

1
2
3
4
5
6
7
8
9

STATE OF MISSOURI
PUBLIC SERVICE COMMISSION

TRANSCRIPT OF PROCEEDINGS
Evidentiary Hearing
January 3, 2017
Jefferson City, Missouri
Volume I

10 In the Matter of the)
Application of Laclede Gas)
11 Company to Change its)
Infrastructure System) Case No.
12 Replacement Surcharge in its) GO-2016-0332
Missouri Gas Energy Service)
13 Territory.)

14)
15 In the Matter of the)
Application of Laclede Gas)
16 Company to Change its)
Infrastructure System) Case No.
17 Replacement Surcharge in its) GO-2016-0333
Laclede Gas service Territory.)

18
19

NANCY DIPPELL, Presiding,
REGULATORY LAW JUDGE.

20
21
22
23

DANIEL Y HALL, Chairman,
WILLIAM KENNEY,
SCOTT T. RUPP,
MAIDA J. COLEMAN,
COMMISSIONERS.

24
25

REPORTED BY:
KELLENE K. FEDDERSEN, CSR, RPR, CCR NO. 838
MIDWEST LITIGATION SERVICES

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

APPEARANCES:

MICHAEL C. PENDERGAST, Attorney at Law

RICK ZUCKER, Attorney at Law
Laclede Gas Company
700 Market Street, 6th Floor
St. Louis, MO 63101
(314)342-0533

FOR: Laclede Gas Company.

MARC D. POSTON, Deputy Public Counsel
Office of the Public Counsel
P.O. Box 2230
200 Madison Street, Suite 650
Jefferson City, MO 65102-2230
(573)751-4857

FOR: Office of the Public Counsel
and the Public.

KEVIN A. THOMPSON, Chief Staff Counsel
MARCELLA FORCK, Legal Counsel
Missouri Public Service Commission
P.O. Box 360
200 Madison Street
Jefferson City, MO 65102
(573)751-3234

FOR: Staff of the Missouri Public
Service Commission.

1 P R O C E E D I N G S

2 (WHEREUPON, the hearing began at
3 8:32 a.m.)

4 JUDGE DIPPELL: Okay. Good morning.
5 We are on the record, then, in Case Nos.
6 GO-2016-0332 and GO-2016-0333, in the matter of
7 Laclede Gas Company and its operating company MGE
8 for a change in infrastructure system replacement
9 surcharge.

10 I am Nancy Dippell, and I'm the
11 Regulatory Law Judge assigned to this hearing. And
12 I see all these friendly faces that I haven't seen
13 in a long time, so it's good to be back on the
14 Bench.

15 We will have Commissioner Kenney
16 calling in on our conference phone. Commissioner
17 Stoll is going to be observing from the Internet
18 access. So the other Commissioners will be present
19 with us later today.

20 We had exhibits already given to the
21 court reporter, I believe, the premarked exhibits,
22 so we'll go ahead and begin with entries of
23 appearance. Can I start with Staff, please?

24 MR. THOMPSON: Kevin Thompson and
25 Marcella Forck for the Staff of the Missouri Public

1 Service Commission, Post Office Box 360, Jefferson
2 City, Missouri 65102.

3 JUDGE DIPPELL: Thank you. Office of
4 the Public Counsel?

5 MR. POSTON: Good morning. Marc
6 Poston appearing for office of the Public Counsel
7 and the public.

8 JUDGE DIPPELL: And Laclede?

9 MR. ZUCKER: Rick Zucker and
10 Michael C. Pendergast here on behalf of Laclede Gas
11 Company and Missouri Gas Energy, 700 Market Street,
12 St. Louis, Missouri 63101.

13 JUDGE DIPPELL: And while this is two
14 cases, I'll probably just refer to the company as
15 Laclede most of the time. If it's appropriate that
16 it's MGE, that's what I mean.

17 So were there -- okay. So we
18 discussed just before we went on the hearing that
19 we have the matter of a pending motion from
20 Laclede, basically a motion to dismiss or, in the
21 alternative, to limit the issues. I believe the --
22 let's see. The issues that you wanted to limit,
23 were those the ones that were dismissed or that
24 were withdrawn?

25 MR. ZUCKER: Well, one of the issues

1 was, the one that we argued did not belong in an
2 ISRS case.

3 JUDGE DIPPELL: And can you talk into
4 the microphone, Mr. Zucker?

5 MR. ZUCKER: Yes, your Honor. One of
6 the issues that has been withdrawn is the issue
7 that we argued was not part of this ISRS case.

8 JUDGE DIPPELL: Okay. And the other
9 one was the -- which other issue was it, the hydro
10 testing?

11 MR. ZUCKER: Well, the update issue
12 and the incentive compensation issue were
13 withdrawn. And so that leaves the hydrostatic
14 testing issue and the plastic within the cast iron
15 issue.

16 JUDGE DIPPELL: All right.

17 MR. ZUCKER: And obviously issue
18 No. 1 is that we shouldn't be arguing any of them
19 today.

20 JUDGE DIPPELL: All right. And,
21 Mr. Poston, did you have anything else to add? You
22 filed yesterday a withdrawal of those two issues.

23 MR. POSTON: No, I didn't have
24 anything to add to that. Just withdrawing them.
25 So they're just out of the case as far as I know.

1 JUDGE DIPPELL: Okay. And will there
2 be a -- how will we -- how are you planning to
3 approach the admission of the testimony? Are we
4 just going to admit that as a whole or are we going
5 to try to strike those issues from the testimony,
6 the prefiled testimony?

7 MR. POSTON: Honestly, it doesn't
8 matter to me. If we want to strike that, that's
9 fine. I don't intend to cite to any of it in a
10 brief, so it really doesn't matter to me.

11 JUDGE DIPPELL: Mr. Zucker, you
12 looked like you had a comment.

13 MR. ZUCKER: I think we are better
14 off striking it. I appreciate your bringing that
15 up. The issues were withdrawn. We might as well
16 not have evidence in the record on it.

17 JUDGE DIPPELL: Well, while I agree
18 that I don't want the record all gunked up, at this
19 point it already is. So I think that if there's no
20 objection, obviously if you're going to object to
21 that coming in, that I would prefer to just receive
22 it as is.

23 MR. ZUCKER: Judge, that's perfectly
24 fine with me. Thank you.

25 JUDGE DIPPELL: Okay. Obviously,

1 like I say, you have a right to make an objection
2 when the testimony is entered.

3 All right. Besides the motion then,
4 are there any other preliminary issues?

5 Okay. I think since I said in the
6 previous order that you would have the opportunity
7 to argue your motion, I'm going to let you -- we're
8 going to start with brief arguments about Laclede's
9 motion, but I'm going to warn you ahead of time
10 that the motion is going to be taken with the case,
11 and we're going to go ahead and have the hearing
12 today and we'll decide that with the case. Because
13 of our quick time frames, we don't have time to
14 maneuver otherwise procedurally.

15 MR. ZUCKER: Understood, your Honor.
16 Thank you.

17 JUDGE DIPPELL: All right, then.
18 Let's go ahead then and do a brief argument on the
19 motion, and this was the motion to dismiss. So I
20 guess we'll start with Laclede then.

21 MR. ZUCKER: Thank you, your Honor.
22 Rick Zucker here on behalf of Laclede Gas Company
23 and MGE. Welcome back to Judge Dippell to the PSC
24 Bench, and Happy New Year to everybody.

25 We are arguing today that OPC when

1 they raised four issues, now two issues in this
2 case on day 70 was past the 60-day deadline to
3 raise issues in a -- in an ISRS case. The statute
4 provides a 60-day deadline.

5 It specifies that that deadline
6 applies to Staff in the statute, but it certainly
7 cannot be interpreted to say that while Staff has
8 60 days to give a report and the Commission has 120
9 days to issue an order, that OPC can bring
10 something up whenever they want.

11 Now, the -- I guess maybe my best
12 argument to support this is the fact that OPC
13 understands this deadline and they have been
14 arguing it repeatedly in the case where they oppose
15 the updates.

16 So what they say is, is the
17 Commission should not allow these updates to occur
18 because it doesn't give us enough time to do an
19 audit within the statutory 60-day deadline. They
20 have argued that -- may I go back to my seat? I
21 have papers.

22 JUDGE DIPPELL: Certainly.

23 MR. ZUCKER: If I may approach the
24 Bench?

25 JUDGE DIPPELL: Yes.

1 MR. ZUCKER: What this handout shows
2 is that OPC has argued both in their testimony in
3 this case by Mr. Hyneman and in their arguments
4 before this Commission, before the Missouri Court
5 of Appeals for the Western District and before the
6 Missouri Supreme Court that -- that the 60-day
7 deadline applied to them.

8 Now they come in here and say, oh,
9 that 60-day deadline doesn't apply. I can file for
10 issues after the 60-day deadline and I'm free to do
11 that.

12 So the question then is, is why were
13 they telling the Commission and these other
14 tribunals that the 60-day deadline applied to them
15 when they're now saying it does not? Which time
16 were they not telling the truth?

17 If we look at the application for
18 transfer to the Supreme Court that OPC filed in the
19 update case on -- in November, and that's on the
20 back page of the handout, they say that the PSC
21 allowed Laclede Gas to wait and provide its
22 supporting documents for 20 million in costs just
23 17 days before the statutorily established 60-day
24 review period ended. Laclede's late submission
25 denied the PSC, the PSC Staff and the public's

1 representative, the Office of the Public Counsel,
2 the statutorily prescribed opportunity to review
3 such costs.

4 Now, one of the things that OPC may
5 argue is they were just responding to the Staff's
6 recommendation within the ten-day period that
7 they're allowed under Commission rules.

8 I would respond by saying that their
9 response was not a response at all. They didn't
10 respond to any of the issues raised by the Staff.
11 Their response was basically to raise new issues,
12 and none of the issues that they raised had
13 anything to do with what the Staff said in their
14 recommendation of the two ISRS cases.

15 Another argument that OPC may make is
16 that in previous cases they have been allowed to
17 raise issues after the 60-day deadline. And, in
18 fact, in our last ISRS case they raised the update
19 issue for the second time in that case after the
20 60-day deadline, and we opposed it then in terms of
21 it being too late.

22 And the Commission kind of said,
23 well, we'll let it slide. It's not much of an
24 issue. It's not difficult for the parties to get
25 this done within the time frame. And so you know,

1 we didn't appeal that. We were okay with that. As
2 a practical matter, what the judge said was okay.

3 But in this case, they -- OPC raised
4 four issues. They were not simple issues. They've
5 tried to get rid of two of them now to make it look
6 a little cleaner, but the fact of the matter is
7 they have raised a number of substantive issues too
8 late in the process to argue them either legally or
9 practically.

10 Now, I would say that another ISRS
11 will be coming. We file them twice a year like
12 clockwork. It will be coming within a couple of
13 months. And if they have now identified these
14 issues, they are free to raise them within the
15 60-day period of the next ISRS, but they are too
16 late for this one.

17 I'd like to close with one last
18 point. In our last rate case, we, Laclede Gas, not
19 MGE, this is just Laclede Gas, made an agreement
20 with Staff and OPC, approved by the Commission,
21 that we would -- that settled a dispute over a tax
22 issue in ISRS by us giving up half of the amount of
23 the tax issue and Staff and OPC agreeing to
24 expedite the administration of our ISRS cases.
25 In this case, that half amounts to \$700,000 in

1 revenue requirement.

2 In exchange, what OPC has done is,
3 instead of bring up their issues in a timely
4 fashion or in a legally -- at a legally allowed
5 time, they raised them ten days after the legally
6 allowed time. And so not only did they not
7 expedite, they did the exact opposite. So we did
8 not receive the benefit of our bargain in that
9 case, and OPC has effectively violated a Commission
10 order.

11 JUDGE DIPPELL: Mr. Zucker, what was
12 the case that that agreement was approved in?

13 MR. ZUCKER: That case would be
14 GR-2013-0171. And I would also say that we have
15 made that agreement in previous rate cases. We
16 have been doing this for a number of years, and
17 Staff has always honored it. They have moved, you
18 know, quickly as reasonably possible.

19 OPC has time and again dishonored it
20 by raising things -- raising issues at the last
21 minute or past the last minute, as in this case,
22 and instead of expediting our cases in exchange for
23 the \$700,000, they've slowed them.

24 In conclusion, I ask that the issues
25 raised by OPC be dismissed. That would leave

1 Staff's recommendation unopposed and we could go
2 forward with filing tariffs as recommended by
3 Staff. Thank you, your Honor.

4 JUDGE DIPPELL: Thank you. Were
5 there any questions?

6 CHAIRMAN HALL: No questions. Thank
7 you.

8 JUDGE DIPPELL: Thank you.
9 Mr. Poston, would you like to make a reply?

10 MR. POSTON: Sure. Good morning.
11 May it please the Commission?

12 There's no legal requirement that OPC
13 is to raise issues within 60 days. The 60 days
14 applies only to Staff's timing to file a report.
15 The language is clear when it says the Staff,
16 quote, may submit a report regarding its
17 examination to the Commission not later than
18 60 days after a petition is filed, end quote.

19 No mention of OPC. To find otherwise
20 would be reading something into the statute that's
21 simply not there. The General Assembly was
22 certainly aware that OPC may be reviewing the
23 petitions as well, and they still chose not to
24 place any requirement on OPC.

25 In addition, OPC was not directed by

1 the Commission to raise issues within 60 days. If
2 you look back at the October 3rd order directing
3 filing and suspending tariff, ordered paragraph 4
4 directs the Staff to file a recommendation by
5 November 29th. No mention of OPC.

6 Once the Staff filed its
7 recommendation, the next day the Commission issued
8 its order establishing time to respond to Staff's
9 recommendation. Ordered paragraph No. 1 directs
10 Laclede to file a response by December 9th.
11 Ordered paragraph 2 directs any other party to
12 respond by December 9th. The only other party was
13 OPC. That was our deadline.

14 The Commission's ISRS rules also have
15 no requirement on OPC as to when it must raise an
16 issue or request a hearing. The procedure OPC
17 followed in this case is the same procedure the
18 Commission has followed in most ISRS cases.

19 GO-2014-0006, it's a Liberty case,
20 OPC's motion to deny the petition and request a
21 hearing was filed six days after the Staff's
22 recommendation. GO-2014-0179, an MGE case, OPC's
23 motion for a hearing ten days after the Staff's
24 recommendation. GO-2014-0212, a Laclede case, OPC
25 motioned for hearing nine days after the Staff's

1 recommendation.

2 GO-2016-0196 and 0197, OPC motioned
3 for a hearing ten days after the Staff's
4 recommendation. In that case Laclede even
5 challenged the lawfulness of OPC requesting a
6 hearing ten days after the Staff rec, the same
7 argument they make here, and the Commission found
8 specifically that OPC's request was lawful.

9 I have that order right here. Quote,
10 the Commission says, Laclede argues that it is
11 unfair and unlawful for OPC to have waited until
12 ten days after the Commission's Staff filed its
13 recommendation on April 1st to request an
14 evidentiary hearing. Laclede seeks either
15 withdrawal of the procedural schedule or a ban on
16 OPC's use of new evidence or arguments that could
17 have been raised prior to April 1st. The
18 Commission will deny Laclede's request.

19 They go on to say, Commission
20 Rule 4 CSR 240-2.080, sub 13, grants a party ten
21 days after a filing in which to respond to any
22 pleading. Although it could have requested a
23 hearing earlier in the process, OPC's motion was
24 lawful.

25 Laclede was well aware of these prior

1 cases, and knowing the established practice, could
2 Laclede have asked the Commission to direct OPC to
3 raise issues within 60 days? They certainly could
4 have. Did they? No.

5 I also find Laclede's argument
6 disingenuous since Laclede argued in prior ISRS
7 cases that the 60 days doesn't apply to OPC and
8 only to Staff to file a report. Now they're
9 singing a different tune. They can't have it both
10 ways.

11 The last point I'll make is that
12 Laclede is partly to blame for us responding when
13 we did because they could have provided responses
14 to data requests sooner. They waited the full 20
15 days to respond to OPC's DRs, while answering Staff
16 DRs in less than five days on average.

17 We sent most of our DRs to Laclede on
18 November 3rd, which is 20 business days after we
19 received the petitions. Laclede waited the full 20
20 days to respond, giving us only two business days
21 to process those responses before the Staff's
22 report was due.

23 They're certainly within their right
24 to answer on day 20, but if they want us to process
25 quicker, they should respond to our DRs with the

1 same speed they respond to Staff's DRs.

2 We also sent three DRs on
3 November 8th, meaning they were due November 28th,
4 one day before the Staff's recommendation. Yet
5 they provided answers shortly after 5 p.m. on day
6 24, which was a Friday, meaning they effectively
7 answered on December 5th, a full week late.

8 We advised them December 6th and 7th
9 of our issues with the petitions and we asked them
10 to remove the ineligible costs, and on December 8th
11 they said no.

12 Then we filed our response on
13 December 9th to the Staff rec, requested a hearing,
14 and we explained in detail with citations to
15 authority and citations to evidence providing them
16 way more detail than was required. We could have
17 waited until direct testimony, but instead we gave
18 them a much better explanation than was required.

19 In regard to Mr. Zucker raising up
20 this prior agreement that we have with them about
21 expediting, if you look at the language of that
22 agreement, you'll see that it clearly says that we
23 will try to expedite to the extent our resources
24 and response to discovery allow that. Well, their
25 response to discovery did not allow that.

1 In summary, we followed all statues
2 and rules. We followed the Commission's orders and
3 we followed past practice. In the future I suggest
4 they make a request when they file their petitions
5 asking the Commission to order OPC to raise issues
6 within 60 days if that's what they expect. We
7 would certainly follow that change in process if it
8 were to be so.

9 Thank you.

10 JUDGE DIPPELL: Thank you.

11 CHAIRMAN HALL: No questions. Thank
12 you.

13 JUDGE DIPPELL: Would Staff like to
14 make any response?

15 MR. THOMPSON: No, thank you, Judge.

16 JUDGE DIPPELL: Thank you.

17 Mr. Zucker, did you have further reply?

18 MR. ZUCKER: I would love to reply,
19 if allowed.

20 JUDGE DIPPELL: I don't think it's
21 necessary at this point, but you looked antsy over
22 there. So I think instead the Commission is going
23 to take this motion with the case and rule on it at
24 the time that they issue their Report and Order.
25 The timing of these ISRS cases is short and,

1 therefore, does not really allow for two separate
2 proceedings, so we're going to go ahead with the
3 hearing. I thank you for your time and arguments.

4 Are there any other preliminary
5 matters that need to be addressed before we begin
6 the hearing?

7 All right, then. We can start with
8 oral arguments. And the parties earlier submitted
9 an order of arguments and witnesses and -- I mean,
10 we can start with opening statements. I'm sorry.
11 And so we'll follow that as best we can. So we'll
12 begin opening statements. We can start with
13 Laclede.

14 MR. ZUCKER: Thank you, your Honor.
15 There are two issues left in this case to argue.
16 We call them hydrostatic testing is the first
17 issue, and the second issue has to do with plastic
18 interspersed within cast iron and steel main.

19 Let me start with the hydrostatic
20 testing issue. This issue arises out of the San
21 Bruno incident in 2010. In 2011 PHMSA issued some
22 new rules or some different interpretation of their
23 rules in which they, I guess, took a lesson that
24 they learned in San Bruno, which is the
25 transmission lines, the high pressure lines that

1 were built before 1970 don't have a lot of records
2 that go with them in terms of how much pressure
3 they can take, what's called the maximum allowable
4 operating pressure.

5 Starting in 1970, when a utility put
6 in a line, before they put the line into service
7 they would do a pressure test, normally a
8 hydrostatic pressure test, which is forcing water
9 at high pressure through the pipe to make sure it
10 holds.

11 What the -- what that would
12 accomplish is setting the maximum allowable
13 operating pressure that the company can use the
14 pipe for. Before 1970, they didn't have that test
15 mandated, and so sometimes it was done and
16 sometimes it wasn't.

17 Under the PHMSA rules, Laclede or MGE
18 has to -- if they don't have a record with that
19 test in it, they have to either perform the
20 pressure test, the hydrostatic test, or take the
21 line out of service. That's their choice.

22 The way Laclede looked at it was, it
23 was certainly a lot more economical to test the
24 line and keep it in service than to have to take
25 the line out of service and replace it. So that's

1 what Laclede has chosen to do.

2 In this case we have hydrostatic
3 testing that was done on a line called Grain Valley
4 in -- just outside of Kansas City. There were two
5 different phases to it, and they both add up to
6 about 1.8 million in total cost, which translates
7 to about 180,000 in revenue requirement.

8 Laclede tested this line -- or MGE
9 actually did, tested this line in accordance with
10 the PHMSA rules so they would be able to establish
11 a maximum allowable operating pressure. So this
12 isn't typical hydrostatic testing as part of an
13 integrity management program. This is a one-time
14 test that is typically done at the time you put a
15 pipe into service and becomes part of the cost of
16 the pipe, and it goes into the asset record of the
17 pipe.

18 So this is basically a substitute or
19 proxy for that test, and therefore, as a one-time
20 test done to meet the requirements of PHMSA rules
21 in order to extend the useful life of the
22 transmission line, they are ISRS eligible.

23 And let me go into the extent of the
24 useful life a little more. The ISRS statute says
25 that projects that extend the useful life or

1 enhance the integrity of the system are ISRS
2 eligible. In this case, what we're saying is that,
3 without this test, the useful life of this line
4 would have ended. So this test by itself extends
5 the useful life of this line, and that's to the
6 customers' benefit. Obviously they don't have to
7 pay for a new line. So all we're asking for is to
8 recover the cost of these hydro testing projects in
9 rates in ISRS.

10 CHAIRMAN HALL: Let me ask you a
11 couple questions about this issue first. Are
12 you -- are you taking the position that hydraulic
13 testing was designed to determine whether or not
14 the pipe was worn out or deteriorated? Because
15 isn't that the standard?

16 MR. ZUCKER: Well, there are
17 different standards in the ISRS statute. The first
18 standard we call 5A. 5A is about replacing pipes
19 or other facilities that are worn out or in
20 deteriorated condition. So if we were replacing
21 the pipe, it would be because it's worn out.

22 Then there's 5B. 5B is a section
23 that is not about replacement. It's about other
24 types of projects.

25 CHAIRMAN HALL: Capital projects?

1 MR. ZUCKER: Capital projects, yes.
2 Everything in the ISRS is capital. If it's an
3 expense item, an O&M item, it doesn't go into the
4 ISRS.

5 CHAIRMAN HALL: And hydraulic testing
6 is a capital item?

7 MR. ZUCKER: Hydrostatic testing is a
8 capital item when done in this manner. In other
9 words, there's other types of hydrostatic testing
10 that are part of our integrity management program.
11 Those are expensed. You will not find them in
12 ISRS. We do not capitalize them. They do not go
13 into this part of the asset record.

14 However, when you do hydrostatic
15 testing to set the maximum allowable operating
16 pressure in a line, usually that test is done right
17 after you've constructed the line and before you
18 put it into service, and it is capitalized. It
19 becomes part of the line. It goes into the asset
20 records.

21 This test we're talking about is not
22 part of integrity management. It's being done
23 solely to set the maximum allowable operating
24 pressure so we can continue to use the line. But
25 for this test, we would have to take this line out

1 of service.

2 CHAIRMAN HALL: Thank you.

3 MR. ZUCKER: Okay. Moving on to the
4 other issue in this case, and that is whether or
5 not, if you replace a line that is mostly cast iron
6 but has some plastic in it, whether or not the
7 replacement costs are ISRS eligible.

8 Our position is that they are ISRS
9 eligible, and there are many reasons for it. First
10 of all, we have been replacing cast iron with
11 plastic in spots where we needed to for decades.
12 So when the ISRS statute was passed in 2004, we had
13 already been replacing pieces of the cast iron line
14 for 20 or 30 years.

15 So the -- the Legislature was well
16 aware or could have been well aware or should have
17 been well aware that when a cast iron line gets
18 replaced, there will have been temporary fixes to
19 that line which consisted of pieces of plastic.

20 Now what we're doing is we're going
21 through in a systematic fashion and changing and
22 taking the cast iron out of entire neighborhoods.
23 In other words, instead of doing it piecemeal and
24 disturbing customers here and there, we're going
25 into a neighborhood, laying the cast iron -- laying

1 the plastic, I'm sorry, abandoning the cast iron,
2 and that will take care of the cast iron in that
3 neighborhood. We don't have to come back. The
4 only other thing we have to do is then reattach the
5 plastic service line to the new main and, of
6 course, that's part of the cast iron program and is
7 also part of the ISRS.

