected
13	the ultimate cost of the project by 16 percent?
14	A. Are you referring to retirement or the new?
15	Q. I'm talking about the new. The cost to install
16	the new main, did it impact that cost, did it increase by 16
17	percent?
18	A. No. The 16 percent would be the percentage of
19	the old pipe that is being that was plastic that is being
20	replaced by the new system.
21	Q. Okay. Would it be fair to say then that you
22	don't know because you haven't analyzed it, what impact that
23	retirement of 16 percent of plastic had on the cost of the
24	project?
25	A. I'm not sure I understand your question.

1	Q. Well, your saying I'm assuming that because I am
2	using these percentages from nine work orders and applying it to
3	everything that we had 16 percent plastic on all mains. And
4	what I'm asking you is are you assuming that the cost of
5	replacing those mains was 16 percent higher because of the
6	plastic retirements?
7	A. No.
8	Q. Okay. And in fact, you haven't done that kind
9	of analysis to determine what the cost impact is, have you?
10	A. I have not done the net analysis Mr. Lauber or
11	Mr. Hoeferlin attached to try to quantify the measure of
12	replacing the existing cast iron and connecting into the
13	existing plastic, no.
14	Q. Okay. You answered a couple of questions about
15	some of the steel mains that were replaced weren't quite up to
16	their average service life; is that correct?
17	A. Yes.
18	Q. And when we say average service life, what does
19	have mean?
20	A. Essentially, it is a review of dollars. SO in
21	theory half of dollars will be retired before that date and then
22	half will be retired after that date.
23	Q. Okay. So since it's an average, it would not be
24	surprising to have some that were retired sooner than the
25	average date and some that were retired after the average date.

1	Would you agree with that as a matter of mathematics?
2	A. I would agree. It could be a vast difference
3	between the shortness and the longevity of each asset.
4	Q. Sure. And I think as you have said in your sort
5	of review of depreciation principles that there are a number of
6	factors that can affect how long you're able to use a facility;
7	is that correct?
8	A. Yes.
9	Q. Okay. And some have different impacts based on
LO	where the facility is located or other conditions?
11	A. Could you describe what you mean by conditions?
L2	Q. Well, for example are you aware that certain
L3	facilities that are in right-of-ways that have heavy exposure to
L4	salt can have an impact on how long those facilities survive?
L5	A. Specifically, know, I'm not.
L6	Q. You're not aware of that?
L7	A. (Witness shook head.)
L8	Q. Okay. Do you know or do you have any knowledge
L9	of whether those kind of conditions had an impact on the soft
20	copper lines that the company removed over a period of years?
21	A. I do not. My understanding is there was a it
22	was a weak copper, so that would more than likely be a corrosive
23	issue. But what causes the corrosion could be anything.
24	Q. Does salt cause corrosion?
25	A. I believe it could.

1	Q. Thanks. When the Company was replacing it
2	copper service lines would it have been Public Counsel's
3	position that it should have first dug up each line and visually
4	examined it to see if it was truly in a worn out and
5	deteriorated condition before it replaced it?
6	MS. SHEMWELL: Mr. Robinett, do you have any way
7	of knowing that? I'm going to object that he wasn't with Public
8	Counsel during that time.
9	JUDGE BUSHMANN: He can answer if he knows; if
10	he doesn't, he can say so.
11	THE WITNESS: I don't even really know if it was
12	a late '70, early '80s.
13	BY MR. PENDERGAST:
14	Q. Let's just put it on more modern facilities that
15	are actually old. Is it Public Counsel's position that in its
16	cast main replacement program that before the Company replaces
17	cast iron main it should uncover it, dig it up, test it and see
18	what its condition is before it replaces it?
19	A. It could. I don't believe that is the only way
20	that they could prove that it was worn out or deteriorated.
21	Q. Well, let's look at it that way. Have you gone
22	ahead and done any kind of analysis of what it would cost to
23	uncover facilities, take a review of what they're doing and what
24	condition they are in before you decide whether to replace it or
25	not?