8 Now, the ISRS legislation itself
9 specifically contemplates that there will be
10 some plastic involved, because you have your
11 Section 5A and 5B that we just talked about. 5B is
12 the temporary fixes. You know, you have done
13 something to enhance the integrity of a line so you
14 don't have to remove it right away. You've done
15 something to extend the useful life of the line so
16 you don't have to remove it right away. Those are
17 the more temporary fixes of a material like cast
18 iron.

19 5A is the complete replacement of the
20 line. So if you're the Legislature, you're looking
21 at it as which order would they be in? If you did
22 the replacement first, there would be no temporary
23 fixes. There would be no plastic in the line
24 because you wouldn't -- you would never have -- you
25 would never need to do the temporary fix after you

1 do the permanent fix. So it would never happen
2 that you would do a 5A replacement of a line and
3 then a 5B temporary fix. It just wouldn't go in
4 that direction.

5 The direction it would go in is you
6 would have some 5B temporary fixes until you did
7 the 5A replacement and replace the whole line.
8 Therefore, the 5A replacement -- therefore, the
9 Legislature would have contemplated that when a
10 cast iron line gets replaced, it might have some
11 plastic in it, and that does not make the line
12 ineligible in any way for ISRS and is, in fact,
13 exactly what the Legislature wants us to do as part
14 of the ISRS program.

15 In addition --

16 CHAIRMAN HALL: Does Laclede take the
17 position that it would be physically impossible to
18 replace the line without replacing the plastic
19 patches?

20 MR. ZUCKER: Let me answer that by
21 giving you a handout to start with, if that's okay.
22 This is a two-page handout.

23 JUDGE DIPPELL: Can we mark this as a
24 demonstrative exhibit?

25 MR. ZUCKER: Sure.

1 JUDGE DIPPELL: I'm going to go ahead
2 and give it your next exhibit number, Laclede
3 Exhibit 6, just to mark it.

4 (LACLEDE EXHIBIT 6 WAS MARKED FOR
5 IDENTIFICATION BY THE REPORTER.)

6 MR. ZUCKER: So I will now continue
7 to answer your question. This is not a real good
8 drawing. It's a little rudimentary, but given the
9 time involved, this is the best we could do at the
10 moment.

11 The top picture on page 1 is what
12 Laclede is actually doing today. So if you see
13 along the top, the green grass, this is where
14 Laclede is putting in the new pipe. We're not
15 putting it in the street, but we're putting it
16 between the curb and the sidewalk. So in that kind
17 of grassy area that's just off the curb, we're
18 putting in a full line.

19 In other words, we dig at one spot,
20 we bore the line through to the other side, and we
21 dig all the way down the block to pull the line
22 through, so that has a minimum of disturbance for
23 the property and the customers.

24 Meanwhile, underneath -- well, it's
25 not actually under -- it looks like the cast iron's

1 underneath the plastic that we're putting in, but
2 it isn't. If I may approach the Bench?

3 JUDGE DIPPELL: Yes, please.

4 MR. ZUCKER: So the old cast iron is
5 usually under the street. So it is off on the
6 other side of the curb, the street side of the
7 curb. As you can see in the bottom picture, the
8 top is gray, indicating street.

9 So the other point to note is that
10 the plastic is going in at a certain depth, maybe
11 three feet, and the cast iron, though, is much
12 deeper, maybe five or six feet. So looking at my
13 arms for an example, here's the new plastic and
14 here's the old cast iron, so they're not under --
15 they're not either at the same height or at the
16 same width position.

17 And so to actually use the old
18 plastic, we would have to do something like what's
19 on the bottom part. We would have to dig down, put
20 some line in, stop it, then go at an angle from the
21 grassy period down and out into the street to hook
22 up to the plastic piece that's within the cast iron
23 line, use that plastic piece, then come in the
24 other side and come off the other side of the
25 plastic piece and go back and hook it into the new

1 main.

2 CHAIRMAN HALL: So in other words, it
3 is physically possible, it's just more expensive
4 and there's probably also some safety issues?

5 MR. ZUCKER: Yes. Well, there are
6 safety issues.

7 CHAIRMAN HALL: Is that correct, that
8 it is physically possible to continue to use that
9 plastic pipe?

10 MR. ZUCKER: Yes. I think that it
11 is, that if we had to do that we could, but it is
12 so economically infeasible, operationally
13 difficult, it prevent -- it presents safety issues
14 such that I don't think that you would look at that
15 as a prudent way to do it.

16 CHAIRMAN HALL: Distinguish for me
17 this situation from the telemetry equipment
18 decision that we reached either in the last ISRS
19 case or the ISRS case before that. In that case,
20 my understanding of our order was that we
21 determined that it was not worn out or
22 deteriorated, and therefore, not ISRS eligible.

23 MR. ZUCKER: That's right, but that
24 stood on its own. That was a -- telemetry was a
25 computer. It was located in regulator stations,

1 and it stood on its own. It was not part of -- it
2 was not integrated into the cast iron like this is.

3 CHAIRMAN HALL: But the company's
4 position in this case was it was more economically
5 expedient to replace the equipment while you were
6 replacing the pipe, and I believe the Commission
7 determined, while that may be true, it wasn't worn
8 out or deteriorated, so therefore, it wasn't ISRS
9 eligible. So how do you distinguish this situation
10 from that one?

11 MR. ZUCKER: I guess in this
12 situation it is not -- it's not feasible to get to
13 that pipe in any kind of a reasonable fashion. I
14 guess I distinguish it by saying that the telemetry
15 stood on its own. This is -- this is part of the
16 cast iron line.

17 CHAIRMAN HALL: If the Commission
18 were to determine that the plastic patches
19 replacement is not ISRS eligible, is it possible to
20 determine what percentage of the ISRS request will
21 be ineligible? Is that -- is there a mathematical
22 way to do that?

23 MR. ZUCKER: It would take a lot of
24 work, but I think that we have numbers about how
25 much plastic was replaced at the time we replaced

1 cast iron. It's a minimum. It's a minimal amount
2 of the total amount, but we could figure it out.

3 CHAIRMAN HALL: Is there an argument
4 that if you were to try to continue using the
5 plastic patches, that you would have significantly
6 higher costs because you'd have -- these -- this
7 drawing that you use where you dig down and over to
8 connect with the plastic, that that, in fact,
9 increases the -- it's not mileage but increases the
10 amount of total piping?

11 MR. ZUCKER: Yes, definitely. No
12 question about that.

13 CHAIRMAN HALL: And what witness
14 would be most appropriate to get more details on
15 that?

16 MR. ZUCKER: On the operational side?

17 CHAIRMAN HALL: On --

18 MR. ZUCKER: How much pipe would be
19 used?

20 CHAIRMAN HALL: How much additional
21 piping or the fact that there would be additional
22 piping necessary in order to connect with the
23 plastic patches.

24 MR. ZUCKER: I would say Mr. Lauber,
25 our second witness, would be more -- better able to

1 answer those questions.

2 CHAIRMAN HALL: Okay. Thank you.

3 MR. ZUCKER: The whole point of the
4 ISRS legislation was to provide incentive for us to
5 do the safety work. If we were to change the
6 arrangement such that, if there's any plastic, that
7 is then cut out of -- of being ISRS eligible,
8 that's going to change the incentive for us. It is
9 going to frustrate what the Legislature wants us to
10 do because we're simply going to prefer fixing
11 lines that are more cast iron over lines that are
12 more -- that have some plastic in them. The whole
13 point of the ISRS legislation was to encourage us
14 to do this work by giving us a more timely recovery
15 of it.

16 What we're saying is, if we're not
17 going to get a timely recovery for some of the
18 pieces, then we, I guess, go back to the drawing
19 board in terms of what we're motivated to do.

20 If we look at the second page of the
21 handout I gave you, that kind of answers the
22 question we've been talking about in terms of what
23 the cost would be to do our method versus the way
24 OPC is suggesting we do it or implying we should do
25 it by using the pieces of pipe that are deeper in

1 the ground and at a different location.

2 So in the first set under cost, you
3 see we're doing it -- we're putting the plastic in
4 for a lower price than we would if we were having
5 to connect to the old plastic. Under ISRS
6 recovery, our view is that we should recover the
7 costs of putting in the new pipe.

8 It's all part of the cast iron
9 replacement system, cast iron replacement program.
10 We do not have a plastic replacement program.
11 We're not out there to remove plastic. We're out
12 there to remove cast iron. And the extent that
13 there is a little plastic in it, that's -- should
14 be of no consequence.

15 But OPC wants to make it of
16 consequence. They want to assess a penalty on us
17 because there is some plastic interspersed in the
18 cast iron. And so the second line shows where
19 Laclede believes it should have an ISRS -- it
20 should have ISRS recovery for the work it does, but
21 OPC assesses a penalty for the fact that there is
22 some plastic in the ground.

23 The third example down shows what's
24 actually happening. In the nine work orders
25 identified by OPC, they -- I mean, they asked for a

1 lot of work orders. We provided them the
2 information. They cherry picked the nine they
3 wanted. When you add up the feet, there is more
4 cast iron coming out than plastic going in.

5 So we don't believe that that is --
6 that that is required. I mean, this -- in my view,
7 it's all part of the cast iron program, so it
8 should all be ISRS eligible. But if you're going
9 to measure feet and match them, we have taken out
10 more than one foot of cast iron for each foot of
11 plastic we've put in.

12 Now then, what about the old plastic
13 that's in there? In the ISRS, we give the customer
14 credit for the old plastic. In other words, it
15 gets retired and the customer gets credit for --
16 for what they had previously been paying for. So
17 their depreciation expense goes down. It reduces
18 the ISRS.

19 And that's what the arrows show there
20 on the far right. The new plastic is basically a
21 cost that -- of the ISRS. The old cast iron gets
22 retired, And that is a minus, a negative, because
23 depreciation is reduced, and the plastic -- I call
24 it the older plastic, it's the plastic that's in
25 there now -- is also retired and that is a

1 reduction off of the ISRS.

2 So the customer is getting credit,
3 the cast iron is being replaced, and the customer
4 is getting credit for the incidental plastic that's
5 also being replaced. And we believe that that is
6 how the ISRS should work.

7 I think the final point I would make
8 is that the -- the lines on the handout there are
9 not drawn to scale. I think the cost of doing --
10 of using the old plastic, of having to dig extra
11 trenches and make extra turns and Ts would be
12 substantially more expensive.

13 It's not a prudent way to do it, and
14 that's why we chose not to do it that way. We're
15 doing it in a way that is less expensive, a less
16 expensive way to get the cast iron out of the
17 ground. If there are no more questions?

18 JUDGE DIPPELL: Thank you,
19 Mr. Zucker. And let me just ask, Mr. Zucker, if
20 you could give me copies of -- go ahead and give me
21 copies of that exhibit for the Commissioners who
22 aren't present right now. I'll need three of
23 those.

24 Thank you. We'll hear from the
25 Staff.

1 MR. THOMPSON: May it please the
2 Commission?

3 The Staff is aligned with the company
4 on both of these issues, the issue of hydrostatic
5 testing and the issue of replacement of plastic
6 pipe that's integrated into the cast iron or steel
7 gas mains.

8 With respect to the hydrostatic
9 testing, you heard Mr. Zucker describe the
10 regulatory environment within which this occurs.
11 If that test is not performed, the line has to be
12 taken out of service and replaced. Therefore,
13 performing the test extends the life of the line.
14 It is squarely, in Staff's opinion, within the
15 permissible purpose of the ISRS statute.

16 With respect to the plastic mains, I
17 believe the way to think about this is to think of
18 an entire segment of line. Laclede replaces an
19 entire segment of line at a time. They don't
20 replace just ten feet here and five feet there.
21 That's what they do when they make repairs. This
22 is the replacement of a line.

23 The plastic pieces are integrated
24 into that cast iron or steel main, and it's the
25 entire segment that is worn out and deteriorated

1 and requires replacement. The fact that some
2 pieces, individual pieces of pipe within that main
3 might still be sound I think is not what the
4 Legislature had in mind.

5 If we were to push OPC's reasoning to
6 the extreme, then Laclede would have to dig up the
7 entire length of that cast iron or steel main and
8 examine each piece to see if it was sound or not,
9 replacing only those that were not. I don't think
10 that's what the Legislature had in mind. I don't
11 think that's what the ISRS statute requires. Thank
12 you.

13 CHAIRMAN HALL: A couple questions.

14 MR. THOMPSON: Yes, sir.

15 CHAIRMAN HALL: Looking at
16 5A concerning the hydraulic testing, the statute
17 says mains, valves, service lines, regulator
18 stations, vaults and other pipeline system
19 components -- excuse me. 5B was the one I wanted
20 to focus on. Main relining projects, service line
21 insertion projects, joint encapsulation projects
22 and other similar projects.

23 So the hydraulic testing is similar
24 to which of these types of designated projects?

25 MR. THOMPSON: It's similar to them

1 in the fact that it extends the life of the main.

2 CHAIRMAN HALL: Well, but it's other
3 similar projects extending the useful life. So the
4 way I look at it is it has to be similar to one of
5 those designated projects, does it not? It needs
6 to be similar to one of those, and I'm not sure how
7 it's similar.

8 MR. THOMPSON: Staff would understand
9 the word similar more broadly. It's similar in
10 that its purpose and effect is the same.

11 CHAIRMAN HALL: So it's Staff's
12 position that any project that extends the useful
13 life of a pipeline would be ISRS eligible?

14 MR. THOMPSON: I'm sure we could come
15 up with examples that Staff wouldn't agree with.
16 Let me just say that with respect to hydrostatic
17 testing, Staff believes that it is eligible.

18 CHAIRMAN HALL: Okay. My second
19 question is similar to one that I raised with
20 Mr. Zucker, is how do you distinguish this
21 Commission's decision on the telemetry equipment
22 from the plastic patches in this case?

23 MR. THOMPSON: By thinking about the
24 line segment as a whole. In other words, I don't
25 think the company is required to dig up the entire

1 length of pipe and salvage those pieces that are
2 still sound and could still possibly be reused in
3 order to put them back into service. I think that
4 when an entire line segment has been determined to
5 be at the end of its useful life, then I think the
6 company gets to replace the entire line segment
7 without having to go in and recover and examine
8 each individual segment of the pipe.

9 CHAIRMAN HALL: So it's not really a
10 function of the cost to do that, it's more of a
11 function of how Staff is interpreting the project?
12 The project is the entire line?

13 MR. THOMPSON: That's correct.

14 CHAIRMAN HALL: And therefore, the
15 whole line needs to be replaced?

16 MR. THOMPSON: That's correct.

17 CHAIRMAN HALL: And if there was
18 telemetry equipment there, that would still be
19 ineligible based on a prior interpretation because
20 it's not part of the line?

21 MR. THOMPSON: I think that's how
22 Staff would apply that prior decision, yes.

23 CHAIRMAN HALL: Okay. Thank you.

24 MR. THOMPSON: Thank you, sir.

25 JUDGE DIPPELL: Thank you,

1 Mr. Thompson.

2 MR. THOMPSON: Thank you.

3 JUDGE DIPPELL: Public Counsel?

4 MR. POSTON: I'd like to begin with
5 issue No. 5 on the issues list, which is the ISRS
6 eligibility of replacing the plastic and
7 polyethylene pipe that's not worn out or
8 deteriorated.

9 I don't think anyone here will
10 dispute that the eligible ISRS recovery of a
11 replaced main or service line must be, quote,
12 installed to comply with a state or federal safety
13 requirement as replacements for existing facilities
14 that have worn out or in deteriorated condition,
15 end quote.

16 So there's two parts to that. First,
17 must be required by a safety law, and second, the
18 pipe being replaced must be worn out or
19 deteriorated. The facts of this case will show
20 that Laclede's ISRS petitions include ineligible
21 projects that meet neither requirement, because,
22 one, there's no state or federal safety requirement
23 that Laclede is following when it places -- when it
24 replaces recently installed plastic pipe with newer
25 plastic pipe. And, two, since such pipe is in fine

1 working condition, the unimpaired plastic pipe does
2 not satisfy the requirement that it be worn out or
3 deteriorated.

4 CHAIRMAN HALL: Mr. Poston, let me
5 interrupt for a moment. I'm sorry to do that, but
6 I want to make sure I remember this question. So
7 OPC would take issue with Staff and Laclede's
8 interpretation of the statute distinguishing
9 5A from 5B, that in 5B there is no requirement that
10 the -- that the facility be worn out or in
11 deteriorated condition?

12 MR. POSTON: I would agree that 5A is
13 for replacement, and that's the worn out and
14 deteriorated. They're replacing it as the worn out
15 and deteriorated. 5B where they're doing something
16 to enhance the line, it's not necessarily worn out
17 or deteriorated, because at that point it would
18 need to be replaced.

19 CHAIRMAN HALL: Okay. Well, I took
20 your comments a moment ago that -- that Laclede has
21 to show worn out or deteriorated in order to --

22 MR. POSTON: For the replacements
23 under 5A. So plastic pipe, that's all 5A. They've
24 said it's eligible under 5A, not 5B.

25 CHAIRMAN HALL: Okay.

1 MR. POSTON: So as you heard in
2 Mr. Zucker's opening and you'll hear a lot of other
3 talk today about how replacing new plastic with
4 newer plastic somehow makes the system safer, that
5 they're somehow helping cut costs, makes sense from
6 a strategic perspective. I'll even go as far as to
7 say it's safer because their crews won't be
8 standing in the street doing those projects.

9 Those are distractions from the real
10 issue here, the real issue in any ISRS petition.
11 The real question to ask, is it required by law and
12 is the existing plastic pipe that was replaced worn
13 out or deteriorated? That's it. That's where the
14 focus need to be here, because that's the legal
15 standard that was established by the General
16 Assembly.

17 The Commission has seen the same
18 issue twice before, and there's clear guidance from
19 both the Missouri Supreme Court and the Commission
20 itself. The Missouri Supreme Court applied a
21 narrow interpretation of the ISRS statute and said
22 all replacements must be replacing pipe that is
23 worn out or in a deteriorated condition.

24 In that case, the pipe was actually
25 destroyed by a third-party excavator. So even in

1 that instance, when there's clear damage, the court
2 said it's still not eligible. It must have become
3 worn out over time.

4 This case is essentially the same
5 case that you addressed in 2015 regarding
6 telemetry. The Commission rejected that equipment,
7 and I'd like to read from the Commission's order
8 just to show how it does apply here.

9 The Commission said, quote, the
10 Court's decision makes clear -- and they're
11 referring to the Supreme Court. The Court's
12 decision makes clear that the Commission should
13 evaluate the eligibility of gas utility plant
14 projects narrowly in order to ensure compliance
15 with the Legislature's intent. When evaluating the
16 telemetry equipment Laclede replaced, which are
17 pipeline system components installed to comply with
18 state or federal safety requirements, the evidence
19 shows that the specific units at issue and work
20 orders -- and gave you two work orders -- were
21 still operable at the time of the replacements.
22 There were no signs of deterioration such as
23 corrosion.

24 It's the same issue here. The
25 Commission went on to say that, while it is clear

1 that telemetry equipment plays a vital role in
2 monitoring and ensuring the safe distribution of
3 gas, Laclede failed to show that specific parts
4 replaced were in an impaired condition. To simply
5 state that the software was old and the
6 manufacturer no longer provided repair parts is not
7 sufficient to demonstrate ISRS eligibility due to a
8 worn out or deteriorated condition.

9 And then it goes on to say, Absent
10 some type of impairment in quality, stake or
11 condition, age alone does not justify inclusion of
12 a gas utility in that project.

13 Lastly, the Commission says, Since
14 the telemetry equipment replacement occurred at the
15 same time as regulator station upgrades, it appears
16 the timing of the replacement was more likely
17 motivated by the efficiency of changing both at the
18 same time than the age of the equipment or any
19 actual impairment.

20 That's the exact same issue we have
21 right here today. The case is clearly analogous.
22 Laclede is replacing ineligible plastic mains and
23 service lines at the same time it replaces eligible
24 mains and service lines due to efficiency or
25 strategic purposes. This would be consistent with

1 the telemetry order and the Supreme Court's opinion
2 that ineligible plastic replacements must be
3 removed from ISRS costs.

4 The evidence in this case will show
5 Laclede is replacing plastic pipe with plastic
6 pipe. Miles of recently installed plastic pipe,
7 much of it partly recovered through an ISRS, have
8 been slipped into these petitions. And they're
9 actually installing brand-new pipe, and as
10 Mr. Zucker showed you, above and slightly to the
11 side. So they'll have brand new pipe over plastic
12 pipe that was recently installed.

13 They say all the millions and
14 millions of dollars we spent on ISRS over the past
15 12 years, those were just temporary patches, and
16 now we have to replace everything again.

17 In this case we are not challenging
18 the prudence of Laclede's strategy of replacing
19 functioning pipe with new pipe. We're only saying
20 the cost associated with the ineligible pipe needs
21 to be removed. It's as simple as that. The
22 prudence of the strategy, that's a rate case issue.
23 That's not before you today.

24 In this case we are not challenging
25 the vast majority of the work order replacement

1 costs because most appear to be for cast iron and
2 steel that we're assuming are worn out or
3 deteriorated. So we ask that you simply tell
4 Laclede to take out the plastic cost and include
5 everything else, which would allow Laclede to begin
6 recovering on the majority of the claimed costs.

7 Chairman, you asked a question to
8 Mr. Zucker about whether Laclede could determine
9 the percentage of plastic, and you may or may not
10 be aware of this, but in Kansas they pretty much
11 adopted our ISRS statute almost entirely, except
12 they called it the GSRS instead of the ISRS. Maybe
13 they're trying to hide the fact that they stole
14 from us. That's really the only change they made
15 to it.

16 And there, there was a company doing
17 what they're doing here. And there in Kansas, what
18 they told them to do, they told them to separate it
19 out. They even told them to change their system on
20 how they report this to the Commission so the
21 system actually separates out the plastic or the
22 ineligible from the eligible pipe.

23 And I would also like to respond
24 to -- Mr. Zucker raised this, brought this
25 demonstration. And if you look at this, you think,

1 well, it's just a little section of plastic that
2 they're replacing. It's mostly this cast iron.
3 But if you look at the evidence in this case, it's
4 going to show we're talking lengths of plastic pipe
5 100, 200, 400, 1,000 feet are being replaced in
6 this -- in these petitions.

7 So these aren't little, small pieces
8 of plastic. There are some of those in there, I
9 would agree, but there's a lot more than what this
10 visual would demonstrate.

11 Moving on to hydrostatic testing
12 costs.

13 JUDGE DIPPELL: Mr. Poston, let me
14 interrupt you just a second. Do you have a
15 specific cite to the Kansas matter that you were
16 talking about or can you provide that in a brief?

17 MR. POSTON: I can provide that.

18 JUDGE DIPPELL: If you'd include that
19 in your brief. Thank you.

20 COMMISSIONER RUPP: So to follow up
21 on your point there where you say there's 1,000
22 feet of pipe out there, is it OPC's position that
23 even if there's a six-inch piece of pipe, that
24 should be taken out, or is there a magic number
25 that if it's over three feet of pipe, it should be

1 dealt with differently, or are you saying that
2 every piece?

3 MR. POSTON: We haven't taken a
4 position on that. I mean, if we were looking at
5 the petitions and we were just seeing a foot here
6 and there, small sections, we probably wouldn't
7 raise an issue with it.

8 But at some point you've got to look
9 and see, you know, a 100-foot, 500-foot section, to
10 us that's unreasonable and unlawful. I think the
11 portion of the one foot, that's also unlawful, but
12 we probably wouldn't have raised the issue just on
13 those little sections.

14 COMMISSIONER RUPP: So what -- and
15 maybe this will come up in the testimony. So what
16 percentage of the plastic that is currently being
17 replaced with the cast iron is larger chunks, the
18 100, 200 feet, what percentage of that -- of all
19 the plastic that is being replaced?

20 MR. POSTON: I don't know if that's
21 been calculated. I don't think anybody's
22 calculated that.

23 COMMISSIONER RUPP: All right. And
24 you also kept referencing the telemetry case.
25 Refresh my memory, what was the vote on that case,

1 do you remember?

2 MR. POSTON: I can look. The vote
3 was four to one, with Commissioner Rupp dissenting.

4 So hydrostatic testing costs.
5 Hydrostatic testing involves filling a pipe with
6 pressurized water to see if it has leaks. Nothing
7 is done to extend the life of the pipe or enhance
8 its integrity because no changes are made to the
9 pipe at all.