1	A. I have not.			
2	Q. Okay. Just kind of ballparking it, do you think			
3	it would be pretty expensive?			
4	A. I believe it could be, yes.			
5	Q. Okay. Would you expect a utility to pay money			
6	to do that kind of thing if it knows that retiring that			
7	particular facility is already going to save money?			
8	MS. SHEMWELL: I think this really calls for			
9	speculation on what a utility might do.			
10	JUDGE BUSHMANN: Overruled.			
11	THE WITNESS: Could you repeat the question?			
12	BY MR. PENDERGAST:			
13	Q. Yeah. Would you expect a utility to undertake			
14	those kind of expensive testing procedures to determine the			
15	condition of a older asset that it already knows if I retire it			
16	and put a new facility in, it's going to save me money rather			
17	than trying to use it?			
18	A. I believe there needs to be some proof that it			
19	is a worn out or deteriorated condition, whether that is leak			
20	analysis or something along those lines. Otherwise, I mean, it			
21	is recoverable under the general rate proceeding for a			
22	replacement.			
23	Q. Let me ask you this: Do you know what kind of			
24	analysis the Company does when it selects what sections of cast			
25	iron main it's going to replace?			

1	A. I don't.			
2	Q. You don't know what kind of leak models or other			
3	tools they might use in order to make those determinations?			
4	A. I don't and I don't know that there are any			
5	present in the record either.			
6	Q. Do you know well, let me as you this: The			
7	system integrity rules that it has to have plans in place to			
8	reduce risk, do you know how the Company administers that?			
9	A. I don't. But I do I've asked some DRs in			
10	several cases to get a part the subsection on the Commission			
11	rule on replacement programs. That requires a long-term			
12	strategic plan and I still don't know that I have that or that			
13	it has been provided to me.			
14	Q. Have you participated in various annual and			
15	regular meetings that the safety staff has with Company			
16	personnel?			
17	A. I did not as a part of Staff when I was a member			
18	of Staff, and I have not as OPC.			
19	Q. So you haven't had an opportunity to observe the			
20	daily, weekly, and monthly interplay between Staff and Company			
21	personnel when it comes to these issues?			
22	A. No. My time on Staff was as a depreciation			
23	expert. We did not touch safety.			
24	Q. Okay. You know, you asked some questions about			
25	whether steel or cast iron facilities are actually worn out and			

1	deteriorated. Has Public Counsel proposed any adjustment			
2	because they are not in Public Counsel's view?			
3	A. Specific to which case?			
4	Q. Any case?			
5	A. I believe our position statement was that they			
6	the applications fail to qualify so they would be			
7	Q. I understand that. But I'm asking you			
8	specifically have you proposed to exclude replacement cost for			
9	cast iron or unprotected steel facilities on the theory that			
10	they are not worn-out or deteriorated.			
11	A. I'm not sure.			
12	Q. Okay. Do you know whether you did in your			
13	testimony?			
14	A. I did not.			
15	Q. You did not? And you're just not sure if			
16	somebody else might not have.			
17	MS. SHEMWELL: He's answered that. Objection.			
18	BY MR. PENDERGAST:			
19	Q. So do you recall whether or not at the Court of			
20	Appeals there was concern about whether or not the replacement			
21	of cast iron and unprotected steel was not ISRS eligible?			
22	A. I was not a part of anything in front of the			
23	Court of Appeals.			
24	Q. So you don't know one way or the other?			
25	A. I don't know.			

1	Q.	Thank you, Mr. Robinett. I have no further			
2	questions?				
3	A. Thank you.				
4	A.	-			
	JUDGE BUSHMANN: Questions by Commissioners.				
5	QUESTIONS BY CHAIRMAN HALL:				
6	Q.	Q. Just a few. Good afternoon.			
7	A.	Good afternoon.			
8	Q.	Did you perform any calculations on the 2018			
9	ISRSs related to amounts included for ineligible plastic?				
LO	Α.	I did not.			
11	Q. Did you look at the calculations prepared by Mr.				
L2	Arabian for Spire West and Ms. Newkirk for Spire East?				
13	Α.	I briefly looked at the work papers that were			
L4	provided with the initial recommendation that would have been in				
L5	an Excel format.				
L6	Q.	Do you have any opinion at all as to the			
L7	propriety of tho	se calculations. You have no reason to doubt			
L8	them?				
L9	Α.	I don't.			
20	Q.	Does it do they appear reasonable to you?			
21	Α.	They do.			
22	Q.	Thank you.			
23		COMMISSIONER KENNEY: No questions. Thank you.			
24	QUESTIONS BY COM	MISSIONER SILVEY:			
25	Q.	Mr. Robinett, in relation to Exhibit 205 you had			