10 If the destiny of a particular pipe
11 is that it will wear out in ten years, the test
12 does not change that. It simply indicates that it
13 isn't worn out today. That pipe will still wear
14 out in ten years.

15 To be eligible under the ISRS statute
16 they claim it qualifies under, which is 5B, there
17 must be something done to the pipe to extend its
18 life or enhance its integrity. Simply testing a
19 pipe only tells whether you need to do more to it,
20 such as replace it or do work on the pipe to fix
21 it.

22 We will present evidence today
23 showing that not only is ISRS not allowed testing
24 costs -- not only does ISRS not allow testing
25 costs, but will also show that these are

1 maintenance expenses that should not be capitalized
2 per the Commission's own accounting standards.
3 Testing expenses simply do not belong in ISRS, and
4 the evidence we present today will support that
5 conclusion. So we ask that these costs be removed.
6 Thank you.

7 JUDGE DIPPELL: Thank you,
8 Mr. Poston.

9 COMMISSIONER KENNEY: Hey, Judge,
10 this is Commissioner Kenney. I have a question.

11 JUDGE DIPPELL: Yes. Go ahead,
12 Commissioner.

13 COMMISSIONER KENNEY: Yes. Thank
14 you, counsel. Have you guys figured out what the
15 net benefit the company must be to replace all the
16 pipe instead of parts of it?

17 MR. POSTON: I do not know that. I
18 did actually ask the company for some type of a
19 cost/benefit analysis that it had done on that, but
20 they did not provide anything.

21 COMMISSIONER KENNEY: Have you looked
22 at the cost differential to take out sections at a
23 time and replace sections versus replacing the
24 entire length of the pipe?

25 MR. POSTON: We've not done that.

1 That is something that we do think should be
2 explored in the rate case, because that's a
3 prudence issue on the project. That's not an issue
4 of ISRS eligibility.

5 COMMISSIONER KENNEY: Okay. So if
6 this cost the -- if we do cut and piece, that costs
7 the customer more, that doesn't concern you. It's
8 just the -- the dynamics of the case; is that
9 correct?

10 MR. POSTON: We're not asking the
11 company to change the way it does anything. All
12 we're saying is, there is a narrow band of costs
13 that ISRS allows, that is ISRS eligible. We're
14 just saying that what you recover through the ISRS
15 has to be eligible. We're not asking them to
16 change anything the way they're doing it.

17 COMMISSIONER KENNEY: Okay. Thank
18 you.

19 CHAIRMAN HALL: I have another
20 question. If the Commission were to adopt OPC's
21 position on the plastic patches, what would -- what
22 should the Commission do concerning the older
23 plastic that has been replaced? Should the company
24 continue to recover for that capital expenditure?

25 MR. POSTON: Once it comes out of

1 service, is retired, they should no longer recover
2 for it.

3 CHAIRMAN HALL: So even though the
4 new plastic that replaced the old plastic would not
5 be ISRS eligible under the position, the older
6 plastic would still be ineligible?

7 MR. POSTON: Well, the older plastic
8 has probably already been in an ISRS and --

9 CHAIRMAN HALL: But they're
10 continuing to recover on it?

11 MR. POSTON: And then it got probably
12 rolled into general rates, so then they're
13 recovering on that. So they're actually double
14 recovering right now on the stuff that's still in
15 the ground and the stuff they put on top.

16 CHAIRMAN HALL: My understating of
17 Laclede's position, which Staff supports, is that
18 the older -- the ISRS recovered on the older
19 plastic is coming out?

20 MR. POSTON: I know they're retiring
21 it, but I guess my understanding is their general
22 rates aren't changing at all. And that's where
23 those costs are in.

24 CHAIRMAN HALL: Okay. Thank you.

25 MR. POSTON: And I'd ask you to ask

1 our witness this question. He could probably do a
2 better job of answering that for you.

3 JUDGE DIPPELL: Thank you. That
4 concludes the opening statements, so we can go
5 ahead and begin with our first testimony. And
6 we'll let Laclede begin with its first witness.

7 MR. ZUCKER: Laclede calls to the
8 stand Glenn W. Buck.

9 (Witness sworn.)

10 JUDGE DIPPELL: Could you state your
11 name and spell it for the court reporter.

12 THE WITNESS: My name is Glenn
13 William Buck. G-l-e-n-n, Buck, B-u-c-k.

14 JUDGE DIPPELL: Thank you. You can
15 proceed when you're ready, Mr. Zucker.

16 MR. ZUCKER: Thank you, your Honor.

17 GLENN BUCK testified as follows:

18 DIRECT EXAMINATION BY MR. ZUCKER:

19 Q. Good morning, Mr. Buck.

20 A. Good morning, sir.

21 Q. Can you tell me who your employer is?

22 A. My employer is Laclede Gas Company.

23 Q. Are you the same Glenn W. Buck who

24 filed direct testimony in this case on

25 December 16th, 2016?

1 A. That's correct.

2 Q. And are you also the same Glenn W.
3 Buck who filed testimony -- rebuttal testimony in
4 this case on December 23rd, 2016?

5 A. Yes, sir.

6 Q. Okay. Going back to your direct
7 testimony, which has been marked as Laclede Exhibit
8 No. 1, if asked the same questions today, would you
9 give the same answers in that testimony?

10 A. Yes, sir.

11 Q. Okay. Is there any changes that you
12 would make?

13 A. No, sir.

14 MR. ZUCKER: Okay. I offer Laclede
15 Exhibit No. 1 into evidence.

16 JUDGE DIPPELL: Is there any
17 objection to Exhibit No. 1, Laclede Exhibit No. 1?
18 (No response.)

19 JUDGE DIPPELL: Seeing none, then, I
20 will admit Laclede Exhibit No. 1.

21 (LACLEDE EXHIBIT 1 WAS RECEIVED INTO
22 EVIDENCE.)

23 BY MR. ZUCKER:

24 Q. Moving on to your rebuttal testimony,
25 Mr. Buck, which has been marked Laclede Exhibit

1 **No. 2.**

2 A. Yes.

3 **Q. If asked the same questions today,**
4 **would you give the same answers?**

5 A. With one correction.

6 **Q. One correction. And where would we**
7 **find this correction?**

8 A. It's actually to Revised Rebuttal
9 Schedule GWB-1.

10 **Q. Okay.**

11 A. And I'd ask to submit the whole
12 schedule again just to make it easier, but I can
13 point out where the differences are.

14 **Q. Is this, what I'm holding in my hand,**
15 **the revisions?**

16 A. Yes, sir.

17 MR. ZUCKER: Okay. Permission to
18 approach the witness.

19 JUDGE DIPPELL: Yes. Have the other
20 parties seen this change yet?

21 MR. ZUCKER: No, but it's not
22 substantive.

23 BY MR. ZUCKER:

24 **Q. Mr. Buck, this document is marked**
25 **Revised Rebuttal Schedule GWB-1; is that correct?**

1 A. That's correct.

2 Q. And do you intend it to be a
3 substitute for the Rebuttal Schedule GWB-1 that's
4 in your rebuttal testimony?

5 A. I do.

6 Q. Okay. And can you explain the change
7 to us?

8 A. Sure. There were two relatively
9 minor changes. In the services section, if you go
10 to the second to the last column over, I believe in
11 the original that was submitted with my testimony
12 it said copper retirements, and I've changed the
13 word to plastic.

14 And then also in that same section,
15 on Work Order 900882, right next you'll see a
16 highlighted number, 7,812. Okay. In the original
17 testimony -- I'll have to go back and check -- that
18 number shown, 15,624, and on revision what ended up
19 happening is I summed the columns of steel and
20 copper and plastic and total retirements up and
21 that's what the original number was.

22 So as I go back and correct it, it's
23 just picking up columns for the steel, copper and
24 plastic retirements. So see, the 7,812 is
25 duplicated in both the third column over and the

1 last column. And obviously it's something that
2 will change at the bottom.

3 Q. Okay. So the difference in footage
4 installed was you -- it was a calculation error in
5 which you doubled the amount?

6 A. Yes. So actually it's showing that
7 the total footage installed went down.

8 Q. Okay. That -- so that adds up down
9 there, so 44,868 feet of service work was
10 installed?

11 A. I believe what was showing was
12 52,680.

13 Q. Right. Okay. And with that change,
14 if I asked you the same questions that are in this
15 testimony today, would your answers be the same?

16 A. Yes.

17 MR. ZUCKER: Okay. I move for entry
18 of Laclede Exhibit No. 2 into evidence.

19 JUDGE DIPPELL: Is there any
20 objection to Laclede Exhibit No. 2 with that
21 substitution?

22 (No response.)

23 JUDGE DIPPELL: Seeing none, then, I
24 will admit Laclede Exhibit No. 2, replacing the
25 Revised Rebuttal Schedule GWB-1.

1 (LACLEDE EXHIBIT 2 WAS RECEIVED INTO
2 EVIDENCE.)

3 MR. ZUCKER: Thank you, Mr. Buck.

4 THE WITNESS: Thank you.

5 MR. ZUCKER: Your Honor, one other
6 thing. We had agreed -- Laclede Exhibit No. 4 is
7 the application of Laclede Gas Company. Laclede
8 Exhibit No. 5 is the application by Missouri Gas
9 Energy. We had agreed that those would just go
10 into the record without objection.

11 JUDGE DIPPELL: Would there be any
12 objection to the admission of Laclede Exhibit No. 4
13 and Laclede Exhibit No. 5?

14 MR. THOMPSON: No objection from
15 Staff.

16 JUDGE DIPPELL: Seeing none, then I
17 will admit Exhibit No. 4 and Laclede Exhibit No. 5.

18 (LACLEDE EXHIBITS 4 AND 5 WERE
19 RECEIVED INTO EVIDENCE.)

20 MR. ZUCKER: Thank you, your Honor.

21 JUDGE DIPPELL: And do we have any
22 cross from Staff?

23 MR. THOMPSON: Just briefly, your
24 Honor.

25 CROSS-EXAMINATION BY MR. THOMPSON:

1 **Q.** You testified that you did not
2 receive any work papers from Mr. Hyneman and,
3 therefore, you could not replicate his
4 calculations; is that correct?

5 A. That's correct.

6 **Q.** Did you ever get those?

7 A. No, sir.

8 MR. THOMPSON: Thank you. No further
9 questions.

10 JUDGE DIPPELL: Thank you. Is there
11 cross-examination from Public Counsel?

12 MR. POSTON: Yes, thank you.

13 CROSS-EXAMINATION BY MR. POSTON:

14 **Q.** Good morning, Mr. Buck.

15 A. Good morning, sir.

16 **Q.** Happy New Year.

17 A. You as well.

18 **Q.** For purposes of my questions, when I
19 refer to Laclede, I'm referring to both Laclede Gas
20 and MGE unless I specify one or the other. Okay?

21 A. Okay. I'll try to do the same.

22 **Q.** Is it your understanding OPC is
23 not -- or is opposing two types of work order costs
24 in this case as ineligible, replacing segments of
25 plastic mains and service lines and hydrostatic

1 costs?

2 A. That's correct.

3 Q. Would you agree with me that the
4 majority of the costs in the ISRS petitions are for
5 other types of costs that OPC is not opposing?

6 A. Yes.

7 Q. OPC is not opposing recovery of costs
8 in replacing segments of cast iron main that's worn
9 out or deteriorated; is that correct?

10 A. Correct.

11 Q. And we're not opposing costs incurred
12 in replacing unprotected bare steel that's worn out
13 or deteriorated?

14 A. That's my understanding.

15 Q. So if the Commission were to agree
16 with OPC and disallow the costs that we oppose as
17 ineligible, Laclede would still get to include the
18 majority of the costs you've included in your ISRS
19 petitions; is that correct?

20 A. I haven't seen the calculations. I'm
21 not really sure if that's true or not, Marc. I'm
22 sorry. Counselor.

23 Q. When I asked you the question, would
24 you agree with me the majority of costs in these
25 ISRS petitions are for other types of costs OPC is

1 not opposing, you said yes.

2 A. Ask me the question again, please.

3 Q. Never mind. I'll move on. In your
4 upcoming rate case, you'll have an opportunity to
5 request to include the plastic replacements in
6 permanent rates; is that correct?

7 A. Correct.

8 Q. Do you agree with me that to be
9 eligible for ISRS, the project must be installed to
10 comply with state or federal safety requirements?

11 A. Under 5A, yes.

12 Q. And when Laclede files its petitions,
13 it included references to safety laws it says
14 require each work order; is that correct?

15 A. Excuse me one second. Can you ask
16 the question again, please?

17 Q. When Laclede filed its petitions, it
18 included references to the safety laws it says
19 required each work order; is that correct?

20 A. It includes reference to the statute
21 which includes multiple types of recovery.

22 Q. Well, let's look at your petition.

23 JUDGE DIPPELL: Can I encourage each
24 of you gentlemen to speak into the microphone a
25 little bit?

1 THE WITNESS: Sure. I'm trying.

2 JUDGE DIPPELL: Thank you.

3 BY MR. POSTON:

4 Q. Do you have a copy of your ISRS
5 petitions?

6 A. Not with me, no.

7 Q. I believe the court reporter has
8 Laclede Exhibit 4.

9 A. Thank you.

10 Q. Have you turn to Appendix A,
11 Schedule 3.

12 A. Okay. I'm there.

13 Q. Okay. And in that schedule you have
14 a column titled state or federal safety
15 requirements; is that correct?

16 A. That's correct.

17 Q. And in that column you have letter
18 codes; is that correct?

19 A. Yes. Which letter codes reference
20 Appendix A's Schedule 4.

21 Q. And with a few exceptions, would you
22 agree with me that the vast majority of your work
23 orders you cited to four specific safety
24 requirements and you labeled using codes A, B, C
25 and K; is that correct?

1 A. Generally, yes.

2 Q. And you agree with me these are the
3 safety requirements you cited for the majority of
4 the work orders that include the replacement of
5 plastic mains and service lines?

6 A. Yes.

7 Q. And as you, I believe, just said, the
8 legend to those codes can be found in Schedule 4 to
9 Laclede Gas' petition; is that correct?

10 A. That's correct.

11 MR. POSTON: I'd like to have an
12 exhibit marked.

13 JUDGE DIPPELL: That will be marked
14 as OPC Exhibit No. 2.

15 (OPC EXHIBIT 2 WAS MARKED FOR
16 IDENTIFICATION BY THE REPORTER.)

17 BY MR. POSTON:

18 Q. Would you agree with me that the
19 court reporter has handed you what's been marked as
20 OPC Exhibit No. 2?

21 A. Correct.

22 Q. And is OPC Exhibit No. 2 a copy of
23 Laclede's legend -- or included on the top a copy
24 of Laclede's legend of state or federal safety
25 requirements, and then behind that's a statute and

1 **some of the Commission's gas safety rules?**

2 A. Correct. I'm not as familiar with
3 the very last two pages, but it looks similar to
4 that, yes.

5 Q. So we've already established that you
6 cite to A, B, C and K as the safety rules that
7 require those replacements, correct?

8 A. Yes.

9 Q. Would you please circle those letters
10 on the official court reporter's copy on the top
11 page?

12 A. Okay.

13 MR. POSTON: Judge, I offer
14 Exhibit -- OPC Exhibit No. 2.

15 JUDGE DIPPELL: Would there be any
16 objection to OPC Exhibit No. 2?

17 MR. ZUCKER: No, your Honor.

18 JUDGE DIPPELL: Seeing none, then I
19 will admit Exhibit No. 2.

20 (OPC EXHIBIT 2 WAS RECEIVED INTO
21 EVIDENCE.)

22 BY MR. POSTON:

23 Q. So I'd like to ask you questions on
24 each of these so the Commissioners can better
25 understand why you believe these laws require you

1 to replace plastic mains and plastic service lines.
2 The first letter A cites to Section 393.130 of the
3 Missouri statutes, and if you turn the page, you'll
4 see I have that attached. Would you agree you're
5 referencing the general requirement that a facility
6 be safe and adequate?

7 A. Yes.

8 Q. Is it your opinion that this statute
9 requires you to replace plastic pipe that's not
10 worn out or deteriorated?

11 A. Ask the question again, please.

12 Q. Is it your opinion that this statute
13 requires you to replace plastic pipe that is not
14 worn out or deteriorated?

15 A. I think this addresses safe and
16 adequate service.

17 Q. Would you agree with me that it was
18 only recently, I believe you told me during your
19 replacement work tour in 2011, that Laclede changed
20 its strategy to replace plastic along with cast
21 iron and bare steel?

22 A. It was approximately 2011 that we
23 changed the strategy, yes.

24 Q. So is it Laclede's position that
25 before 2011, Laclede's practices of replacing just

1 the piece of main that was worn out or deteriorated
2 was in violation of law because it didn't also
3 replace the connective plastic main or line?

4 MR. ZUCKER: Objection. He's asking
5 him to make a legal conclusion. Mr. Buck is not an
6 attorney. He can argue this in his brief if he
7 wants.

8 MR. POSTON: Mr. Buck is here with --
9 supporting the petition and supporting their claims
10 of eligibility for all of these costs. He's the
11 witness up here supporting those, and --

12 JUDGE DIPPELL: I'll sustain the
13 objection. You're asking him to make a legal
14 opinion about what happened in the past.

15 MR. POSTON: He's -- okay. It's been
16 sustained. I'll move on.

17 Well, Judge, he's here telling us
18 that all of these costs are eligible. My questions
19 are asking him about rules that they're citing to.

20 JUDGE DIPPELL: You asked him about
21 whether what happened in the past was illegal.

22 MR. POSTON: I said, is it Laclede's
23 position. I'm not asking him to give me a legal
24 opinion.

25 JUDGE DIPPELL: That's not the

1 question that I heard. I sustained an objection on
2 a question asking him whether something was
3 illegal.

4 MR. POSTON: Well, can I rephrase the
5 question?

6 JUDGE DIPPELL: Please ask a
7 different question.

8 BY MR. POSTON:

9 Q. Is it Laclede's position that before
10 2011 Laclede's practice of replacing just the piece
11 of main that was worn out or deteriorated was in
12 violation of law because it didn't also replace the
13 connective plastic main or service line?

14 A. I'm not positive I understand the
15 question. Can I try and rephrase so that you
16 understand what I'm answering?

17 Q. Sure.

18 A. Okay. So I think what you're asking
19 is, if we replaced a section of cast iron main,
20 let's say it's 100 feet, and there was a piece of
21 connecting plastic next to it, if we didn't replace
22 both of them, would that be considered, what was
23 the term you used, illegal or --

24 Q. Was that Laclede's position that when
25 they followed that practice of not replacing the

1 plastic at the same time, was that -- was that
2 Laclede's position that that was unlawful?

3 A. I wouldn't say it was unlawful. I
4 think we were taking pipe out of the ground that
5 was at risk. And frankly, I think Mark Lauber, our
6 other witness, would probably be the better person
7 to ask these questions.

8 Q. So is it Laclede's position now that
9 it is unlawful to replace any segment of cast iron
10 main without replacing all connecting plastic?

11 A. I think we're approaching it a
12 different way, if that's an answer to your
13 question.

14 Q. Well, either Laclede has taken a
15 position that it's unlawful or not. Do you know?

16 A. I really don't know whether it's
17 unlawful. I know what our practice is.

18 Q. Let's move on to the second authority
19 you cite, B, and that's the next page of OPC
20 Exhibit 2. The second authority you cite is
21 Section 13 of the Commission's gas safety rules,
22 correct?

23 A. That's correct.

24 Q. And if you see on the OPC Exhibit 2,
25 the next page, you look down toward the middle

1 bottom of that page, you see there's Section 13,
2 correct? It's page 46 of the Commission's safety
3 rules.

4 A. I'm there.

5 Q. Would you agree with me that under
6 13B2 -- and I'll let you get there.

7 A. Okay. I'm there.

8 Q. It says, Each segment of pipeline
9 that becomes unsafe must be replaced, repaired or
10 removed from service. Do you agree it says that?

11 A. It does say that, yes.

12 Q. Would you agree then when a segment
13 of cast iron wears out, this rule requires that
14 that segment be replaced?

15 A. It discusses a segment of pipeline,
16 not a segment of cast iron.

17 Q. Doesn't pipeline refer to all types
18 of pipe?

19 A. I'm not really sure where the term
20 segment is defined. Maybe that would help.

21 Q. What's your definition of segment?

22 A. From my standpoint, a segment is a
23 continuous set of pipe that's providing service,
24 and could be cast iron, it could be plastic, it
25 could be steel, it could be a combination of all

1 three.

2 Q. And when it joins another segment of
3 pipe, then that's a separate segment?

4 A. Again, I'm not sure where segment is
5 defined here.

6 Q. But this definition -- I mean, under
7 maintenance --

8 A. Yes.

9 Q. -- where it says each segment of
10 pipe, regardless of what the definition of segment
11 is, this requirement only requires you to replace
12 the segment that becomes unsafe. Would you agree
13 with that?

14 A. That's correct.

15 Q. Does not require you to replace an
16 adjoining segment that is not unsafe, correct?

17 A. I think that's correct, yes.

18 Q. Okay. Let's move on to the next,
19 which is letter C of what you've listed as why this
20 project should be eligible. Can you turn there?
21 What does C reference?

22 A. C is 4 CSR 240.40-30.15. So No. 13
23 was maintenance. Under 15 is replacement programs,
24 which is on page 52 of your exhibit.

25 Q. And you're familiar with Laclede's

1 **gas safety replacement programs, correct?**

2 A. Generally, yes.

3 Q. Does Laclede have written replacement
4 programs to implement the requirements of this
5 section?

6 A. Yes and no. For example, and now I'm
7 going to designate between Laclede and MGE, if I
8 might, because MGE was on a replacement program
9 that had a mandated amount of cast iron or steel
10 that has to be taken out of the ground. That was
11 an order in like 1990, 1992.

12 For Laclede we've had various orders
13 or agreements between the company and the Staff's
14 gas safety group on removing pipe, but I'm not sure
15 that there has been a program per se. But, once
16 again, I'd probably defer to Mr. Lauber on that.

17 Q. If you look under Section 15,
18 replacement programs, and you see there is a
19 Subpart B, and do you see the last -- or the second
20 sentence of that says, The requirements of this
21 section apply to pipelines as they existed on
22 December 15th, 1989. Do you see that?

23 A. Yes.

24 Q. By implication it does not apply to
25 new portions of pipeline added after December 15th,

1 **1989, correct?**

2 MR. ZUCKER: I'm going to object to
3 that. It calls for a legal conclusion again.

4 JUDGE DIPPELL: I'm sorry,
5 Mr. Poston. Would you repeat your question?

6 MR. POSTON: I asked him if by
7 implication when something says it applies to
8 pipelines as they existed on December 15, 1989,
9 that by implication it would not apply to
10 pipelines -- pipes installed after that date.

11 MR. ZUCKER: How would Mr. Buck know
12 that? He's a fact witness. He's not here to
13 provide legal opinions to Mr. Poston.

14 MR. POSTON: Again, he is here to
15 support their claim of eligibility, and it's tied
16 to every legal authority that they cite.

17 JUDGE DIPPELL: Mr. Poston, I will
18 let you ask him what his opinion is with regard to
19 whether that applies.

20 MR. POSTON: With the understanding
21 he's not an attorney.

22 JUDGE DIPPELL: Exactly.

23 BY MR. POSTON:

24 **Q. So by implication, as a non-attorney,**
25 **would you say that that would mean that these rules**

1 don't apply to new portions added after
2 December 15th, 1989?

3 A. According to -- what I see here is
4 according to this section. But again, I think
5 you're probably, once again, better off to ask
6 Mr. Lauber that question.

7 Q. Pipelines installed after 1989 were
8 subject to new safety requirements that the
9 pipelines installed before 1989 were not subject
10 to; is that correct?

11 A. Again, I'll defer to Mr. Lauber.

12 Q. Okay. Let's turn to Subsection C of
13 the replacement programs.

14 A. Okay. The unprotected steel service
15 lines and yard lines?

16 Q. Yes.

17 A. Yes.

18 Q. And a service line connects a
19 customer to the main line; is that correct?

20 A. Yes, or -- yes, that's correct.

21 Q. And has Laclede replaced all of its
22 unprotected steel service lines and yard lines that
23 existed on December 15th, 1989?

24 A. I would gather the answer would be
25 no.

1 Q. Do you believe -- well, perhaps this
2 is a better question for Mr. Lauber. Do you know
3 under C, you see down -- I guess the last sentence
4 of that first paragraph, where it says, the
5 operator shall choose from the following options
6 unless otherwise ordered by the Commission and
7 shall notify the Commission by May 1st, 1990 which
8 option or combination of options the operator will
9 undertake. Do you see that?

10 A. Yes, I see that.

11 Q. Do you know which of these options
12 Laclede Gas and MGE chose?

13 A. And I think you're right, it's better
14 to ask Mr. Lauber that.

15 Q. And moving on to the next type of
16 replacement program under Subsection D, that's for
17 cast iron, transmission lines, feeder lines and
18 mains, correct?

19 A. Correct.

20 Q. And under Subsection D it says,
21 Operator shall first prioritize and eliminate those
22 pipelines that present the greatest potential for
23 danger; is that correct?

24 A. That's correct.

25 Q. Has Laclede eliminated all the high

1 **priority cast iron?**

2 A. Again, I'll defer to Mr. Lauber on
3 that.

4 **Q. Do you know if Laclede has a current**
5 **cast iron replacement program?**

6 A. I believe we have both probably
7 informal and formal cast iron replacement programs.

8 **Q. And were those programs ordered and**
9 **approved by the Commission?**

10 A. Once again, I certainly know they
11 were for MGE. I believe they were for Laclede, but
12 I'm not sure there's been an overarching
13 requirement.

14 **Q. But you are citing to this rule as**
15 **requiring you to replace these plastic**
16 **replacements, correct?**

17 A. The company is, yes.

18 **Q. The last type of replacement program**
19 **under Subsection E is for replacing or cathodic**
20 **protection of unprotected steel, transmission**
21 **lines, feeder lines and mains, correct?**

22 A. Correct.

23 **Q. Would you agree with me that**
24 **Laclede's unprotected steel main replacement**
25 **program ended recently?**

1 A. For the Laclede operating unit,
2 that's correct.

3 **Q. So does that mean Laclede has**
4 **replaced or used cathodic protection on all**
5 **unprotected steel mains?**

6 A. I think we use cathodic protection on
7 all steel mains whether they're coated or not.

8 **Q. So that answer is yes, then, you've**
9 **either replaced them or there's some type of**
10 **cathodic protection on them?**

11 A. Bare steel we've replaced. Coated
12 steel is still in the ground and it's cathodically
13 protected.

14 **Q. So that would leave your cast iron**
15 **replacement program as the only remaining**
16 **replacement program under the safety rules; is that**
17 **correct?**

18 A. For the Laclede operating unit,
19 correct.

20 **Q. Can you point to me anywhere in**
21 **Section 15 or anywhere else in the Commission's gas**
22 **safety rules that require a plastic safety program?**

23 A. I would probably go back to the safe
24 and adequate service section, because technically
25 that's not in the gas safety section. So without

1 having a complete set here, I'm not sure I can.
2 There may or may not be some. I just don't know
3 without them being here.

4 Q. Can you point me to any Commission
5 order that specifically requires Laclede to replace
6 plastic or polyethylene mains or service lines?

7 A. Not that I am personally aware of,
8 no.

9 Q. So the last letter you've cited to in
10 your legend that requires these plastic
11 replacements is the letter K; is that correct?

12 A. That's correct.

13 Q. And this refers to Section 17 of the
14 Commission's gas safety rules, and if you'll turn
15 the page, you'll see I've added that as well. And
16 that section is titled gas distribution pipeline
17 integrity management; is that correct?

18 A. That's what it's entitled, yes.

19 Q. Is it Laclede's position that this
20 rule mandates replacement of plastic mains and
21 service lines that were recently installed?

22 A. Ask that question one more time,
23 please.

24 Q. Is it Laclede's position that this
25 rule mandates the replacement of plastic mains and

1 **service lines that were installed recently?**

2 A. I'm not sure where the term recently
3 is defined in there, but I would again probably,
4 once again, defer to Mr. Lauber. He would be a
5 better person to ask the question.

6 Q. **Would you agree that these four laws,**
7 **one statute and three rules are the extent of which**
8 **your petition has stated is why -- is what requires**
9 **you to replace plastic mains and service lines; is**
10 **that correct?**

11 A. No. I think we also quote A, B, C,
12 D, E and K, and also have F in there.

13 Q. **For the plastic replacement?**

14 A. I'm not sure that we have anything
15 just strictly designated as plastic replacements in
16 here, sir.

17 Q. **Would you agree that the petition**
18 **will speak for itself as to what you've designated?**

19 A. I would assume that the description
20 of the work order header sheets describe what's
21 being replaced, yes.

22 Q. **I'm saying your citation to what**
23 **authority requires those replacements are contained**
24 **within the petition?**

25 A. That's correct.

1 Q. Okay. So we've just addressed
2 whether the plastic replacements are made to comply
3 with the state and federal safety requirement. To
4 be eligible would you agree that replacements must
5 also be a pipe that is worn out or in deteriorated
6 condition?

7 A. Yes.

8 Q. Do you deny that the work orders
9 you've included in these petitions include the
10 replacements of plastic mains and plastic service
11 lines that are not worn out or in deteriorated
12 condition?

13 A. I would say that we include segments
14 of pipe that is in worn out or deteriorated
15 condition, yes.

16 Q. That are not in worn out or
17 deteriorated condition?

18 A. That are.

19 Q. Do you also include segments --
20 replacing segments that are not worn out and
21 deteriorated?

22 A. And this gets back to the question of
23 how you define a segment.

24 Q. Okay. Let's define it. For purposes
25 of my question, a segment is a continuous portion

1 of pipe between two joints, no breaks in the pipe.
2 It's one continuous pipe with a joint connected to
3 another segment of pipe. Would you accept that for
4 purposes of these questions?

5 A. For your hypothetical, yes.

6 Q. So considering that, would you -- do
7 you deny that the work orders you've included in
8 these petitions include the replacement of plastic
9 main and plastic service line segments that are not
10 worn out or deteriorated conditions?

11 A. Under your hypothetical, yes.

12 Q. Do you deny that you replace plastic
13 mains and service lines that have been installed
14 recently with newer plastic mains and service
15 lines?

16 A. There are some recent mains that have
17 been retired, yes.

18 Q. Would you agree that in some
19 instances a new plastic main or service line is
20 going near and parallel to the plastic main that's
21 already in the ground?

22 A. With the caveat being some instances,
23 I could accept that. I would assume that would
24 actually be the majority of time, but I don't know
25 for certain. Again, Mr. Lauber would be much

1 better on the engineering issues.

2 Q. Would you agree with me that the
3 existing plastic mains and service lines being
4 replaced were installed in the 1970s, 1980s, 1990s
5 and 2000s?

6 A. I -- there may be even 2010s in
7 there, and it could be before '70s.

8 Q. That's my next question. Would you
9 agree that some of the plastic being replaced was
10 originally installed since 2010?

11 A. Yes.

12 Q. Some of it since 2014?

13 A. I'm not sure that I've looked that
14 closely, but I would -- once again, within your
15 assumption, I'll say yes.

16 Q. Have you provided any evidence to
17 suggest that any of the replaced plastic mains or
18 service lines were worn out or in deteriorated
19 condition?

20 A. For those discrete pieces that were
21 replaced, no.

22 Q. According to Laclede's depreciation
23 rates, plastic and copper service lines fully
24 depreciate in 44 years on average; is that right?

25 A. On average, yes.

1 Q. That means some will last longer and
2 some will last shorter; is that correct?

3 A. Much like cast iron, correct.

4 Q. So anything installed after 1972
5 would have been in the ground less than 44 years;
6 is that correct?

7 A. Simple math, yes.

8 Q. I'd like to move on to your rebuttal
9 testimony. Do you have that?

10 A. I do.

11 Q. And your replacement page makes it
12 easier because that's what I'm going to refer to.
13 Do you have that? Was that marked as an exhibit?

14 JUDGE DIPPELL: It was included in
15 the exhibit as a substituted page.

16 MR. POSTON: So which exhibit is
17 that, do you know, Judge?

18 JUDGE DIPPELL: Laclede Exhibit 2.

19 THE WITNESS: Mr. Poston, are you
20 done with OPC No. 2?

21 MR. POSTON: Yes.

22 THE WITNESS: Thank you.

23 BY MR. POSTON:

24 Q. Now, in your rebuttal testimony you
25 refer to Work Order 900547 on page 10 within your

1 testimony; is that correct? You use that one as an
2 example?

3 A. On line 14, correct.

4 Q. I'd like to use that same example for
5 the next series of questions. So going back to
6 GWB-1, here you show a summary of work orders
7 identified in Mr. Hyneman's testimony; is that
8 correct?

9 A. Correct.

10 Q. And you base your footage amounts on
11 what was actually installed and retired, which is
12 likely different from the total shown in the work
13 order authorization sheet, correct?

14 A. Correct.

15 Q. And why are they different?

16 A. It could be a number of things. The
17 first thing would be that the work order
18 authorization sheets are based on estimates. So
19 they're done by, for example, an engineer,
20 compliance engineer in our construction engineering
21 department who may or may not have gone out to the
22 field, because he goes out there to see if there --
23 where you could put the pipe, for example, if you
24 could put it in the causeway, we'd either have to
25 sit there and trench out the street, et cetera.

1 But it's also a matter of determining
2 how closely accurate the -- they are when they sit
3 there and do the work, because it may be a more
4 efficient way to do it in the field than what they
5 did when they planned it out.

6 **Q. For the most part are those work**
7 **authorization sheets accurate to what work is**
8 **actually done?**

9 A. That's a good question. I'm hesitant
10 to say yes, because I'm sure that there are times
11 when it varies. But I would think that generally,
12 yes, these are indicative of the type of work
13 planned to be done on that job.

14 **Q. And looking at the top of your table**
15 **that's titled mains --**

16 A. Yes.

17 **Q. -- you have -- you show footage**
18 **installed, cast iron retirements and other**
19 **retirements. Does this other category include**
20 **retirement of plastic mains?**

21 A. It's not listed on the work order
22 authorization sheet.

23 **Q. What do you think it includes?**

24 A. I would have to go back to the -- I
25 guess the retirement records to be sure exactly

1 what it includes.

2 Q. Well, if it's not cast iron, wouldn't
3 you -- it would have to be either plastic or steel,
4 correct?

5 A. And for the most part, steel has been
6 retired, but there may have been -- not looking at
7 the record, I don't have it in front of me, I
8 assume that there's no steel. I think -- amongst
9 all these nine work orders, I think there was about
10 100 feet of steel that was retired.

11 Q. So what other type do you have if
12 it's not steel and it's not cast iron?

13 A. That's what I'm saying. So I'm just
14 saying other retirement is probably -- it's
15 probably plastic.

16 Q. Okay.

17 A. But there may be a little bit of
18 steel there. I just don't know for sure without
19 looking at the records.

20 Q. Do you recall a number of data
21 requests I sent you where, in regard to a number of
22 work orders, I asked for a specific footage of each
23 retired segment of main and service line, the
24 vintage or year that segment was installed, and to
25 identify whether the replaced segment was iron,

1 **steel, plastic or copper?**

2 A. I don't have a copy of the data
3 request with me. Do you by chance?

4 **Q. I do.**

5 MR. POSTON: May I approach?

6 JUDGE DIPPELL: Yes.

7 THE WITNESS: Thank you.

8 BY MR. POSTON:

9 **Q. Would you agree what I've provided**
10 **you was Laclede's answers to the data request; is**
11 **that right?**

12 A. This was like numbers 1 through 31, I
13 think it was.

14 **Q. It's on there. And if you see Data**
15 **Request No. 10 on there, that's where I asked you**
16 **about the work order that you reference in your**
17 **testimony, 900547; is that correct?**

18 A. Looks like we hit a page break on
19 that one. Okay. Ask the question again, please.

20 **Q. Data Request No. 10, that's where I**
21 **asked you about Work Order 900547?**

22 A. Yes.

23 MR. POSTON: I'd like to have another
24 exhibit marked.

25 JUDGE DIPPELL: That will be OPC

1 Exhibit 3.

2 (OPC EXHIBIT 3 WAS MARKED FOR
3 IDENTIFICATION BY THE REPORTER.)

4 BY MR. POSTON:

5 Q. Do you agree with me what's been
6 marked as OPC Exhibit No. 3 includes the actual
7 retirements from Work Order 900547 by vintage,
8 footage and type?

9 A. It appears to be, yes. That's
10 correct.

11 Q. And so looking at the first page,
12 would you agree that by far the majority of the
13 service lines you replaced were plastic, they were
14 not worn out or in a deteriorated condition?

15 A. Doing eyeball, I would agree with
16 that on an eyeball basis. Don't make me use a
17 calculator, please.

18 Q. And if you turn to the second page,
19 you'll see at the bottom of that page it shows the
20 vintage and footage of the replaced plastic mains,
21 correct?

22 A. That's correct.

23 Q. And these replaced mains were
24 initially installed between 1997 and 2011; is that
25 correct?

1 A. That's correct.

2 **Q. Would you agree with me that these**
3 **mains were not worn out or in deteriorated**
4 **condition?**

5 A. I personally didn't look at any of
6 them, but I would assume based on their vintage
7 that, in and of themselves, the plastic main was
8 probably not worn out or in deteriorated condition.

9 MR. THOMPSON: I'm going to object to
10 that, Judge. I think the witness is speculating at
11 this point.

12 MR. POSTON: He already answered.

13 JUDGE DIPPELL: I'm going to allow
14 his answer to stand.

15 BY MR. POSTON:

16 **Q. These mains are still in the ground,**
17 **are they not?**

18 A. They're not in service, if that's
19 what you're asking.

20 **Q. I believe you make the point in your**
21 **testimony that in some instances, including this**
22 **one, you're retiring more plant than you're**
23 **installing; is that correct?**

24 A. Give me one moment. That's correct.

25 **Q. Can you point me to anywhere in the**

1 ISRS statutes where there's this rule that says
2 replacement of pipe that's not worn out or
3 deteriorated is eligible so long as the retirements
4 exceed the installations?

5 MR. ZUCKER: To the extent he's
6 calling for a legal conclusion, I object.

7 JUDGE DIPPELL: I'll let him answer
8 if he knows. Mr. Zucker, could you please use your
9 microphone?

10 MR. ZUCKER: Yes.

11 THE WITNESS: Ask the question again,
12 please.

13 BY MR. POSTON:

14 Q. Can you point me to where in the ISRS
15 statutes or rules it says replacements of pipe
16 that's not worn out or deteriorated is eligible so
17 long as the retirements exceed the installations?

18 A. I'm not aware of any place, no.

19 Q. An old cast iron pipe and plastic
20 pipe that's retired is still in Laclede's rate
21 base, correct?

22 A. Ask the question again, please. I
23 think the answer is no, but ask me again, please.

24 Q. The old cast iron pipe that's retired
25 is still in Laclede's rate base?

1 A. No, that's not correct.

2 Q. Can you explain that?

3 A. It may -- well, I can sit there and
4 direct you to GWB Schedule 2. But essentially when
5 you do a retirement, you're taking the gross
6 property out of plant in service. You're also
7 taking the gross value of the property out of your
8 depreciation reserve. So it comes out of plant in
9 service and depreciation reserve. So it's not in
10 service anywhere. It's not on your books.

11 Q. But your general rates don't change;
12 is that correct?

13 A. You asked me a different question.

14 Q. I asked you if it's still in your
15 rate base that you're recovering through rates.

16 A. And the answer would be, no, it's
17 not.

18 Q. But your rates haven't changed,
19 correct?

20 A. My depreciation rate has changed.

21 Q. But the rates that are being charged
22 to customers have not changed?

23 A. I'm not sure I'm following.

24 Q. When you put in a new pipe, both the
25 old pipe and the new pipe are earning a rate of

1 **return; is that correct?**

2 A. It depends on the age of the pipe as
3 compared so what the depreciation rate is.

4 **Q. So in some instances would that be**
5 **true?**

6 A. In some instances it's actually a
7 credit for customers.

8 **Q. I said, in some instances would that**
9 **be true?**

10 A. Yes, that and the converse.

11 **Q. And in your testimony you're asked**
12 **the question, does early retirement of plastic**
13 **mains cause the ISRS request to increase, and you**
14 **say, no, retirements reduce the ISRS. Would you**
15 **agree that the additions cause the ISRS to**
16 **increase?**

17 A. That's correct.

18 MR. POSTON: I have no more
19 questions, but I would ask that Mr. Buck not be
20 excused until after Mr. Lauber has testified in
21 case some questions he may defer to Mr. Buck.

22 JUDGE DIPPELL: And were you going to
23 offer OPC Exhibit No. 3?

24 MR. POSTON: Yes. Thank you, Judge.
25 I would like to offer that.

1 JUDGE DIPPELL: Would there be any
2 objection to OPC Exhibit No. 3?

3 (No response.)

4 JUDGE DIPPELL: Seeing none, then, I
5 will admit that into the record.

6 (OPC EXHIBIT 3 WAS RECEIVED INTO
7 EVIDENCE.)

8 MR. POSTON: Did I offer Exhibit 2?

9 JUDGE DIPPELL: Yes.

10 THE WITNESS: Mr. Poston, would you
11 like this back?

12 MR. POSTON: Yes.

13 JUDGE DIPPELL: Can I ask the
14 commissioners, will you have substantial questions
15 for this witness? We're really close to needing a
16 break for the court reporter.

17 CHAIRMAN HALL: I have a few.

18 JUDGE DIPPELL: Okay. Then let's go
19 ahead and take Commissioner questions before we go
20 to a break. So, Chairman Hall, did you have
21 questions?

22 CHAIRMAN HALL: Just a few.

23 QUESTIONS BY CHAIRMAN HALL:

24 Q. Good morning.

25 A. Good morning.

1 **Q. What is the total amount of old**
2 **plastic that was replaced?**

3 A. If you're talking about on all the
4 ISRS projects, I don't think anybody's done that
5 calculation at this point.

6 **Q. How easy would it be to perform that**
7 **calculation?**

8 A. It obviously can be done. It would
9 be a very painstaking process, especially when you
10 consider the fact that, for example, in an ISRS, in
11 the current ISRS, we may have 200 work orders and
12 80 of them may be for work that was actually in
13 prior periods and you're having negative amounts
14 coming through on the work order balance itself
15 that actually reduces your ISRS.

16 So I'm not sure exactly how you
17 allocate those out. And probably the bigger issue
18 is I'm not sure how you allocate the cost of a
19 project between the various types of main that's
20 going in, going out.

21 **Q. Yeah. I don't know how you calculate**
22 **it either. I'll be interested to hear how, because**
23 **my understanding of OPC's position, it would**
24 **require us to perform that calculation. So I'll be**
25 **interested in OPC's witnesses as to how they think**

1 **we could perform it.**

2 A. I guess that's personally where we're
3 struggling, sir, is that if you've taken out more
4 main than you put in the ground, I'm not sure how
5 you sit there and allocate the pipe that you're
6 putting in the ground between main -- cast iron
7 main that came out that was more than the amount
8 of plastic that you put in and some other plastic
9 that came out incidentally.

10 So if we turn to -- if I might go
11 back to the Revised Schedule GWB-1, staying with my
12 Work Order 900547, you'll see that we installed
13 footage of 6,306 feet.

14 **Q. I'm sorry. Where are you on here?**

15 A. Okay. The very top one, the mains.

16 **Q. Okay.**

17 A. So the very first line for Work
18 Order 900547, you'll see in the first column the
19 footage installed, so the plastic main put in was
20 approximately 6,306 feet. What was actually
21 removed from the ground -- or not removed from the
22 ground but abandoned in place, because we don't
23 normally take plastic or cast iron out of the
24 ground, was approximately 6,896 feet of cast iron
25 main and 2,125 feet, which I think 20 feet of that

1 was steel, but the other portion of it was largely
2 cop-- or plastic.

3 I don't know how you allocate the
4 cost of putting 6,300 feet of main in the ground,
5 how you take it out when you've got more main that
6 you removed from service than what you put in in
7 the first place. I'm not sure if there is any
8 logical way to do that calculation.

9 **Q. I don't know either. Would you**
10 **explain for me how the retirement of plastic**
11 **patches figures in to the calculation of the ISRS**
12 **in your application?**

13 A. Sure. Actually, this actually came
14 up when we -- the ISRS rule was first passed in
15 2004. This was a question about what do you do
16 with the retirement value of the property that
17 comes out of the ground. The concern was something
18 that they kind of referred to earlier -- or the OPC
19 counsel referred to double recovering.

20 Reality is is that when you sit
21 there -- and let's say you put 1,000 feet of main
22 in and you take 500 feet out. You're putting the
23 cost of the new main in, so we get a return on the
24 cost of the main plus depreciation expense on that
25 main.

1 So let's say it was \$1,000 and your
2 depreciation rate was 2 percent. You would sit
3 there and have a \$20 depreciation expense. You
4 would look at the 500 feet of main that came out,
5 and let's say that's also at a 2 percent rate and
6 that was worth \$500. You would take \$10 out of
7 depreciation expense on the other side. So now the
8 effect of depreciation expense is \$20 up for the
9 new main but then \$10 down for the old main on the
10 depreciation expense.

11 **Q. So you would net that out in the new**
12 **ISRS?**

13 A. Yes, absolutely.

14 **Q. And where -- where in the application**
15 **itself is that -- or is it set forth in the**
16 **application?**

17 A. It is. Unfortunately, it's a really
18 long document, but I will try and get you to the
19 right spot. If you go to Appendix B, page 3 of 11,
20 which is probably about six or seven pages from the
21 very back.

22 **Q. Which appendix? I'm sorry.**

23 A. This would be the application,
24 Laclede Exhibit No. 4.

25 **Q. Appendix C?**

1 A. Appendix B. Page 3 of 11. Looks
2 like you may be at A.

3 **Q. I'm in Appendix B.**

4 A. Oh, that may be MGE's. I apologize.

5 **Q. Okay. That's fine.**

6 A. The only one I have is Laclede's with
7 me.

8 **Q. That's fine. I assume it's similar,**
9 **and I don't have that appendix with me. Do you?**

10 A. Can I offer this to you?

11 JUDGE DIPPELL: Sure.

12 THE WITNESS: Okay. That's our
13 application for the Laclede operating unit, and as
14 part of the application, we file Appendix A, which
15 shows all the additions, retirements, et cetera.
16 And then we have Appendix B, which actually does
17 the ISRS calculations. So if you actually look to
18 the page before, that page 3 of 11 shows what our
19 original filing was for the total ISRS revenue
20 requirement. But Appendix B, page 3 of 11 shows
21 the depreciation expense on the additions, in this
22 case \$1,320,163.

23 And you'll see next to it the
24 retirement annual depreciation, which was negative
25 \$221,919. Net increase in depreciation expense is

1 a million ninety-eight. So, in fact, in essence
2 we're giving customers credit for the depreciation
3 expense on the retired property.

4 CHAIRMAN HALL: I have no further
5 questions. Thank you.

6 JUDGE DIPPELL: Thank you. I don't
7 believe there are any other Commissioner questions,
8 and I don't have any questions. I'm going to go
9 ahead and take just a short -- well, let me ask:
10 Are there going to be any recross questions?

11 MR. THOMPSON: None from Staff.

12 MR. POSTON: I have a few.

13 JUDGE DIPPELL: All right. Let's go
14 ahead and take a quick ten-minute break. My clock
15 shows 10:43. The clock in the hearing room was
16 dead this morning, so come back in ten minutes.

17 (A BREAK WAS TAKEN.)

18 JUDGE DIPPELL: We're back after a
19 brief break, and thank you for the clock
20 miraculously returning in our absence. Okay. So
21 we are ready then. There was no recross from
22 Staff.

23 Public Counsel?

24 MR. POSTON: Yes, thank you.

25 RE-CROSS-EXAMINATION BY MR. POSTON:

1 Q. I'm going to -- I'm going to start
2 with the first questions that you got from the
3 Chairman. He asked you how easy would it be to do
4 a calculation to try to determine and remove the
5 plastic amount. Do you recall that?

6 A. Yes.

7 Q. Well, first he asked you how would
8 you identify the total amount of plastic, and would
9 you agree that OPC Exhibit No. 3 for Project 900547
10 or Work Order 900547, you were able to determine
11 that?