1	stated that you also it was Page 59 from the NARUC			
2	A. Fifty-nine.			
3	Q. In relation to that exhibit you said also had			
4	relied on Page 3 of that same document?			
5	A. Yes, sir.			
6	Q. Is Page 3 also in the record?			
7	MS. SHEMWELL: We can provide it to the			
8	Commission.			
9	COMMISSIONER SILVEY: That was it. Thank you.			
10	JUDGE BUSHMANN: Recross by Staff.			
11	MR. JOHNSON: No questions.			
12	JUDGE BUSHMANN: Spire Missouri.			
13	MR. ZUCKER: No questions.			
14	JUDGE BUSHMANN: Redirect OPC.			
15	REDIRECT EXAMINATION BY MR. CLIZER:			
16	Q. Just briefly. You mentioned the difference in			
17	the methodology you used versus Staff coming up with their			
18	numbers of 2016 and 2017 case. How did the numbers themselves			
19	actually compare?			
20	A. Once Staff corrected their initial			
21	recommendation to account for the months that the ISRS cases			
22	were reflected, my number fell in the middle roughly in the			
23	middle of Staff's two calculations.			
24	Q. Spire requested or asked if you were aware of			
25	what testing was done, I believe, with regard to replacement as			

1	part of a steel or cast iron main program. Was that testing		
2	request one of the things you requested in the DR?		
3	A. It was.		
4	Q. And their response was again, they didn't		
5	perform testing?		
6	A. If they determined that it was not economically		
7	or operationally feasible to reconnect, they did not test is my		
8	understanding from that DR response.		
9	REDIRECT EXAMINATION BY MS. SHEMWELL:		
10	Q. Mr. Robinett, do you know whether or not the		
11	commission issue subpoenas?		
12	A. I believe they have that power, yeah.		
13	Q. Are you aware in this case did Spire subpoena		
14	any member of the commission's safety staff gas safety staff		
15	to testify?		
16	A. I didn't see any staff safety member that I'm		
17	aware of testify today.		
18	MS. SHEMWELL: That's all I have. Thank you.		
19	JUDGE BUSHMANN: Thank you for your testimony,		
20	Mr. Robinett.		
21	THE WITNESS: Thank you.		
22	JUDGE BUSHMANN: That concludes all of the		
23	witness testimony. We've got a number of issues that are still		
24	outstanding. Let's go over those and make sure that we're all		
25	on the same page with that.		

1	Staff is going to file no later than August 29th			
2	information relating to the 2018 cases that document ineligible			
3	plastic exclusions from their calculations. Have I got that			
4	right?			
5	MR. JOHNSON: I believe so.			
6	JUDGE BUSHMANN: Any objections to that would be			
7	by August 31st. If anybody wants to object to that late-filed			
8	exhibit.			
9	Similarly, OPC will file Page 3 of the			
LO	depreciation information that was mentioned in relation to			
11	Exhibit 205.			
L2	MS. SHEMWELL: Yes.			
L3	JUDGE BUSHMANN: And that would also be due by			
L4	August 29th with objections by August 31st.			
L5	In addition, the transcript is going to be			
L6	expedited. It will be available hopefully on August 29th.			
L7	Briefs are due on September 6th. Those briefs as I mentioned			
L8	earlier should include a discussion of the Commission's			
L9	authority to issue refunds from the 2016 and 2017 cases, also an			
20	analysis of Supreme Court decision in Missouri American Water			
21	Company versus OPC issued March 14th, 2017, and the citation to			
22	that case is 516 S.W.3d 823.			
23	As far as the exhibits, Spire's Exhibits 1			
24	through 6 are all admitted. Staff's Exhibits 100 through 107			
25	are all admitted. OPC's Exhibits 200 through 202 and 206			

1	through 209 are admitted. Exhibits 203, 204, and 205 are				
2	currently pending with objections due by the end of the day				
3	tomorrow.				
4	Anything the parties want to add that I forgot?				
5	MS. SHEMWELL: We have supplied Spire with the				
6	documents that Mr. Robinett relied on, the entire books.				
7	JUDGE BUSHMANN: Anybody else have anything I				
8	need to discuss? Hearing none, we are adjourned.				
9	(Off the record.)				
10	(WHEREIN; the hearing has concluded.)				
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# Evidentiary Hearing Vol. III

### CERTIFICATE OF REPORTER

I, Lisa M. Banks, CCR within and for the State of Missouri, do hereby certify that the witness whose testimony appears in the foregoing deposition was duly sworn by me; that the testimony of said witness was taken by me to the best of my ability and thereafter reduced to typewriting under my direction; that I am neither counsel for, related to, nor employed by any of the parties to the action in which this deposition was taken, and further, that I am not a relative or employee of any attorney or counsel employed by the parties thereto, nor financially or otherwise interested in the outcome of the action.

Lank Sank S

Lisa M. Banks, CCR No. 1081

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