12 A. For that work order, yes.

13 Q. And you did it for other work orders
14 that we asked about, right?

15 A. I did, but there's a -- the concern I
16 had with this is there's a time issue related to
17 when a project is complete and sometimes actually
18 in service and when the actual trailing information
19 comes in. So that information I provided, for
20 example, in that work order is not always available
21 for all the work order in an ISRS. That's why a
22 lot of them are charged to -- originally to
23 account 10600, which is construction not yet
24 classified. On those ones that would not
25 necessarily be available.

1 Q. Okay. Do you think there's some work
2 around that could -- we could figure out to try to
3 come up with a reasonable number?

4 A. You know what? I've never
5 contemplated it. I really haven't.

6 Q. And then he asked you how easy it
7 would be to calculate just a percentage -- I mean,
8 to determine an amount, and would you agree that
9 one way you could do it is you could determine what
10 the percentage of plastic pipe that's in the entire
11 petition or you could even do it by work order,
12 percentage by work order, and then just apply that
13 percentage to the total work order cost?

14 A. I don't really think that would be
15 accurate, and the reason why is because I'm not
16 sure that you can -- how do you take -- I'm not
17 sure how you take 8,000 feet coming out of the
18 ground, comparing it to 6,000 feet that was put in
19 the ground, and come up with some ratio that says
20 this amount is related to X, this amount is related
21 to Y. It's not logical.

22 Q. Well, absent some other way to find
23 out exactly how much it costs, would that be one
24 way you could do it? Say Work Order 900547, if you
25 were to say 10 percent of the retirements were

1 plastic, then we just remove 10 percent of the work
2 order cost. That's one way that could be done?

3 A. I'm sure there are a lot of different
4 ways it could be done. I really haven't
5 contemplated how to do it.

6 Q. But that's one way the Commission
7 could do it?

8 A. I'd have to think through whether
9 that's logical or not.

10 Q. So you can't give a yes or no,
11 whether they could possibly do that?

12 A. I hadn't really considered it.

13 Q. Okay. I'm asking you to consider it.

14 A. Okay. Please describe the scenario
15 again.

16 Q. If 10 percent of Work Order 900547
17 included plastic retirement and 90 percent included
18 other types of retirement, could you just say,
19 okay, 10 percent of that total work order was
20 plastic, and so we just remove 10 percent of the
21 total cost of that work order?

22 A. And I guess I don't think that's how
23 you could do that, because I don't think putting
24 the plastic in or out is necessarily part of an
25 average cost of putting stuff in or taking pipe out

1 or putting pipe into the ground. The -- doing
2 plastic may be an incremental cost versus the fixed
3 cost of actually setting the job up in the first
4 place. So I don't think that's a logical way to
5 look at it, no.

6 Q. But if you're trying to come up with
7 a simple way to do it that doesn't require you to
8 go back and determine how much it cost to replace
9 every foot of plastic, isn't that a possible way
10 you could do it, just do a general percentage, that
11 the Commission could do it?

12 A. It is a possible way. I wouldn't
13 agree with it, but --

14 Q. So would you prefer them to go
15 through and determine the cost to replace each
16 plastic foot?

17 A. I really hadn't considered it because
18 this really isn't our position at this point.

19 Q. Are you a certified public accountant
20 or CPA?

21 A. I am not.

22 Q. I'm going to ask you some accounting
23 questions anyway because they were asked of you
24 already.

25 A. If it will help you, I was in the

1 finance area and actually certified books for
2 25 years. So I think I'm probably an accountant by
3 trade, if nothing else.

4 Q. Can we hold one moment, please?

5 Thank you. I'm not a CPA either. So it's taking
6 me a while to understand.

7 A. Okay.

8 Q. So the question you were -- the
9 discussion you were having with the Chairman about
10 how you treat the retirements and -- isn't the
11 reduction in depreciation on the retirement --
12 retired plant in ISRS only because you're not
13 recovering the depreciation on books, not recording
14 the depreciation on books?

15 A. Ask the question again. I'm sorry.
16 I was getting the schedule out.

17 Q. I thought you would say that. Okay.
18 Isn't the reduction in depreciation on the retired
19 plant in ISRS only because you're not recording the
20 depreciation on your books?

21 A. It's because we took it out of
22 service and depreciation expense is your gross
23 plant in service times the depreciation rate. So
24 it's a function of the plant in service and the
25 depreciation rate itself.

1 Q. Let me try the question one more
2 time.

3 A. Okay.

4 Q. Isn't the reduction in depreciation
5 on the retired plant in ISRS only because you're
6 not recording depreciation on your books?

7 A. It's because the plant isn't in
8 service anymore.

9 Q. Is the answer no or is it yes?

10 A. It's not a logical question. I think
11 the answer would be, is that your plant in service
12 is no longer there, so as you take that times the
13 depreciation rate, it has a reduction in your
14 depreciation expense. If you're getting to the
15 point so the depreciation expense isn't on your
16 books anymore, it's because the plant isn't in
17 service anymore.

18 Q. So does the company receive full
19 recovery for the short-lived assets?

20 A. I don't understand the question.

21 Q. Are depreciation expenses built into
22 revenue requirement?

23 A. Yes.

24 Q. What happens to the dollars collected
25 related to plant that is retired?

1 A. You don't recover retired plant
2 through anything other than the depreciation
3 expense originally. If you sit there and think of
4 a piece of property, let's say it's a piece of
5 property that's going to last ten years and it cost
6 \$1,000 and has a ten-year depreciation expense.
7 You're recovering the gross property amount, the
8 \$1,000 initial investment, \$100 a year through the
9 depreciation expenses, all else being equal. So
10 that's how you're getting the return of your
11 property at that point.

12 Then your return on your property is
13 the your net plant times your weighted average cost
14 of capital. So the retirement value really does
15 not have anything to do with recovering the gross
16 investment.

17 **Q. So when you retire plant early --**
18 **let's say you put in plastic pipe. Even though you**
19 **retire it, you still get to recover the full amount**
20 **of that initial investment?**

21 A. You're now actually getting into what
22 a depreciation calculation would do. I can go into
23 as much detail as I can about this, but essentially
24 depreciation is a self-reconciling methodology,
25 whereas once you've taken -- if you retire

1 something early, you stop recovering on that at
2 that point in time.

3 You continue the depreciation
4 expenses till your net rate case, because we have
5 open-ended depreciation. But as far as the
6 recovery of the property that was retired early,
7 you don't go back and recover it until you take a
8 final look at what your depreciation reserve was
9 versus what the theoretical reserve should be, and
10 then you do a theoretical reserve adjustment and
11 add to or subtract that from your depreciation
12 rates. That's how you would recover that cost.

13 Conversely, on a cast iron main,
14 which has an 80-year life, right now we have,
15 quote, over-recovered on that because most of our
16 property that we have is 100 years or older.
17 Eventually when you go back and do a depreciation
18 study, you're going to look at that and say, your
19 depreciation reserve should have been X and it's
20 actually much higher than that. So you'll actually
21 have a negative theoretical reserve adjustment that
22 will sit there and, all else being equal, reduce
23 your depreciation rate.

24 **Q. So when you're -- through accounting**
25 **mechanisms or whatever you call them, you're able**

1 to recognize the full value of that plant that was
2 retired?

3 A. Depreciation is supposed to be
4 self-reconciling, yes.

5 Q. And so when you retire plant that was
6 installed in 2010 with brand-new plant, you're
7 going to get to recover the full value of both of
8 those?

9 A. Anything that's under or retired
10 early or retired too late is all self-reconciling,
11 correct.

12 Q. So that gives the company incentive
13 to replace as much as possible, wouldn't you agree?

14 A. No. I completely disagree.

15 Q. I mean, there's a profit incentive,
16 wouldn't you agree, you get to earn a profit on
17 each foot of plant you put in?

18 A. Whether I retire it early or late,
19 I'm still getting a profit or -- on the value of
20 the property in the ground. I guess maybe I'm,
21 Marc -- or Mr. Poston, I'm not positive I'm
22 following your question again.

23 MR. POSTON: I'm good. Thank you.
24 That's all I have.

25 JUDGE DIPPELL: Thank you. Were

1 there any additional Commissioner questions at this
2 point? All right. Then, let's go ahead. Is there
3 redirect?

4 MR. ZUCKER: Yes, your Honor.

5 REDIRECT EXAMINATION BY MR. ZUCKER:

6 Q. Mr. Buck, do you know what the
7 purpose is of the cast iron replacement program?

8 A. To replace cast iron main, I assume.

9 Q. And does Laclede have a plastic main
10 replacement program?

11 A. Not that I'm aware, no.

12 Q. Would Laclede replace an entire line
13 of plastic main with plastic main that didn't have
14 any cast iron in it?

15 A. Not in my experience, no.

16 COMMISSIONER KENNEY: This is
17 Commissioner Kenney. Are we getting ready to
18 start?

19 JUDGE DIPPELL: I'm sorry,
20 Commissioner. We're already in progress here.
21 We're on redirect of Mr. Buck. Did you have any
22 additional questions?

23 COMMISSIONER KENNEY: No. I'm good.
24 I'll let you know if I do.

25 JUDGE DIPPELL: Okay. Thank you.

1 I'm sorry. Continue.

2 MR. ZUCKER: Thank you, your Honor.

3 BY MR. ZUCKER:

4 Q. Mr. Buck, in evidence in this case
5 are the nine work orders that we've been talking
6 about in Rebuttal Schedule GWB-1?

7 A. Yes.

8 Q. It would appear to me, doing quick
9 math, that the other retirement mains is less than
10 20 percent of the total. Does that look right to
11 you?

12 A. Correct.

13 Q. And why -- do you know why the
14 amounts are so low of plastic?

15 A. To some extent, I can defer to
16 Mr. Lauber on that, but it's also the case that
17 they will -- if you have a large project that's
18 strictly related to plastic, it will go on its own
19 schedule. In fact, we meet with the construction
20 engineering group fairly often to discuss projects
21 to see whether they would take plastic out as part
22 of a larger project. And there's kind of a rule of
23 thumb as far as how much plastic you would have as
24 taking out that's still within the ISRS-eligible
25 project on its own.

1 Q. Okay. So if it's mainly a project
2 that takes out plastic, you're saying it would not
3 be in the ISRS?

4 A. I would ask them to sit there and do
5 that on a separate work order. And again, I'm not
6 sure we would be doing that anyway.

7 Q. Are you familiar with the ISRS
8 statute?

9 A. I am.

10 Q. Does the ISRS statute require the
11 company to remove plant in a prudent manner?

12 A. Absolutely.

13 Q. Or -- and install plant in a prudent
14 manner?

15 A. Yes. In fact, actually --

16 MR. POSTON: Judge, I'm going to
17 object. He wasn't able to testify to the statute
18 when I was asking him questions.

19 JUDGE DIPPELL: Mr. Zucker, would you
20 repeat your question for me, please?

21 MR. ZUCKER: Yes. My question is, in
22 the ISRS statute, is Laclede required to perform
23 its ISRS work in a prudent manner?

24 MR. POSTON: Asking him to interpret
25 the statute.

1 JUDGE DIPPELL: I agree that sounds
2 like it's calling for a legal opinion about what
3 the statute says.

4 BY MR. ZUCKER:

5 Q. Could you read Section 10 of the
6 statute to us, Section 393.1015.10?

7 A. Sure. No. 10, nothing contained in
8 Section 393.1009 to 393.1015 shall be construed to
9 impair in any way the authority of the Commission
10 to review the reasonableness of the rates or
11 charges of a gas corporation, including review of
12 the prudence of eligible infrastructure system
13 replacements made by a gas corporation, pursuant to
14 the provisions of Section 386.390.

15 Q. Thank you. In your experience in
16 rate cases, what would happen if Laclede came in
17 for a rate case and had done ISRS work imprudently?

18 A. A party would propose to disallow
19 those costs, and I think actually under the ISRS
20 rules they could seek a refund of past ISRS
21 charges.

22 Q. Do you know how long Laclede has been
23 doing work where we replace, I guess, patches of
24 cast iron with plastic?

25 A. For quite a while. I know it

1 predates, I think, most of the questions we have.
2 I think Mr. Poston even showed things. Certainly
3 it was prior to the ISRS statute themselves getting
4 passed.

5 **Q. And so at the time the ISRS statute**
6 **was passed, the cast iron lines already had plastic**
7 **in and amongst it?**

8 A. Absolutely. In fact, that's one of
9 the work orders that we went through 500947 -- or
10 547 showed some plastic that was in place in 1997
11 through 2000, which is all prior to the ISRS
12 statute, which is 2003.

13 **Q. And so do you think that the ISRS**
14 **statute contemplated Laclede removing the cast iron**
15 **in a manner which left that old plastic in?**

16 MR. POSTON: Objection. He's asking
17 him to interpret the statute again.

18 JUDGE DIPPELL: There's been -- we've
19 been talking a lot about legal opinions here. I
20 will say that Mr. Buck testified as to what the
21 statute said and everything with regard to his
22 direct testimony. So I'm going to allow.

23 MR. POSTON: If I could respond.

24 JUDGE DIPPELL: No. I'm talking,
25 Mr. Poston. Thank you. I'm going to allow him to

1 answer as to what he knows, but he has testified
2 that he's not an attorney, so we could save the
3 legal arguments for the brief.

4 MR. ZUCKER: Understood, your Honor.

5 JUDGE DIPPELL: Thank you.

6 BY MR. ZUCKER:

7 Q. Okay. So do you think that it
8 would be prudent for us to remove the cast iron
9 without -- and use the old plastic instead of the
10 way we're doing it?

11 A. No, it would be economically
12 infeasible.

13 Q. Mr. Buck, you testified in response
14 to Chairman Hall's question that the depreciation
15 expense in Laclede Gas's ISRS case would have been
16 1.3 million without deductions for retirement, and
17 after those deductions it was 1.1 million?

18 A. That sounds approximately correct,
19 yes.

20 Q. So Laclede was not asking for
21 \$200,000 in ISRS costs because they were eliminated
22 by the retirements?

23 A. Correct.

24 Q. How much do cast iron retirements
25 tend to be as a percentage of the installation?

1 A. You mean as compared to the total
2 installation cost of the pipe that's being put in
3 the ground now?

4 **Q. Yes.**

5 A. It's substantially smaller, if you
6 think about it. Some of the cast iron is well over
7 100 years old. So if you talk about weight scales
8 back then and even the cost of materials, the cost
9 of cast iron is de minimus in comparison to the
10 cost of the pipe being put in the ground today.

11 **Q. How about the value of the**
12 **retirements of the plastic?**

13 A. Certainly higher than the cast iron.
14 General inflation, if you're talking something that
15 was put in the ground in 2012, was one of the
16 examples that was given, it would be substantially
17 close to what the cost of plastic would probably be
18 today, and it may be more because I think we've
19 become a little more efficient in how we put the
20 plastic in the ground.

21 **Q. You were asked by Mr. Poston if the**
22 **ISRS amounts that OPC was not objecting to was**
23 **basically a majority of the costs allowed, and you**
24 **said you did not know the answer. Do you recall**
25 **that?**

1 A. Yes.

2 **Q. Why didn't you know whether or not it**
3 **was -- it would be a majority?**

4 A. If I'm following your question, it's
5 because there hasn't been any quantification one
6 way or the other of what cost is which. And
7 getting back to Mr. Poston's question from just a
8 few moments ago, I'm not really sure how you'd go
9 about quantifying what that cost would be.

10 **Q. Do you have your Rebuttal**
11 **Schedule GWB-1?**

12 A. I do.

13 **Q. If Laclede were to say that it would**
14 **just count the footage installed up to the amount**
15 **of cast iron retirement and not involve plastic at**
16 **all in the ISRS calculation, would Laclede be able**
17 **to recover all of its -- if these nine work orders**
18 **were the entire case, would Laclede be able to**
19 **recover all of its installation costs?**

20 A. For these nine work orders, yes.

21 **Q. And that's because?**

22 A. The footage installed was
23 43,833 feet. The cast iron replacement or cast
24 iron retired was 44,598 or about 800 feet more than
25 what was put in the ground.

1 Q. Okay. And then if you didn't count
2 plastic at all, you wouldn't include the retirement
3 of the plastic in the ISRS, would you?

4 A. Correct.

5 Q. And so that offset of the ISRS
6 wouldn't occur?

7 A. Yeah. And I think it was -- I forgot
8 how much it would be but, yes, it would not have
9 included the depreciation expense on the retirement
10 value.

11 Q. You've testified that Laclede is
12 performing its cast iron main replacement program
13 in a prudent manner. Do you recall that?

14 A. Yes.

15 Q. Given the way Laclede is performing
16 its program, would there be any different amount of
17 new plastic put in if the line that was retired was
18 all cast iron? In other words, let me give you a
19 hypothetical. Let's say in one case the line is
20 85 percent cast iron and 15 percent plastic.

21 A. Okay.

22 Q. In another case exactly the
23 same-length line is 100 percent cast iron. Would
24 Laclede be doing anything different in its
25 replacement of those two lines?

1 A. No. We'd install the same amount of
2 main, if that's your question.

3 Q. Yes. That's my question.

4 A. Okay. I'm glad I clarified, then.

5 Q. One moment, please. Let me check my
6 notes a minute.

7 Mr. Poston asked you a couple of
8 questions of what information was or was not in the
9 statute. Is there anything in the statute, to your
10 knowledge, that says that every inch of removed or
11 replaced facilities has to be worn out or
12 deteriorated?

13 A. No.

14 Q. Is there anything in the statute that
15 requires Laclede to work around or not include any
16 segments of plastic?

17 MR. POSTON: Objection. It's asking
18 for a legal conclusion.

19 JUDGE DIPPELL: I'll sustain that.
20 The statute speaks for itself. Let's put the legal
21 arguments in the briefs, please.

22 MR. ZUCKER: Okay. I think that's
23 all I have. Thank you, your Honor.

24 JUDGE DIPPELL: Thank you.

25 THE WITNESS: Thank you.

1 JUDGE DIPPELL: And Mr. Poston
2 requested that you not be completely excused in
3 case some of those questions you deferred to
4 Mr. Lauber maybe comes back.

5 THE WITNESS: I'll be here.

6 JUDGE DIPPELL: Thank you. If you
7 could remain. All right then. Laclede's next
8 witness?

9 MR. ZUCKER: Laclede calls Mark D.
10 Lauber.

11 JUDGE DIPPELL: Could you raise your
12 right hand.

13 (Witness sworn.)

14 JUDGE DIPPELL: Thank you.

15 MARK D. LAUBER testified as follows:

16 DIRECT EXAMINATION BY MR. ZUCKER:

17 Q. Good morning, Mr. Lauber.

18 A. Good morning.

19 Q. Can you state and spell your name for
20 the record?

21 A. Yes. It's Mark Lauber, last name
22 L-a-u-b-e-r.

23 Q. And are you employed by Laclede Gas
24 Company?

25 A. Yes, I am.

1 Q. Are you the same Mark D. Lauber who
2 filed rebuttal testimony in this case on
3 December 23rd, 2016?

4 A. Yes.

5 Q. Do you have a copy of that testimony
6 with you?

7 A. Yes, I do.

8 Q. And that testimony has been marked
9 Laclede Exhibit No. 3. And you have it in front of
10 you?

11 A. Yes.

12 Q. Okay. If I asked you the same
13 questions posed in that testimony today, would your
14 answers be the same?

15 A. Yes.

16 Q. Do you have any changes to any part
17 of the testimony?

18 A. No, I don't.

19 MR. ZUCKER: I move for admittance
20 into evidence of Laclede Exhibit No. 3.

21 JUDGE DIPPELL: Are there any
22 objections to Laclede Exhibit No. 3?

23 (No response.)

24 JUDGE DIPPELL: Seeing none, then I
25 will admit Laclede Exhibit No. 3.

1 (LACLEDE EXHIBIT 3 WAS RECEIVED INTO
2 EVIDENCE.)

3 MR. ZUCKER: Thank you, Mr. Lauber.

4 THE WITNESS: You're welcome.

5 JUDGE DIPPELL: Is there
6 cross-examination by Staff?

7 MR. THOMPSON: No, thank you, Judge.

8 JUDGE DIPPELL: Public Counsel?

9 MR. POSTON: Yes, thank you.

10 CROSS-EXAMINATION BY MR. POSTON:

11 Q. Good morning, Mr. Lauber.

12 A. Good morning.

13 Q. I'll give you the same caveat I gave
14 Mr. Buck, that when I refer to Laclede, I'm
15 referring to Laclede Gas and MGE unless I designate
16 separately.

17 A. Understood.

18 Q. You're an engineer; is that correct?

19 A. That's correct.

20 Q. Are you a licensed professional
21 engineer or PE?

22 A. No, I'm not.

23 JUDGE DIPPELL: Mr. Lauber, could I
24 get you to be sure to speak into the microphone?
25 It's difficult. Mr. Poston is so close there.

1 THE WITNESS: Okay.

2 BY MR. POSTON:

3 Q. And you've held several positions
4 with Laclede in the area of corrosion control; is
5 that right?

6 A. Among others, but that was a
7 responsibility of mine, yes.

8 Q. Would it be safe to say you're
9 familiar with Laclede's practices of detecting
10 corrosive pipe?

11 A. Yes.

12 Q. And hydrostatic testing involves
13 filling a segment of pipe with pressurized water,
14 and if it doesn't maintain the pressure, you know
15 the pipe has a leak; is that correct?

16 A. That's one of the things, yes, that
17 you identify.

18 Q. But the test makes no physical
19 changes to that pipe; is that correct?

20 A. You're actually applying a physical
21 stress to the pipe, but no, it doesn't result in a
22 physical change after you walk away from it. No.

23 Q. The test tells you the main or the
24 pipe is still operating safely as expected or not,
25 correct?

1 A. Yeah, unless you have a failure, and
2 then you're going out and making a repair or
3 replacement, rehabilitation of that pipe.

4 Q. I'd like to hand you an exhibit. I'm
5 not going to have it marked. It's just a copy of
6 393.1009 just to refer to. I'm not going to ask
7 him to interpret it. Commissioner and the Judge
8 want copies of this?

9 JUDGE DIPPELL: Yes.

10 BY MR. POSTON:

11 Q. I'd like to ask you a few questions
12 about 393.095B.

13 A. All right.

14 Q. And you quote from this subsection in
15 your testimony supporting the eligibility of
16 hydrostatic testing; is that correct?

17 A. That's correct.

18 Q. And so if we look at B, it starts by
19 identifying three types of projects. Do you see
20 that?

21 A. Yes. It gives examples, yes.

22 Q. And it says it must be one of these
23 three or other similar projects, correct?

24 A. That's not my engineering
25 interpretation of that, no.

1 Q. Let me read that language. It says,
2 main relining projects -- well, let me back up.

3 Gas utility plant project -- I'm up
4 on 5 -- may consist only of the following: Main
5 relining projects, service line insertion projects,
6 joint encapsulation projects and other similar
7 projects. Would you agree that that's an accurate
8 reading of that statute, at least that portion?

9 A. Yes.

10 Q. So the first, main relining projects,
11 this refers to relining the interior of a pipe,
12 correct?

13 A. Yes.

14 Q. Would you agree this involves more
15 than just testing the line?

16 A. It may involve a number of different
17 things, cleaning, similar to what you do with hydro
18 testing.

19 Q. My question was, would you agree this
20 involves more than just testing?

21 A. Yes.

22 Q. So the second, service line insertion
23 projects, this refers to inserting a new line into
24 an old line; is that correct?

25 A. Yes.

1 Q. Would you agree this involves more
2 than just testing the line?

3 A. Yes.

4 Q. And the last project reference is a
5 joint encapsulation project. And joint is where
6 two segments of pipe are joined; is that correct?

7 A. Yes.

8 Q. How does Laclede encapsulate a joint?

9 A. Well, there's several different
10 practices we use, but one of which is actually
11 putting a clamp on a joint. That would be cast
12 iron typically. Another one would be actually, I
13 guess, putting a sealant around the joint, some
14 sort of mold or something like that.

15 Q. Would you agree this refers to more
16 than just testing the joint?

17 A. Yes.

18 Q. Does joint encapsulation extend the
19 useful life of a main?

20 A. Yes.

21 Q. You're familiar with the process of
22 cathodic protection of steel pipe; is that correct?

23 A. That's correct.

24 Q. Would you agree that a very simple
25 way to explain cathodic protection is that it

1 involves attaching anodes to a section of steel
2 pipe to change the flow of electrons, which slows
3 down the corrosion of the pipe?

4 A. That would be one very crude way of
5 describing that, yes.

6 Q. I'm an attorney, so put that out
7 there. Would you agree that slowing down the rate
8 of corrosion extends the useful life of the pipe?

9 A. Yes.

10 Q. Your testimony says hydrostatic
11 testing is performed on transmission lines, which
12 are the larger diameter steel lines; is that
13 correct?

14 A. Yes.

15 Q. How does Laclede test cast iron
16 distribution mains to determine whether a
17 particular segment is worn out or deteriorated?

18 A. We do a number of different things
19 that's primarily focused on reviewing the leakage
20 history of the pipe.

21 Q. Do you do any type of ultrasonic
22 testing?

23 A. No.

24 Q. So there's no actual test being
25 performed on the mains themselves; it's just

1 **through leakage reports?**

2 A. Well, we find a leakage quite often
3 through leakage surveys, which you could consider
4 as a test. But to the extent that we're looking at
5 reports, that's accurate.

6 **Q. So how do you do a leakage survey?**

7 A. We go over the pipeline with leak
8 detection instrumentation on a periodic basis.

9 **Q. So is it your position that the cost**
10 **for that type of leak survey is eligible for ISRS**
11 **recovery?**

12 A. No, it's not.

13 **Q. So how does Laclede test steel**
14 **service lines to determine whether a particular**
15 **segment of service line is worn out or**
16 **deteriorated? Is it the same way, through the leak**
17 **surveys?**

18 A. Overall, we do much the same thing,
19 yes. And then we also use our cathodic protection
20 monitoring program to identify issues with the
21 steel services. And again, we look at overall
22 leakage rate.

23 **Q. And each time Laclede were to test**
24 **the service line, is it your position the test is**
25 **eligible for ISRS?**

1 A. No.

2 Q. If a customer calls and says they
3 smell gas and a Laclede service technician comes to
4 the home and tests around the meter, the service
5 line for leaks, discovers no leaks, does that
6 extend the use of the life of the meter service
7 line?

8 A. To my knowledge, no.

9 Q. Is it Laclede's position that the
10 costs of that leak test are eligible for ISRS?

11 A. It's my understanding, no.

12 Q. I'd like to change subjects and ask
13 you questions about the other issue before the
14 Commission, whether replacing plastic mains and
15 service lines that were not deteriorated are
16 eligible. And I want to be sure that you
17 understand our position because I was confused by
18 your testimony.

19 Is it your understanding that for the
20 work orders that replace both cast iron mains that
21 are old and plastic mains that are not old, that
22 OPC's position is the cost of replacing the cast
23 iron is eligible but the cost of replacing the
24 plastic is not eligible?

25 A. That's my understanding of your

1 position, yes.

2 Q. So OPC's not contesting the cost of
3 replacing the specific segments of old pipe that
4 are made of cast iron and steel, correct?

5 A. That's my understanding, yes.

6 Q. And the majority of the replacements
7 in these ISRS petitions are for cast iron and bare
8 steel pipe; is that correct?

9 A. Yes. That's my understanding.

10 Q. So OPC is not challenging the
11 majority of the replacements that you've included
12 in your petition, then, correct?

13 A. Correct.

14 Q. At some point a few years back, I
15 believe Mr. Buck referred to 2011, Laclede made a
16 strategic decision to replace more than just the
17 segment that was worn out or deteriorated; is that
18 correct?

19 A. Yeah. We determined that the cast
20 iron was part of a larger system --

21 Q. I'm sorry.

22 A. -- of our facilities, and that's why
23 we decided to replace the entire system.

24 Q. Can you cite to any new safety laws
25 that required this change in strategy?

1 MR. ZUCKER: Is he asking for a legal
2 conclusion again?

3 JUDGE DIPPELL: He just asked him if
4 he could cite to such a thing. If he cannot -- he
5 can or cannot.

6 THE WITNESS: Are you asking me about
7 laws or regulations or both?

8 BY MR. POSTON:

9 **Q. Any new safety requirement. It could**
10 **be a state or federal safety requirement that**
11 **required this change in strategy.**

12 A. It's my understanding -- or it's my
13 opinion, yes, there was.

14 **Q. And what was that?**

15 A. The distribution integrity management
16 regulations that came out in the mid-2000s required
17 all operators to do risk and threat analysis on
18 their distribution systems, and Laclede and MGE
19 performed those analysis and determined that cast
20 iron, in general, those systems were relatively
21 higher threat than the rest of the system. And so
22 we placed a greater emphasis on replacing those
23 systems.

24 **Q. Okay. So it's your -- then it's your**
25 **understanding that those safety laws mandated you**

1 to replace plastic pipe?

2 A. Yes.

3 Q. Can you quote -- cite to what
4 regulations you're referring to?

5 A. In the state regulations, I believe
6 it's Section 16 under 4 CSR 40.030.

7 Q. So Section 16, would you agree that's
8 titled pipeline integrity management for
9 transmission lines?

10 A. I believe that's Section 17.

11 MR. POSTON: Can I approach?

12 THE WITNESS: I may have my section
13 numbers a little bit off. I apologize.

14 I'm sorry. Right. So 17. Yeah. So
15 Section 17 refers to the distribution integrity
16 management requirements in the state regulation.
17 Thank you for pointing that out.

18 BY MR. POSTON:

19 Q. Sure. You also spent a few pages of
20 your testimony explaining why Laclede made the
21 decision to replace entire areas rather than just
22 the worn out or deteriorated portion. And you
23 discuss whether that -- you talk about whether that
24 decision was a prudent decision to make; is that
25 correct?

1 A. Yes, I spent some time talking about
2 that.

3 Q. But whether or not that decision was
4 prudent is not an issue before the Commission in
5 this case; is that correct?

6 A. No. That's correct.

7 Q. The question of whether the decision
8 to replace an entire, say, neighborhood rather than
9 just the worn out section of pipe is prudent,
10 that's a rate case issue, isn't it?

11 A. That's what I've been told, yes.

12 Q. So prudence of Laclede's strategy is
13 not an issue here?

14 A. Is that a question?

15 Q. Yes. Sorry.

16 A. Yeah. Correct.

17 Q. Doesn't that make your testimony
18 regarding prudence of Laclede's new strategy
19 entirely irrelevant?

20 MR. ZUCKER: I'm going to object to
21 that. Again, he's making a legal conclusion.
22 Legal relevance is not in Mr. Lauber's ken.

23 MR. POSTON: I'm just asking him
24 whether his prudence argument is relevant or not
25 for the issues before the Commission.

1 JUDGE DIPPELL: I'll allow him to
2 answer.

3 THE WITNESS: Okay. From an
4 engineering standpoint, I believe the prudence
5 argument is relevant because, in my opinion, the
6 statute was set forth to incentivize operators to
7 accelerate their replacements of aging
8 infrastructure and expand them. So what I believe
9 OPC's trying to do is take that and diminish that
10 incentive.

11 BY MR. POSTON:

12 Q. So is plastic 500-foot main installed
13 in 2011, is that an aging infrastructure?

14 A. If it's part of a cast iron system,
15 yes.

16 Q. That plastic segment, is that an
17 aging infrastructure?

18 A. If you cut out that piece of plastic
19 and hold it in your hands, no, that's not an aging
20 infrastructure. But when it's connected to the
21 cast iron system, it's part of the system and, yes,
22 it is.

23 Q. Isn't it accurate to say OPC is not
24 challenging whether Laclede should or shouldn't
25 follow this new strategy, all we're saying is you

1 need to limit what you put into ISRS by those
2 amounts that the ISRS statute's allowing?

3 MR. ZUCKER: I don't know why he's
4 asking him what OPC is saying.

5 JUDGE DIPPELL: Is that an objection,
6 Mr. Zucker?

7 MR. ZUCKER: Yes, I'm sorry.

8 JUDGE DIPPELL: Could you use your
9 microphone?

10 MR. POSTON: I'm not sure what the
11 objection is.

12 MR. ZUCKER: Apparently I can use it
13 sometimes.

14 JUDGE DIPPELL: Okay. Would you
15 restate what your objection is?

16 MR. ZUCKER: Yeah. The objection is
17 he's asking him to speculate as to what OPC's
18 position is.

19 MR. POSTON: I'm asking him to give
20 me his understanding of our position. It's not
21 speculation.

22 JUDGE DIPPELL: I'm going to overrule
23 the objection. Again, the direct -- or the
24 rebuttal testimony, the prefiled testimony of this
25 witness speculates about what OPC's position is

1 again and again. So I'll allow Mr. Poston to ask
2 him the question.

3 THE WITNESS: Could you repeat the
4 question?

5 BY MR. POSTON:

6 Q. Is it accurate to say that OPC is not
7 challenging at this time whether Laclede should or
8 should not follow its new replacement strategy?
9 Instead, our challenge is limited to just whether
10 the plastic segment replacement costs are eligible
11 for partial recovery through the ISRS?

12 A. I've read your position and that's my
13 understanding, yes.

14 MR. POSTON: That's all I have.
15 Thank you.

16 JUDGE DIPPELL: Thank you. Are there
17 Commission questions, Mr. Chairman?

18 QUESTIONS BY CHAIRMAN HALL:

19 Q. Hello.

20 A. Hello, sir.

21 Q. Could you pull up -- I believe it was
22 handed to you -- 393.1009?

23 A. Okay.

24 Q. And look at 5B, and Mr. Poston asked
25 you a couple of questions about main relining,

1 service line insertion and joint encapsulation
2 projects. I'm not going to duplicate those
3 questions, but I just want to make sure I
4 understand. Do all three of those types of
5 projects involve a physical improvement component?

6 A. Of the pipeline, yes. Yes.

7 Q. You're an engineer, correct?

8 A. That's correct.

9 Q. I assume -- without any engineering
10 background whatsoever, I assume that a pipeline
11 that is one continuous piece is safer than a
12 pipeline that has a couple of -- a couple of
13 connections?

14 A. In general, I would agree with you,
15 yes.

16 Q. So where -- where there's a patch,
17 there is an inherent vulnerability?

18 A. Yes.

19 Q. And so it would be safer to have one
20 continuous plastic pipeline than it would be to
21 have plastic connected to plastic connected to
22 plastic; is that correct?

23 A. Yes.

24 Q. Are --

25 COMMISSIONER KENNEY: Mr. Chairman,

1 can I interrupt here?

2 CHAIRMAN HALL: Is that an objection?

3 Certainly.

4 COMMISSIONER KENNEY: No. No. I
5 think you've been misled, because these pipes don't
6 come in -- when you put in an eight-inch pipeline,
7 they come in pieces, and they connect them. I
8 think there may be 20 to 30 foot pieces; isn't that
9 correct?

10 THE WITNESS: Yes.

11 COMMISSIONER KENNEY: So, Chairman,
12 when they -- when they put them in, they'll connect
13 them above ground. Makes it easier. It's a safer
14 process, versus leaving in the ground and then
15 trying to connect it there. I think that's the
16 process. But it has to be put together, and I'm
17 not sure the way they seal it, but that's the
18 process. I just wanted to clarify that.

19 JUDGE DIPPELL: Can I ask the witness
20 just to affirm or deny what the Commissioner was
21 saying? Is that your understanding?

22 THE WITNESS: Yeah. So any time you
23 make a connection to a pipe, you know, there's
24 always a risk of human error. We call those
25 construction defects. It's one of our threats that

1 we assess on our pipelines. So for plastic,
2 there's any number of different types of
3 connections between couplings or butt fusion,
4 electro fusion-type connections that we make. But
5 the more you have of them, certainly, you know, the
6 higher risk of construction defect you have.

7 CHAIRMAN HALL: So --

8 COMMISSIONER KENNEY: Excuse me.
9 Don't they come in joints of about 25 to 30 feet?

10 THE WITNESS: Sometimes they're as
11 long as -- they're on coils of 500 feet. That
12 would be our smaller sizes.

13 COMMISSIONER KENNEY: Eight inch?

14 THE WITNESS: Eight-inch pipe could
15 come in 40-foot lengths.

16 COMMISSIONER KENNEY: Yeah, they
17 aren't coils. That's your main lines, aren't they?

18 THE WITNESS: Actually, the majority
19 of the footage that we're talking about related to
20 this case replacing our cast iron system are two
21 inch.

22 COMMISSIONER KENNEY: Okay. Thank
23 you. You corrected me then. Thank you.

24 BY CHAIRMAN HALL:

25 Q. So bottom line, the more connections,

1 **the more vulnerability?**

2 A. Correct.

3 **Q. And if -- if Laclede were to take the**
4 **approach assumed in OPC's position that it would**
5 **connect plastic to existing plastic, that would**
6 **increase vulnerability?**

7 A. Absolutely. Absolutely. And not
8 only that, but the location of where we would have
9 to run that would increase vulnerability to
10 third-party damage going into the future because
11 you'd have these lines that would jump out into the
12 street and then back out to the sidewalk area.
13 Very difficult to locate and not a standard
14 parallel run to the street that you normally have.

15 **Q. Having said that, I assume that there**
16 **is some existing plastic that you continued to make**
17 **use of along these lines?**

18 A. Absolutely.

19 **Q. And what was the criteria that you**
20 **used to determine that you should continue using**
21 **existing plastic?**

22 A. Generally --

23 **Q. If that question makes sense.**

24 A. Yeah. Generally, the longer runs of
25 plastic or lengths, if it happens to be at or near

1 the curb that was easily accessible so we could get
2 to the service Ts, in some cases these are
3 connected to the higher pressure systems and made
4 it pretty readily reusable.

5 For the most part, it's our low
6 pressure system, but I would say in general the
7 location was conducive to reusing it and made it
8 more accessible, and also just the length of the
9 pipe.

10 Q. The longer the existing pipe, the
11 more likely you would be to try to connect to it as
12 opposed to replacing it?

13 A. To reuse it, yes.

14 Q. Is there a -- is that criteria set
15 forth in writing anywhere or is it just kind of a
16 rule of thumb?

17 A. It's more or less a rule of thumb.

18 Q. So it's length of the existing pipe,
19 the existing plastic and the location which affects
20 the ease of replacement?

21 A. Yeah. How it fits into the overall
22 design of the area, the neighborhood that you're
23 redesigning. That would be correct.

24 CHAIRMAN HALL: Okay. I have no
25 further questions. Thank you.

1 JUDGE DIPPELL: Thank you.
2 Commissioner Kenney, did you have additional
3 questions?

4 COMMISSIONER KENNEY: No. I
5 appreciate it, though. Thank you.

6 JUDGE DIPPELL: Commissioner Coleman?

7 COMMISSIONER COLEMAN: No, thank you.

8 JUDGE DIPPELL: I just have one
9 question, and this is just kind of a basic thing.
10 QUESTIONS BY JUDGE DIPPELL:

11 Q. But can you explain to me the
12 difference between the main line and the service
13 line? There's a distinction in the testimony, and
14 I just want to make sure I'm clear on that.

15 A. Yes. Absolutely. So the service
16 line runs from the main. It's an extension of the
17 main and an integral part of the system, but it
18 connects the main to the individual customers. So
19 it runs up to -- terminates at the outlet of the
20 meter set. So it connects to the meter.

21 Typically our low pressure systems
22 where our cast iron resides has the main or the
23 main out in the street and the service line runs up
24 and through a customer's basement. Most of the
25 houses, the buildings in St. Louis have basements.

1 And then the meter terminates or is sitting inside
2 of a basement.

3 That was done because low pressure
4 has a lot of moisture in the gas. It's just
5 inherent to the system, and if you had meters
6 sitting outside subject to cold weather, you'd have
7 a lot of condensation in the meters and constantly
8 be getting water in the meters. So we typically
9 try to put everything inside where we could.

10 So now when we replace the systems we
11 try to move those meters outside. But that -- that
12 service line is really an integral part. You can't
13 replace the main without replacing the service line
14 in most cases.

15 **Q. Now, when Mr. Zucker was giving his**
16 **opening, he was talking about how the main and**
17 **the -- how the old and the new don't exactly lay on**
18 **top of each other with regard to the main. But**
19 **what about with regard to the service line? How**
20 **are they --**

21 **A. Right. So if you can picture the**
22 **service termination is just like a fitting on top**
23 **of the old main, and now all of a sudden you have**
24 **replaced the main at a completely different**
25 **location. Now, you have to -- that service starts**

1 at a different point then, and it may be at a very
2 different depth as well.

3 So it becomes -- when you compound
4 that with, okay, we're going to terminate in a
5 different spot because the houses in St. Louis, you
6 know, there's all kinds of different issues with
7 where you can put a meter on the outside, that --
8 that service line might be in a completely
9 different side of the house now than where it was
10 in the basement, because you only have space on
11 maybe that one side of the house.

12 So now you have a different starting
13 point and different ending point for the service
14 line, and it just makes it infeasible in most cases
15 to use that old service line that was there, even
16 if it was plastic. So that's why you have to run a
17 new service line.

18 **Q. Now, what about -- so when it**
19 **actually comes to the customer's home, for**
20 **instance, what about their connection inside? Is**
21 **that -- I mean, now it's terminating at a different**
22 **place. Do they have to --**

23 **A.** Right. So Laclede works with the
24 customer. In most cases, you know, we'll help them
25 repipe to the existing fuel runs that they have

1 inside of their home from our new meter set
2 location.

3 JUDGE DIPPELL: Okay. Thank you. Is
4 there any further cross-examination from Staff?

5 MR. THOMPSON: No. Thank you, Judge.

6 JUDGE DIPPELL: Public Counsel?

7 MR. POSTON: Yes. Thank you.

8 RECROSS-EXAMINATION BY MR. POSTON:

9 Q. Are there safety rules to ensure that
10 joints are safe?

11 A. Yes.

12 Q. Is Laclede in compliance with those
13 joint safety rules?

14 A. Yes.

15 Q. Now, Laclede submits mechanical
16 fitting failure reports annually to the Commission,
17 don't they?

18 A. Yes.

19 Q. And what are those?

20 A. Those are reports of hazardous leaks
21 that resulted from a failure of the fitting.

22 Q. And do you have a part of those
23 reports? Do you contribute to those reports?

24 A. No, I don't. I used to.

25 Q. Do you recall I requested copies of

1 **those reports in this case?**

2 A. Yes. In the past week or so I
3 remember seeing that.

4 **Q. And were those provided to me?**

5 A. I don't know.

6 **Q. Can you explain what a tie-over is?**

7 A. Tie-over?

8 **Q. Yeah.**

9 A. So generally your tie-over or tie-in
10 is you're tying into or connecting to an existing
11 main that was live before you -- not part of your
12 current project. And your current project installs
13 new piping and now you're connecting to that
14 existing facility. So you're tying into the
15 existing system that was there. That's where you
16 get your gas feed from. So that tie-over.

17 Tie-in is that connection you're
18 making from the new facility to the existing
19 facility.

20 **Q. Isn't that a way to connect an**
21 **existing service line to a new main that perhaps is**
22 **put in at a different elevation?**

23 A. Yes.

24 MR. POSTON: Thank you. That's all.

25 JUDGE DIPPELL: Any additional

1 Commissioner questions?

2 Is there redirect from Laclede?

3 MR. ZUCKER: Yes, your Honor.

4 REDIRECT EXAMINATION BY MR. ZUCKER:

5 Q. Good morning again, Mr. Lauber.

6 A. Good morning.

7 Q. Mr. Poston asked you some questions
8 about hydrostatic testing to find leaks. Do you
9 recall that?

10 A. Yes.

11 Q. Do we do hydrostatic testing for the
12 purpose of finding leaks?

13 A. Yeah. That's one of the options that
14 we do for new projects and older ones. It's one of
15 the objectives.

16 Q. Okay. And is that part of the
17 maintenance program?

18 A. When it's done in conjunction with
19 our integrity management program, yes, it is.

20 Q. And is that put in ISRS?

21 A. No, it's not.

22 Q. Okay. So what hydrostatic testing is
23 Laclede, or MGE actually in this case, talking
24 about when they have put hydrostatic testing in the
25 ISRS?

1 A. Well, that would be a project that
2 would extend the useful life of the pipeline that
3 you're targeting, and that would be older
4 pipelines. The ones that we've recently done were
5 pipelines that were installed prior to 1970 that we
6 considered to be out of compliance with pipeline
7 safety regulations.

8 They did not have an established
9 maximum allowable operating pressure that will
10 allow the pipeline to continue to be operated. So
11 our only choice was then to perform the testing or
12 take the line out of service and abandon.

13 **Q. Okay. And is this a one-time test or**
14 **is this part of a maintenance program?**

15 A. Yes. It's just a one-time test for
16 the life of the pipeline that becomes part of the
17 asset record.

18 **Q. And usually is that -- since 1970,**
19 **has that test been done at the time the -- a new**
20 **transmission line went into service or some other**
21 **time?**

22 A. Yes, it's done at the time the
23 pipeline is put into service.

24 **Q. Okay. And is it capitalized with the**
25 **cost of the pipeline?**

1 A. Yes, it is.

2 Q. Mr. Poston asked you some questions
3 about the Section 5B projects that extend the
4 useful life or enhance the integrity. Do you
5 recall that?

6 A. Yes, I do.

7 Q. When you were talking about main
8 relining, he asked whether there was some -- well,
9 I guess you were answering whether there was some
10 kind of a cleaning element due to hydrostatic
11 testing that gave it some similarity or improved
12 the line in some way, like a main reline. Do you
13 recall that?

14 A. Yes, that's correct. And it is
15 similar to really all these projects in that you're
16 performing it on the pipeline and you're extending
17 the useful life of the pipeline. But I expounded a
18 little bit on the fact that when you do a
19 hydrostatic test, you are required to ensure that
20 the line is clean.

21 Q. But that's not why you did the
22 hydrostatic test in this case; is that right?

23 A. That's correct.

24 Q. If you didn't need to establish the
25 MAOP on this line, would you have done a

1 **hydrostatic test?**

2 A. In these cases, no.

3 **Q. Looking back at Section 5B, do you**
4 **have that in front of you still?**

5 A. Yes.

6 **Q. Do main relining projects enhance the**
7 **integrity of the pipeline?**

8 A. Yes.

9 **Q. Do they extend the useful life of the**
10 **pipeline?**

11 A. Well, let me back up. So main
12 relining projects extend the useful life of the
13 pipeline. To the extent that the pipeline is still
14 part of the new lining, I would say, yeah, it is
15 enhancing the integrity.

16 **Q. Okay. Do service line insertion**
17 **projects enhance the integrity of the pipeline?**

18 A. You're essentially putting in a new
19 pipeline when you insert, so the newer pipeline has
20 a higher integrity generally than the older
21 pipeline has.

22 **Q. Does it extend the useful life of the**
23 **pipeline?**

24 A. Well, in my opinion, it's a new
25 pipeline, but to the extent that I believe the

1 Legislature probably wrote this, yes, it would
2 extend the useful life.

3 Q. What about joint encapsulation
4 projects, do they enhance the integrity of the
5 pipeline?

6 A. Yes, because it seals the joints and
7 keeps them from having hazardous leaks.

8 Q. And does it extend the useful life of
9 the pipeline?

10 A. Yes.

11 Q. One moment, please. Is it Laclede's
12 goal to replace all of the cast iron main in its
13 system?

14 A. Yes.

15 Q. Do you consider any of the cast iron
16 main to not be worn out or deteriorated?

17 A. In general, I consider it worn out
18 and deteriorated.

19 Q. And in response to Judge Dippell's
20 question, a main runs along the street, is that
21 correct, in general?

22 A. Typically, yes. Yes.

23 Q. And then the service lines run off
24 the main to the homes or businesses?

25 A. Correct.

1 Q. Mr. Poston asked you some questions
2 about hydro testing. Do you recall that?

3 A. Yes.

4 Q. The hydrostatic testing. I'm sorry.
5 Did MGE have verifiable records on the line that
6 was hydrostatically tested?

7 A. No, they did not.

8 Q. Is that why MGE tested the line?

9 A. Yes.

10 Q. And I think you answered to
11 Mr. Poston that when Laclede tests a service line
12 that is being replaced, that that was not ISRS
13 eligible; is that correct?

14 A. I don't recall saying that.

15 Q. Is it correct?

16 A. No. Oh, wait a second. I'm sorry.
17 So a service line that's being replaced under our
18 replacement program?

19 Q. Yes.

20 A. Yes, it would be ISRS eligible.

21 Q. And is that a one-time test?

22 A. Yes.

23 Q. When you install a new plastic main
24 as part of the cast iron main replacement program
25 and the cast iron main has a joint encapsulation on

1 **it already, does that joint encapsulation get**
2 **replaced also?**

3 A. Yes, it does.

4 MR. ZUCKER: Your Honor, let me check
5 my notes for a moment.

6 JUDGE DIPPELL: Go ahead.

7 MR. ZUCKER: Thank you, Mr. Lauber.

8 THE WITNESS: Thank you.

9 JUDGE DIPPELL: Thank you. Then that
10 concludes your testimony, Mr. Lauber. You may step
11 down.

12 THE WITNESS: Thank you.

13 JUDGE DIPPELL: Let me ask a quick
14 housekeeping question. Well, let me first ask,
15 does that conclude your witnesses, Mr. Zucker?

16 MR. ZUCKER: Yes.

17 JUDGE DIPPELL: All right. So next
18 up is Staff witnesses. Are all of Staff's
19 witnesses going to continue to testify even with
20 the --

21 MR. THOMPSON: My understanding is
22 that there are no questions from the parties for
23 Caroline Newkirk or Dave Sommerer.

24 JUDGE DIPPELL: Okay.

25 MR. THOMPSON: So unless there are

1 Commission questions for those two witnesses, I
2 would propose that we simply admit their testimony
3 and dispense with their taking the stand.

4 JUDGE DIPPELL: All right. And with
5 regard to the other -- so that just leaves you with
6 the one witness then; am I correct?

7 MR. THOMPSON: Well, that would leave
8 me Jennifer Grisham, Kim Bolin and Mark
9 Oligschlaeger.

10 JUDGE DIPPELL: Oh, I'm sorry. All
11 right. Let me do a quick poll here. Would there
12 be Commission questions for witnesses Newkirk and
13 Sommerer?

14 COMMISSIONER COLEMAN: I won't have
15 any.

16 CHAIRMAN HALL: I need just a minute.

17 JUDGE DIPPELL: Okay. What I'm
18 thinking is that we may take care of that
19 housekeeping matter and then break for lunch.

20 CHAIRMAN HALL: No, I don't.

21 JUDGE DIPPELL: All right. Then
22 let's go ahead and, if that's all right with
23 everyone, to take those two bits of testimony, get
24 those entered into the record, and then we'll break
25 for lunch.

1 MR. THOMPSON: Thank you, Judge. So
2 that would be Staff Exhibit No. 1, which is the
3 direct testimony of Caroline Newkirk, Staff Exhibit
4 No. 3, the direct testimony of David Sommerer in
5 Case 0332, and Staff Exhibit No. 4, the direct
6 testimony of Mr. Sommerer in Case No. 0333. And I
7 would offer those three pieces of testimony at this
8 time.

9 JUDGE DIPPELL: Would there be any
10 objection to Staff Exhibit No. 1, Staff Exhibit
11 No. 3 or Staff Exhibit No. 4?

12 (No response.)

13 Seeing none, I will admit those three
14 exhibits into the record.

15 (STAFF EXHIBITS 1, 3 AND 4 WERE
16 RECEIVED INTO EVIDENCE.)

17 MR. THOMPSON: Thank you, Judge.

18 JUDGE DIPPELL: And so my -- the
19 computer time is 12:09. The newly working clock
20 is a few minutes behind that. But let's just take
21 a -- say an hour and a few minutes and come back in
22 here at 1:15.

23 (A BREAK WAS TAKEN.)

24 JUDGE DIPPELL: Okay. We're back on
25 the record, back from lunch. Staff, do you want to

1 call your first witness?

2 MR. THOMPSON: Staff would call
3 Jennifer K. Grisham.

4 (Witness sworn.)

5 JUDGE DIPPELL: Thank you. Would you
6 go ahead and spell your name for the court
7 reporter.

8 THE WITNESS: It's J-e-n-n-i-f-e-r,
9 K, Grisham, G-r-i-s-h-a-m.

10 JUDGE DIPPELL: Now, it's my
11 understanding, we mentioned before, it turns out
12 that Public Counsel doesn't have any questions for
13 this witness and no one else does, except for me,
14 one little clarification. So if you want to do an
15 abbreviated getting the testimony in like we did
16 the others.

17 JENNIFER K. GRISHAM testified as follows:

18 DIRECT EXAMINATION BY MR. THOMPSON:

19 Q. Did you prepare or cause to be
20 prepared Staff Exhibit No. 2, Direct Testimony of
21 Jennifer K. Grisham?

22 A. Yes.

23 Q. And do you have any corrections or
24 changes to that testimony?

25 A. No, I do not.

1 Q. If I was to ask you -- if I were to
2 ask you those questions here today, would your
3 answers be the same?

4 A. Yes.

5 Q. Are the contents of that testimony
6 true and correct to the best of your knowledge and
7 belief?

8 A. Yes.

9 MR. THOMPSON: At this time I would
10 offer Staff Exhibit No. 2, the direct testimony of
11 Jennifer K. Grisham.

12 JUDGE DIPPELL: Would there be any
13 objection to Staff Exhibit No. 2?

14 MR. ZUCKER: No.

15 JUDGE DIPPELL: All right. Then I
16 will admit Staff Exhibit No. 2.

17 (STAFF EXHIBIT 2 WAS RECEIVED INTO
18 EVIDENCE.)

19 MR. THOMPSON: And I will tender the
20 witness, Judge.

21 JUDGE DIPPELL: Thank you. And is
22 there still no cross-examination? Commissioner
23 questions?

24 QUESTIONS BY JUDGE DIPPELL:

25 Q. I just have one question, and that

1 was -- and maybe I'm just not following it. On the
2 Staff Memorandum that's attached to your testimony,
3 on page 1, the very last number there at the end of
4 that paragraph, and it says, Laclede's estimated in
5 its application that it was entitled to an
6 incremental increase of ISRS revenues in this case
7 of, and gives the number, is that supposed to be
8 the same number on page 4 in the paragraph right
9 under auditing summary and conclusions?

10 A. The difference between the number on
11 page 1 and the -- hang on a second. Oh, there is a
12 difference there.

13 Q. It looks like on page 1 you're
14 talking about updated through October 31st, and
15 page 4 updated on November 10th, but that's still
16 updated through the 31st of October, correct?

17 A. Okay. The number on page 1, it was
18 the estimated dollars that included the estimated
19 costs for the update period. Whereas, on the
20 number on page 4, different than -- the sentence
21 that says, This is different than Laclede's
22 requested revenue requirement of the 4.5, that
23 would be their number that they requested after the
24 estimated costs were updated for the true costs.

25 Q. Okay. I just needed that

1 clarification.

2 A. Okay.

3 JUDGE DIPPELL: Thank you. Is there
4 any cross-examination based on my question?

5 MR. ZUCKER: No, your Honor.

6 JUDGE DIPPELL: All right. Thank you
7 very much, Ms. Grisham. You may step down.

8 THE WITNESS: Thank you.

9 JUDGE DIPPELL: Okay. Then we can go
10 ahead with your next witness.

11 MR. THOMPSON: Thank you, Judge.
12 Staff calls Kim Bolin.

13 (Witness sworn.)

14 KIM BOLIN testified as follows:

15 DIRECT EXAMINATION BY MR. THOMPSON:

16 Q. Ms. Bolin, could you spell your last
17 name for the reporter, please?

18 A. Yes. It's B-o-l-i-n.

19 Q. Thank you. And how are you employed?

20 A. I am an auditor with the Missouri
21 Public Service Commission.

22 Q. And did you prepare or cause to be
23 prepared the rebuttal testimony that's been marked
24 as Staff Exhibit No. 5?

25 A. I did.

1 Q. Do you have any corrections or
2 additions to that?

3 A. Yes, I have a few corrections.

4 Q. Could you go through those, please?

5 A. Yes. On page 5 of my rebuttal
6 testimony, on the first line, it reads, Yes, my
7 review of these work orders indicated that Laclede
8 has removed. It should read, Yes, my review of
9 these work order authorization sheets indicated
10 that Laclede has removed.

11 JUDGE DIPPELL: Can you state that
12 location for me again?

13 THE WITNESS: It's page 5, line 1.

14 JUDGE DIPPELL: Okay.

15 THE WITNESS: And then on page 7 of
16 the same piece of testimony, line 7, a graph starts
17 and has various work order numbers and feet of
18 main. If you go to the second work order, which is
19 work order 900546, under steel and cast iron it
20 should be 7,262, which would make the total in the
21 third column 7,788.

22 This would also impact the total
23 lines at the bottom. The total for steel and cast
24 iron would be 44,678, and then the total would be
25 53,415. That's all my corrections.

1 BY MR. THOMPSON:

2 Q. Thank you very much. With those
3 corrections in mind, if I were to ask you those
4 questions again today, would your answers be the
5 same?

6 A. They would.

7 Q. And are the corrected contents of
8 your testimony true and correct to the best of your
9 knowledge and belief?

10 A. Yes, they are.

11 MR. THOMPSON: At this time I move
12 the admission of Staff Exhibit No. 5.

13 JUDGE DIPPELL: Would there be any
14 objection to Staff Exhibit No. 5?

15 MR. ZUCKER: No, your Honor.

16 JUDGE DIPPELL: Seeing no objection,
17 I will admit Staff Exhibit No. 5.

18 (STAFF EXHIBIT 5 WAS RECEIVED INTO
19 EVIDENCE.)

20 MR. THOMPSON: Thank you, Judge. I
21 would tender the witness.

22 JUDGE DIPPELL: Is there
23 cross-examination by Laclede?

24 MR. ZUCKER: No, your Honor.

25 JUDGE DIPPELL: Public Counsel?

1 MR. POSTON: Yes. Thank you.

2 CROSS-EXAMINATION BY MR. POSTON:

3 Q. Good afternoon, Ms. Bolin.

4 A. Good afternoon.

5 Q. I'd kind of like to start off with
6 kind of where we left off before lunch. In your
7 testimony you discuss depreciable life of assets;
8 is that correct?

9 A. Could you refer to me which page?

10 Q. I do see it on the top of page 5, but
11 I don't know if there's other places.

12 A. Okay.

13 Q. Is depreciation expense built into
14 the revenue requirement in a rate case?

15 A. There is depreciation expense built
16 on rate base in rates.

17 Q. And what happens to the depreciation
18 expense that was built into the revenue requirement
19 for an asset that is retired between rate cases?

20 A. There is no depreciation expense
21 that's not in rate base.

22 Q. I'm not sure -- let me ask the
23 question again. I don't know if you understood my
24 question. I asked what happens to the depreciation
25 expense that was built into the revenue requirement

1 for an asset that is retired between rate cases?

2 A. The depreciation remains the same
3 amount that was built into the rates regardless.

4 Q. And I believe when you talk about the
5 depreciable life, your discussion and your
6 testimony actually does it again on page 4, do you
7 know how the recording of short-lived assets as
8 regular retirements would affect the average
9 service lives in future depreciation studies?

10 A. Could you repeat that question?

11 Q. Do you know how the recording of
12 short-lived assets as regular retirements would
13 affect the average service lives in future
14 depreciation studies?

15 A. I've not conducted a depreciation
16 study, so I'm not sure exactly how that would work.

17 Q. Do you know if inclusion of short-
18 lived assets designated as regular retirements
19 decrease the historical average service life
20 experienced by Laclede?

21 A. I've not done any depreciation
22 studies.

23 Q. Just generally, do you know the
24 answer to that question?

25 A. I've not done any depreciation

1 studies, so I'm not --

2 Q. You've never done one is what you're
3 saying?

4 A. Right. Correct.

5 Q. I'll move on, then. I'm going back
6 to the questions I just asked. Just based on your
7 accounting knowledge, could you provide an answer
8 just based on your knowledge of accounting?

9 A. On what happens to depreciable lives?

10 Q. Yes.

11 A. The lives --

12 MR. THOMPSON: I object, Judge.

13 She's already said she has never done a
14 depreciation study.

15 MR. POSTON: I'm asking her not to
16 base it on a depreciation study but just on her
17 understanding of accounting.

18 JUDGE DIPPELL: I'll allow the
19 question. If she doesn't know the answer, she can
20 say she doesn't know the answer.

21 MR. POSTON: Let me repeat the
22 question.

23 BY MR. POSTON:

24 Q. I'll go to the first one. Do you
25 know how the recording of short-lived assets as

1 regular retirements would affect the average
2 service lives in future depreciation studies?

3 A. I've not done any depreciation
4 studies.

5 Q. Then the second question again, based
6 on your accounting understanding, would inclusion
7 of short-lived assets designated as regular
8 retirements decrease the historical average service
9 life experienced by Laclede?

10 A. I'm not familiar with depreciation
11 studies enough to answer that.

12 Q. Okay. You've provided testimony on
13 the plastic replacement issue, correct?

14 A. Yes, I did.

15 Q. Can you point me to language in the
16 ISRS statute or rule that says replacements of pipe
17 that's not worn out or deteriorated is eligible if
18 it was a patch?

19 A. I do not think the word patch is
20 anywhere in the rules.

21 Q. How would you define a patch?

22 A. It would be a piece of pipe that they
23 had to fix a leak or a segment of it.

24 Q. A small segment?

25 A. I don't know how you define a segment

1 exactly, but it's a piece of pipe that they've had
2 to use to fix a leak or a problem.

3 Q. But generally you think of a patch as
4 a smaller segment?

5 A. It could be. I'm not sure what exact
6 size it would be.

7 Q. So if Laclede replaces a 1,000-foot
8 plastic service line with another 1,000-foot
9 plastic service line, are they simply making a
10 temporary patch permanent?

11 A. Could you repeat your question?

12 Q. If Laclede replaces a 1,000-foot
13 plastic service line with another 1,000-foot
14 plastic service line, are they simply making a
15 temporary patch permanent?

16 A. They're replacing that piece that was
17 put in place to fix a problem.

18 Q. Would you consider a 500-foot segment
19 of gas main installed in 2011 to be only a small
20 patch?

21 A. I don't know what my definition of a
22 small patch, how many feet I would consider small
23 in the context of these items.

24 Q. So when you refer to the word patch
25 in your testimony, what are you referring to?

1 A. Could you refer me to which page I
2 said patch on?

3 **Q. Page 4, up at the top.**

4 A. Could you repeat your question?

5 **Q. I guess I asked, what is your**
6 **definition of a patch?**

7 A. It would be a piece of pipe they use
8 to fix a pipe that's already in the ground.

9 **Q. It could be of any length?**

10 A. I don't have a definition on what I
11 would consider small or large in this case.

12 **Q. Did you make any site visits for any**
13 **of these replacements?**

14 A. No, I did not.

15 **Q. Would you agree with me that the**
16 **Commission's gas safety rules only require Laclede**
17 **to replace the segment of pipe that is unsafe and**
18 **not connected pipe that is safe?**

19 MR. THOMPSON: I object. It calls
20 for a legal conclusion.

21 JUDGE DIPPELL: Could you repeat your
22 question, Mr. Poston?

23 MR. POSTON: I'm asking her if she
24 would agree with me that the Commission's gas
25 safety rules only require Laclede to replace the

1 segment of pipe that's unsafe and not the connected
2 pipe that is safe.

3 JUDGE DIPPELL: I'm going to sustain
4 the objection.

5 BY MR. POSTON:

6 Q. You say your review of work orders,
7 which I guess you changed that to work order
8 authorization sheets, show Laclede replaced plastic
9 beyond its depreciable life. Will you agree that
10 the majority of the plastic replaced was not beyond
11 its depreciable life?

12 A. I would agree with that.

13 Q. And depreciable life is not the
14 standard under the ISRS; is that correct?

15 A. I do not believe I've seen
16 depreciable life as a standard in ISRS.

17 Q. Is it your understanding the standard
18 is worn out or deteriorated?

19 A. I don't know if that's the only one.
20 There are safety requirements, too, if I remember
21 right, in ISRS.

22 Q. Would you expect the 500-foot segment
23 of main installed five years ago to be worn out or
24 deteriorated?

25 MR. THOMPSON: Objection. This

1 witness is not an engineer. I don't know how she
2 can be expected to answer a question about how
3 quickly plastic pipe might wear out.

4 MR. POSTON: Depreciation is an
5 accounting concept, and her testimony talks a lot
6 about these patches. I'm just asking her
7 understanding of -- based on her understanding, not
8 necessarily as an engineer, but her understanding
9 as an accountant.

10 JUDGE DIPPELL: I'll overrule the
11 objection as long as she's testifying with regard
12 to depreciation --

13 THE WITNESS: Could you repeat the
14 question?

15 JUDGE DIPPELL: -- or accounting
16 knowledge, whichever.

17 BY MR. POSTON:

18 Q. Would you expect a 500-foot segment
19 of main installed five years ago to have fully
20 depreciated?

21 A. Based on the depreciation lives, no,
22 it would not have been fully depreciated.

23 Q. You also say OPC's position would
24 encourage the company to avoid replacing segments
25 with plastic pipe; is that correct?

1 A. Is that also on page 5?

2 Q. Let me try to find it. Yeah.

3 Page 5, towards the middle. You say, If OPC's
4 position on this issue is adopted of not allowing
5 any recovery of costs to replace plastic pipe
6 embedded within older materials, would this provide
7 Laclede or MGE an incentive to replace pipe that
8 may need to be replaced by contains sections of
9 plastic pipe? And you say no; is that correct?

10 A. That is correct.

11 Q. Now, would you agree that Laclede is
12 required to replace pipe if it knows that pipe to
13 be in an unsafe condition?

14 A. I would agree that they would need to
15 replace pipe that is unsafe.

16 Q. And so if it's a disincentive for
17 Laclede to replace sections that have plastic pipe,
18 wouldn't that also be then an incentive for them to
19 focus on those segments with cast iron and steel?

20 A. I think they are focusing on segments
21 that have cast iron and steel but have plastic
22 interspersed with them.

23 Q. Let's say a work crew is replacing
24 plastic main and service lines. Would you agree
25 it's not possible for that same crew to be on the

1 other side of town replacing a cast iron main and
2 steel service line that's corroded?

3 A. The same crew?

4 Q. Yes.

5 A. It would not be possible.

6 Q. Is it your testimony that Laclede
7 shouldn't have to be able to prove, if asked, that
8 a particular segment of replaced pipe was worn out
9 or deteriorated?

10 A. Could you repeat the question?

11 Q. Is it your testimony that Laclede
12 shouldn't have to be able to prove, if asked, that
13 a particular segment of replaced pipe was worn out
14 or deteriorated?

15 A. I don't know that I said they'd
16 have -- they needed to prove every time, did I?

17 Q. Well, how about is it your position
18 that Laclede shouldn't have to be able to prove, if
19 asked, a particular segment of replaced pipe was
20 worn out or deteriorated?

21 A. I think if asked they would be able
22 to prove it.

23 MR. POSTON: That's all I have.

24 Thank you.

25 JUDGE DIPPELL: Thank you. Are there

1 questions from the Commission?

2 CHAIRMAN HALL: Yes.

3 JUDGE DIPPELL: Thank you.

4 QUESTIONS BY CHAIRMAN HALL:

5 Q. Good afternoon.

6 A. Good afternoon.

7 Q. Let's say hypothetically that the
8 Commission were to adopt OPC's position that
9 replacement of new plastic for old plastic is not
10 ISRS eligible.

11 A. Okay.

12 Q. Can you give me any process by
13 which -- or any methodology that would allow us to
14 back out the costs that we have determined are
15 ineligible from their application?

16 A. That's been something we've been
17 thinking about since this issue came about, to come
18 up with a number, and I don't know that there is a
19 good, exact method to use.

20 Q. Can you explain why that is?

21 A. Well, you've got -- they are actually
22 adding less plant than the total plant that they
23 are taking out, and some of that is cast iron.
24 Some of that is plastic. It's -- I don't know how
25 you get to the actual cost of the plastic that is

1 being replaced.

2 **Q. Any other impediments to a**
3 **calculation that would adopt that approach?**

4 A. I can't think of any right now,
5 but...

6 CHAIRMAN HALL: Okay. No further
7 questions. Thank you.

8 JUDGE DIPPELL: All right. I don't
9 believe there are any other Commission questions,
10 and I don't have any questions. Is there recross
11 based on the Chairman's questions?

12 MR. POSTON: Yes.

13 MR. ZUCKER: No for me.

14 JUDGE DIPPELL: Thank you. Public
15 Counsel.

16 RE-CROSS-EXAMINATION BY MR. POSTON:

17 **Q. The question you were asked by the**
18 **Chairman about how you back out ineligible costs,**
19 **if you can't separate it out but the Commission**
20 **finds that those portions are ineligible, should**
21 **the Commission just reject it all?**

22 A. That's up to the Commission.

23 **Q. You don't have a position on that?**

24 A. Our position is not to exclude any of
25 the plastic pipe.

1 Q. Well, I'm saying if your employer
2 says this portion is ineligible, I mean, I guess
3 the choices are either come up with some formula to
4 do it or it's all ineligible?

5 A. We could try to come up with some
6 formula. I don't know that all the parties would
7 agree with it. Each party may have a separate
8 formula to develop how to remove these costs.

9 Q. If we were to be able to determine
10 that a particular work order has, say, 10 percent
11 plastic replaced and 90 percent cast iron or steel,
12 couldn't we just take 10 percent of the entire work
13 order costs and just exclude that? Is that one
14 possible way to do it?

15 A. I don't know that it would be the
16 best possible way to do this. I don't know that it
17 would get you to the exact cost of the plastic
18 that's being replaced.

19 Q. How would you get to the exact cost?

20 A. That I don't know.

21 Q. Do you have a better way to do it?

22 A. Not right now.

23 Q. Are you familiar with the
24 Massachusetts Formula Allocation Factor?

25 A. Yes, I am.

1 Q. And that's used by Staff, right?

2 A. To allocate certain corporate costs.

3 Q. Is that exact and accurate?

4 A. No, it is not, but it is an
5 allocator.

6 MR. POSTON: Thank you. That's all I
7 have.

8 JUDGE DIPPELL: Is there redirect
9 from Staff?

10 MR. THOMPSON: Thank you, Judge.

11 REDIRECT EXAMINATION BY MR. THOMPSON:

12 Q. Mr. Poston asked you some questions
13 about segments. Let me ask you a question
14 following up on that. If there was a gas line that
15 ran from Fulton to Columbia, would you consider
16 that to be a segment?

17 A. I guess it could be defined as a
18 segment. I'm not --

19 Q. Could be?

20 A. Could be.

21 Q. Okay. You were asked a question
22 about what you might expect plastic -- how quickly
23 you might expect plastic pipe to wear out or be
24 fully depreciated. Now, would you agree with me
25 that worn out and fully depreciated are not the

1 same thing, are they?

2 A. That is true, they are not the same
3 thing.

4 Q. Worn out, would you agree, refers to
5 the physical condition of the asset?

6 A. Correct.

7 Q. And fully depreciated refers to an
8 accounting convention?

9 A. Depreciable lives.

10 Q. Okay. And in your background, have
11 you had any particular experience with plastic
12 pipe? In other words, what I'm -- I'm not trying
13 to be humorous. I'm trying to get at whether or
14 not you have any special knowledge about how
15 quickly plastic pipe might wear out under various
16 conditions.

17 A. I'm not an engineer, and I don't have
18 any background in examining plastic pipe that's
19 been in the ground.

20 Q. Okay. Now, the Chairman asked you a
21 question about if the Commission determined that
22 the replacement of the plastic patches or segments
23 or portions of segments was determined to be
24 ineligible, how that cost would be backed out,
25 correct?

1 A. Correct.

2 Q. Am I correct in understanding your
3 testimony that Staff has not developed any
4 methodology for doing that?

5 A. We have not calculated or developed
6 any methodology.

7 Q. And who raised that issue?

8 A. Office of the Public Counsel.

9 Q. Would you expect them to suggest a
10 methodology?

11 A. Yes.

12 Q. Now, this case involves a certain
13 definite amount of money; isn't that correct?

14 A. Yes, there's a certain amount of
15 money in this case.

16 Q. And has Public Counsel identified a
17 definite adjustment or disallowance that they want?

18 A. They have not -- they have not
19 developed an exact dollar that I'm aware of.

20 Q. Have they given you a ballpark?

21 A. Not a dollar amount, no.

22 Q. Mr. Poston asked you whether, if we
23 can't back it out, the entire ISRS request should
24 simply be rejected. Do you recall that question?

25 A. That the entire --

1 Q. Right. That the entire amount then
2 should just be rejected if you can't back out the
3 ineligible plastic pipe.

4 A. I don't remember those exact words,
5 but --

6 Q. Okay. Do you remember a question
7 along those lines?

8 A. Similar to that, yes.

9 Q. Would you consider that to be a fair
10 result?

11 A. No.

12 Q. And as a layperson who works with the
13 ISRS, do you think that's what the Legislature
14 intended?

15 A. No. I believe the legislation
16 intended to incentivize the company to replace
17 mains.

18 MR. THOMPSON: Thank you. No further
19 questions.

20 JUDGE DIPPELL: All right.
21 Ms. Bolin, I believe that concludes your testimony,
22 and you may be dismissed. Next witness.

23 MR. THOMPSON: At this time, your
24 Honor, Staff calls Mark Oligschlaeger.

25 (Witness sworn.)

1 JUDGE DIPPELL: Thank you. Could you
2 please spell your last name for the court reporter?

3 WITNESS: O-l-i-g-s-c-h-l-a-e-g-e-r.

4 MARK OLIGSCHLAEGER testified as follows:

5 DIRECT EXAMINATION BY MR. THOMPSON:

6 Q. Mr. Oligschlaeger, how are you
7 employed?

8 A. I'm employed as the manager of the
9 auditing department for the Missouri Public Service
10 Commission.

11 Q. And did you prepare or cause to be
12 prepared certain rebuttal testimony that's been
13 marked as Staff Exhibit No. 6?

14 A. I did.

15 Q. Do you have any changes or
16 corrections to that?

17 A. I do not.

18 Q. If I were to ask you those questions
19 today, would your answers be the same?

20 A. They would.

21 Q. And to the best of your knowledge and
22 belief, would those answers be true and correct?

23 A. They would.

24 MR. THOMPSON: I offer Staff
25 Exhibit 6.

1 JUDGE DIPPELL: Any objections to
2 Staff Exhibit No. 6?

3 (No response.)

4 JUDGE DIPPELL: Seeing none, I will
5 admit Staff Exhibit 6.

6 (STAFF EXHIBIT 6 WAS RECEIVED INTO
7 EVIDENCE.)

8 MR. THOMPSON: Thank you, Judge. I
9 tender the witness.

10 JUDGE DIPPELL: Is there
11 cross-examination by Laclede?

12 MR. ZUCKER: No, your Honor.

13 JUDGE DIPPELL: Public Counsel?

14 CROSS-EXAMINATION BY MR. POSTON:

15 Q. Good afternoon.

16 A. Good afternoon.

17 Q. My first question is kind of where we
18 left off with Ms. Bolin. For OPC to calculate what
19 needs to be removed from this, this case, if the
20 Commission were to find that plastics are
21 ineligible, would you expect OPC to be able to
22 calculate that?

23 A. I would expect OPC to come up with a
24 proposed method or solution to at least get an
25 estimate of what that disallowance would be worth.

1 Q. Okay. How about this: Is one method
2 or solution you determine the percentage of pipe in
3 a work order that's plastic and you multiply that
4 by the total cost for the work order and you remove
5 that cost; is that one method?

6 A. That's one simple method. I think
7 there's some complications involving the facts
8 present here that might make that somewhat suspect.

9 Q. Do you have a better method?

10 A. I do not.

11 Q. And I want to ask you some of the
12 same questions I asked Ms. Bolin that she was not
13 able to answer. Is depreciation expense built into
14 the revenue requirement in a rate case?

15 A. It is.

16 Q. And what happens to the depreciation
17 expense that was built into the revenue requirement
18 for an asset that is retired between rate cases?

19 A. If you're talking about what happens
20 to the rate levels, the rate levels don't change
21 and can be assumed to reflect the same level of
22 depreciation expense whether the asset is retired
23 or not.

24 If you're talking about accounting,
25 then depreciation would cease on that particular

1 asset for booking purposes once it's retired.

2 Q. Do you know how the recording of
3 short-lived assets as regular retirements would
4 affect the average service lives in future
5 depreciation studies?

6 A. Well, again, I have not personally
7 participated in any depreciation studies. From my
8 general knowledge of regulation, I would speculate
9 that a series of early retirements for a given
10 asset class may lead to a shortened asset life
11 for -- in the context of depreciation expense.

12 Q. Would inclusion of shorter-lived
13 assets designated as regular retirements decrease
14 the historical average service life experienced by
15 Laclede?

16 A. Again, I would speculate that it
17 could.

18 MR. THOMPSON: Judge, he's
19 speculating. He's even saying that he's
20 speculating.

21 JUDGE DIPPELL: But you let him
22 answer.

23 MR. THOMPSON: Well, I move that we
24 strike that testimony.

25 JUDGE DIPPELL: Overruled. He's

1 already answered. The answer can stand.

2 BY MR. POSTON:

3 Q. Would you -- can you provide a
4 reasoned accounting viewpoint of the answer you
5 just provided?

6 MR. THOMPSON: Objection. Calls for
7 speculation.

8 JUDGE DIPPELL: He asked him if he
9 could. If he cannot, then he can say no. I'll
10 allow it.

11 THE WITNESS: Based on a high level
12 of generality, if the estimated service life of an
13 asset class declines over time, I would expect over
14 time that that would be reflected in depreciation
15 rates.

16 BY MR. POSTON:

17 Q. Would the decrease in average service
18 life increase the depreciation rate in following
19 proceedings?

20 A. Can you repeat that, please?

21 Q. Would the decrease in average service
22 life increase the depreciation rate in following
23 proceedings?

24 A. If you assume a decreased service
25 life, all other things being equal, if reflected in

1 depreciation study, that would increase the
2 depreciation expense.

3 Q. Okay. Moving on. Do you agree with
4 Laclede that replacing plastic mains and service
5 lines qualify for ISRS?

6 A. It would certainly depend upon the
7 context in which they're replaced.

8 Q. How about in the context where they
9 say the reason for replacing it is because it's
10 attached to a cast iron main that's deteriorated?

11 A. Staff's position is, yes, that would
12 be an eligible ISRS replacement.

13 Q. Do you agree with that position?

14 A. Yes.

15 Q. So your rebuttal testimony addresses
16 hydrostatic testing with a few questions and
17 answers; is that right?

18 A. That's correct.

19 Q. And you summarize the Staff's
20 position in three sentences, the first being that
21 such costs have been allowed in past ISRS
22 petitions; is that correct?

23 A. That's correct.

24 Q. Would you agree that past treatment
25 does not make the costs legally eligible?

1 A. In and of itself, it does not.

2 Q. You also state that Federal Energy
3 Regulatory Commission, FERC, accounting guidelines
4 allow for capitalization of hydrostatic testing in
5 certain circumstances, correct?

6 A. That's correct.

7 Q. Why is it important that it be a cost
8 that is capitalized?

9 A. Well, my knowledge is, with the
10 exception of depreciation expense and property
11 taxes associated with ISRS-eligible capital
12 additions, expenses are not allowed recovery under
13 ISRS.

14 Q. Assume for me if your testimony was
15 incorrect and the FERC's Uniform System of Accounts
16 said testing is a maintenance expense. Would your
17 opinion change on whether it is ISRS eligible?

18 A. Well, I don't believe your
19 hypothetical is correct, but yes, we would take
20 that into account.

21 MR. POSTON: I'd like to have an
22 exhibit marked. I think I'm at 4; is that right?

23 JUDGE DIPPELL: Yes, OPC Exhibit
24 No. 4.

25 (OPC EXHIBIT 4 WAS MARKED FOR

1 IDENTIFICATION BY THE REPORTER.)

2 MR. POSTON: May I approach the
3 witness?

4 JUDGE DIPPELL: Yes.

5 BY MR. POSTON:

6 Q. Okay. You have with you what's been
7 marked OPC Exhibit No. 4; is that correct?

8 A. That is correct.

9 Q. You're a certified public accountant;
10 is that correct?

11 A. That is correct.

12 Q. And I've actually handed you two
13 documents; is that correct?

14 A. Yes.

15 Q. One has not been marked as an
16 exhibit. Can you first identify what that document
17 is?

18 A. This document is entitled
19 Subchapter F, Accounts, National Gas Act.

20 Q. Would you agree that that document is
21 the FERC's Uniform System of Accounts for natural
22 gas companies?

23 A. Based on a quick review, it appears
24 to be.

25 Q. And then looking at --

1 JUDGE DIPPELL: Excuse me,
2 Mr. Poston.

3 MR. POSTON: Yes.

4 JUDGE DIPPELL: Just one moment. I'm
5 confused. Is that the one that you just marked or
6 is there two with that same title?

7 MR. POSTON: No. The exhibit is
8 actually just an excerpt from that, two pages,
9 three pages from that exhibit. I didn't want to
10 have to put the whole thing in.

11 JUDGE DIPPELL: Okay. I'm sorry. I
12 didn't understand that you'd handed him the whole
13 thing. Proceed.

14 BY MR. POSTON:

15 Q. And so could you verify for me that
16 what's been marked as OPC Exhibit No. 4 is the
17 cover page of the Uniform System of Accounts and
18 pages 632 and 633?

19 A. They appear to match.

20 MR. POSTON: I offer OPC Exhibit
21 No. 4.

22 JUDGE DIPPELL: Would there be any
23 objection to OPC Exhibit No. 4?

24 MR. THOMPSON: May I voir dire?

25 JUDGE DIPPELL: Sure.

1 VOIR DIRE EXAMINATION BY MR. THOMPSON:

2 Q. Mr. Oligschlaeger, are you familiar
3 with the FERC Chart of Accounts or Uniform System
4 of Accounts?

5 A. In general terms, yes.

6 Q. Is that something you consult or work
7 with regularly?

8 A. I would say so.

9 MR. THOMPSON: Okay. I have no
10 objection.

11 JUDGE DIPPELL: Thank you. I will
12 admit OPC Exhibit No. 4.

13 (OPC EXHIBIT 4 WAS RECEIVED INTO
14 EVIDENCE.)

15 BY MR. POSTON:

16 Q. Would you agree with me that the
17 Commission's accounting rules require Missouri gas
18 utilities to follow the Uniform System of Accounts?

19 A. Yes.

20 Q. So you'll see on page 632, which is
21 the second page of OPC Exhibit No. 4, I've
22 underlined a few passages. Can you please read
23 that first underlined part?

24 A. The part that's entitled No. 2,
25 maintenance?

1 **Q. That's correct.**

2 A. Okay. No. 2, maintenance, part A.
3 The cost of maintenance chargeable to the various
4 operating expense and clearing accounts includes
5 labor, materials, overheads and other expenses
6 incurred in maintenance work. A list of work
7 operations applicable generally to utility plant is
8 included hereunder.

9 **Q. Okay. And thereunder I've also**
10 **underlined No. 2 under items; is that correct?**

11 A. That's correct.

12 **Q. Can you please read that?**

13 A. Sure. No. 2, inspecting, testing and
14 reporting on condition of plant specifically to
15 determine the need for repairs, replacements,
16 rearrangements and changes and inspecting and
17 testing the adequacy of repairs which have been
18 made.

19 **Q. Would you agree with me that,**
20 **according to this, gas utility companies are**
21 **required to treat testing to determine the need for**
22 **repairs as a maintenance expense?**

23 MR. THOMPSON: I object. This is
24 only a portion of the FERC Uniform System of
25 Accounts. Mr. Poston clearly is trying to attack

1 Mr. Oligschlaeger's testimony that the FERC allows
2 hydrostatic testing to be capitalized under some
3 circumstances, and the use of this small excerpt
4 from the total document I think is improper, an
5 improper attack on that.

6 JUDGE DIPPELL: Can you tell me your
7 objection exactly? Improper attack?

8 MR. THOMPSON: It's improper because
9 he's asked him to read these excerpts, and then
10 clearly the next question is, well, these excerpts
11 don't support what you said, do they? What I'm
12 saying is that Mr. Oligschlaeger should have the
13 ability to refer to the entire FERC Uniform System
14 of Accounts.

15 MR. POSTON: I'll respond that on
16 redirect he is certainly able to ask him. He's got
17 the entire copy sitting there with him.

18 JUDGE DIPPELL: I'm going to overrule
19 the objection. You may answer.

20 THE WITNESS: And if you could repeat
21 your question.

22 BY MR. POSTON:

23 Q. Would you agree with me that,
24 according to this, gas utility companies are
25 required to treat testing to determine the need for

1 **repair as a maintenance expense?**

2 A. In general, that is true. There are
3 exceptions to that rule.

4 **Q. And what are those general**
5 **exceptions?**

6 A. The exceptions that I'm aware of as
7 they apply to hydrostatic testing is there is an
8 accounting release from the FERC, I think they're
9 also called chief accountant letters, which specify
10 the circumstances in which hydrostatic testing can
11 be capitalized outside the context of it being
12 applied to items under construction.

13 **Q. And what are those specific**
14 **circumstances?**

15 A. In general, they apply to situations
16 in which they are a one-time test, and as I recall,
17 applicable to situations where a test needs to be
18 done to an item of plant for which the federal
19 requirements or the regulations requiring the test
20 weren't in place at the time the asset was first
21 placed in service.

22 **Q. Is that -- is that -- and what is**
23 **that from?**

24 A. That's from an accounting release or
25 I think they're sometimes known as chief accountant

1 letters from the FERC.

2 **Q. So that wasn't actually the FERC**
3 **itself issued that?**

4 A. I really don't know the authority. I
5 assume that came from the chief accountant, not
6 from the five or three commissioners of FERC,
7 however many there are.

8 **Q. Do you know the date of that?**

9 A. 2004.

10 **Q. Okay. So if FERC were to further**
11 **clarify this in regard to testing, in particular**
12 **hydrostatic testing, and conclude that such testing**
13 **is an expense and should not be capitalized, would**
14 **that change your opinion on whether Laclede's**
15 **hydrostatic testing costs are eligible for ISRS?**

16 A. We would take that into account.
17 Again, FERC's findings on any particular accounting
18 point I don't think are binding on the Missouri
19 Commission.

20 **Q. Certainly when they interpret their**
21 **own rules, don't you think that's somewhat binding**
22 **on the Commission?**

23 A. Well, I mean, their Uniform System of
24 Accounts is highly similar, in most instances
25 identical to our system of accounts. I don't think

1 that makes them the ultimate arbiter of what the
2 Missouri Commission finds reasonable or acceptable
3 in the field of accounting.

4 MR. POSTON: I'd like to have another
5 exhibit marked.

6 JUDGE DIPPELL: Be OPC Exhibit No. 5.

7 (OPC EXHIBIT 5 WAS MARKED FOR
8 IDENTIFICATION BY THE REPORTER.)

9 BY MR. POSTON:

10 Q. Have you had a chance to look at --
11 well, do you have a copy of OPC Exhibit No. 5?

12 A. Yes.

13 Q. Okay. Would you agree with me that
14 this appears to be a FERC order on accounting for
15 pipeline assessment costs issued June 30th, 2005?

16 A. That is what the title indicates.

17 Q. Would you agree that's what this
18 appears to be?

19 A. Yes.

20 MR. POSTON: I offer OPC Exhibit
21 No. 5.

22 JUDGE DIPPELL: Would there be any
23 objection to OPC Exhibit No. 5?

24 MR. THOMPSON: No objection.

25 MR. ZUCKER: I'm going to assume that

1 it is what it purports to be. Obviously whatever
2 this order, the order on accounting for pipeline
3 assessment costs is speaks for itself.

4 JUDGE DIPPELL: So no objection?

5 MR. ZUCKER: Yeah, basically.

6 JUDGE DIPPELL: All right. Then I
7 will admit OPC Exhibit No. 5.

8 (OPC EXHIBIT 5 WAS RECEIVED INTO
9 EVIDENCE.)

10 BY MR. POSTON:

11 Q. If you turn to the second page of
12 that -- I'm sorry, page 4, do you see it asks the
13 question, Should the costs of pipeline assessment
14 activities be expensed or capitalized? Do you see
15 that?

16 A. I do.

17 Q. And then if you turn to page 6,
18 you'll see where the FERC begins its discussion.
19 Do you see that?

20 A. Well, it's not clear whether the
21 discussion pertains only to the question you cited
22 earlier, whether it's a broader discussion, but
23 there is a discussion called discussion on page 6,
24 yes.

25 Q. Okay. And then on page 7, do you see

1 in paragraph 21 I've underlined a few passages? Do
2 you see that?

3 A. I do.

4 Q. Can you please read the lines I've
5 underlined?

6 A. The first excerpt, The Commission's
7 accounting rules provide the costs incurred to
8 inspect, test and report on the condition of plant
9 to determine the need for repairs or replacements
10 are to be charged to maintenance expense in the
11 period the costs are incurred, with a Footnote 6.

12 The second excerpt, several sentences
13 down, states, Broadly speaking, pipeline assessment
14 activities provide information about the condition
15 of existing facilities to ensure that operation of
16 the pipeline remains within established safety
17 parameters. The act of inspecting or assessing a
18 pipeline segment does not by itself increase the
19 useful life of a pipeline asset or improve its
20 efficiency.

21 Q. So is it your position that
22 hydrostatic testing by itself increases the useful
23 life of a pipeline asset?

24 A. In the circumstances where a failure
25 to conduct the test or a failure to make repairs or

1 replacement means that the asset in question must
2 be taken out of service after failing the
3 hydrostatic test, I think an argument can be made
4 that it should be viewed as extending the useful
5 life of the asset.

6 **Q. Only where it needs to come out and**
7 **replaced, you're saying?**

8 A. Well, if the test is failed -- and
9 I'm not even sure whether that's an accurate
10 technical term -- it's my understanding that
11 something has to be done to the pipe for it to
12 continue to be included in service or used to
13 provide service to customers.

14 **Q. Do you have a copy of the 2004**
15 **document you referred to?**

16 A. I don't have it with me, no.

17 **Q. Can you get a copy of it?**

18 A. It's available. Do you want me to
19 leave the witness stand and get it?

20 **Q. Well, I mean, could it be something**
21 **we bring back later today and maybe have marked as**
22 **an exhibit? This is something that seems to be an**
23 **important document to have. It's contradicting**
24 **what this is saying right here.**

25 JUDGE DIPPELL: What is the exhibit

1 exactly or what is the document?

2 MR. POSTON: He referred to a 2004 --
3 could you refer to -- or explain what it was?

4 THE WITNESS: Again, I think the
5 official title is an accounting release from the
6 FERC chief accountant which specifies the limited
7 circumstances in which hydrostatic testing is
8 allowed to be capitalized.

9 JUDGE DIPPELL: I'm trying to decide
10 if that's some sort of legal precedent or anything
11 that we could just take notice of and could be
12 provided with the briefs.

13 MR. POSTON: I'm going to argue it's
14 not a legal precedent. It's not a FERC -- it's not
15 the FERC decision itself. So that's why I was
16 wanting to get this in. He's already testified
17 that it's not an official FERC document, so I
18 withdraw the request.

19 MR. THOMPSON: Judge, if we're going
20 to be arguing about what the legal status of this
21 document that isn't in here is going to be, I think
22 that's a matter for the briefs and not a matter to
23 confront this witness with on the stand.

24 JUDGE DIPPELL: Well, I agree with
25 that. I just -- if we don't have the document in

1 the record, then -- and it turns out it's a fact
2 that we need to have instead of a law that we could
3 take notice of, I don't want to get away without
4 it.

5 At the same time, since this is
6 Staff's witness and not Public Counsel's witness,
7 I'm not inclined to go have him go find the
8 document to put in, and Mr. Poston has withdrawn
9 his request, so the matter's taken care of.

10 MR. THOMPSON: Thank you, Judge.

11 MR. POSTON: That's all I have.

12 Thank you.

13 JUDGE DIPPELL: Are there Commission
14 questions? Mr. Chairman.

15 CHAIRMAN HALL: Thank you.

16 QUESTIONS BY CHAIRMAN HALL:

17 Q. Good afternoon.

18 A. Good afternoon.

19 Q. Do you know if hydrostatic testing
20 was an O&M expense item in the last rate case to
21 Laclede?

22 A. I don't know for sure. Some
23 hydrostatic testing even under the FERC guidelines
24 I mentioned earlier should still be charged to
25 expense. That includes hydrostatic testing that is

1 part of an ongoing pipeline integrity program. I'm
2 using terms I'm not totally familiar with, but
3 that's what I got from the document. So it is
4 possible, but I can't tell you for sure.

5 Q. If the Commission were to determine
6 that that is in -- that is not an ISRS-eligible
7 expense item, going forward the company could
8 include all hydrostatic testing in their O&M in
9 each rate case; is that correct?

10 A. That is correct.

11 Q. You testified that the OPC approach
12 to backing out potentially ineligible plastic
13 piping replacement would be, I believe you used the
14 term suspect. Why did you -- why did you say that
15 that would be suspect?

16 A. Well, broadly, I mean, there's no
17 objective right answer to how you value that
18 because you're taking -- I guess the replacement
19 pipe is entirely made out of plastic, but it's not
20 clear exactly how much of that is a direct
21 replacement for whatever the amount of plastic was
22 in the retired pipe.

23 Now, just to use one ex-- one clear
24 example, there are situations that have been
25 alluded here today where they took out a piece of

1 pipe and the amount of cast iron pipe that was
2 replaced is greater than the entire amount of
3 plastic that came in as the replacement.

4 So a decision would have to be made,
5 how do you account for that? Do you just do the
6 10 percent ratio that Mr. Poston suggested or do
7 you take the fact that the entire amount of plastic
8 is less than the cast iron and say there is
9 effectively no cost to replace the plastic in the
10 original pipe?

11 I mean, I'm not sure either way is a
12 definitive right or wrong answer, but still that
13 judgment would have to be made.

14 CHAIRMAN HALL: Okay. Thank you.

15 JUDGE DIPPELL: All right. I don't
16 believe there are any other Commissioner questions.
17 Is there further cross-examination from Laclede?

18 MR. ZUCKER: Yes, your Honor. Thank
19 you.

20 RE-CROSS-EXAMINATION BY MR. ZUCKER:

21 Q. Good afternoon, Mr. Oligschlaeger.

22 A. Good afternoon.

23 Q. Did you hear Mr. Lauber testify this
24 morning that hydrostatic testing in connection with
25 an integrity management program is expensed?

1 A. Yes.

2 Q. And that the hydrostatic testing that
3 is in this ISRS is of a different nature?

4 A. Yes.

5 Q. And did you agree with that?

6 A. That appears to be generally
7 consistent with the accounting release from FERC
8 that I referenced earlier.

9 Q. Are you familiar with the testing of
10 a line before it's put into service?

11 A. In concept, yes.

12 Q. And is that -- does that -- is that
13 testing capitalized?

14 A. Because the testing is performed on
15 an item under construction, the accounting norm is
16 for it to be capitalized as part of the
17 construction work order.

18 Q. And if a utility did not have records
19 that that test was performed and was then required
20 to perform the test itself as a substitute, would
21 you say that that should be capitalized?

22 (Recording on telephone played.)

23 JUDGE DIPPELL: Sorry about that.

24 THE WITNESS: I can't say that that
25 exact scenario was referenced in the accounting

1 release, but it appears to be consistent with the
2 general scenario under which the accounting release
3 indicated that those costs, hydrostatic testing
4 costs could be capitalized.

5 BY MR. ZUCKER:

6 Q. And how would Staff feel about that?

7 A. We would not have a problem with that
8 accounting treatment.

9 Q. Are you familiar with, if you
10 capitalize an item, how much of that item the
11 customers pay each year?

12 A. In general terms, I'm familiar with
13 how capital items are treated for ratemaking
14 purposes.

15 Q. Would you say 10 percent is a normal
16 amount for the customer to pay?

17 A. If you're talking about both return
18 and depreciation, I think somewhere between 10 and
19 say 12 and a half percent would be in the ballpark.

20 Q. Okay. So if the company capitalized
21 the 1.8 million in hydro testing costs in this
22 case, the customers would be paying about \$200,000
23 a year for that. Does that sound like correct
24 math?

25 A. Again, in the ballpark.

1 Q. And if customers paid the entire
2 amount as an expense, they would be paying
3 approximately 1.8 million; is that correct?

4 A. That's correct.

5 MR. ZUCKER: That's all the questions
6 I have. Thank you.

7 JUDGE DIPPELL: Thank you. Public
8 Counsel?

9 MR. POSTON: Just a moment, please.
10 Yes, I do have a few questions.

11 RECROSS-EXAMINATION BY MR. POSTON:

12 Q. Okay. If the Commission were to find
13 that the plastic portions were ineligible, would
14 you agree that it would certainly be helpful if the
15 Commission were to order Laclede in its next ISRS
16 to separate out the plastic from the eligible types
17 of pipe?

18 A. If the -- if I understand your
19 question, if the Commission were to find in OPC's
20 favor on the particular issue involving replacement
21 of plastic pipe, I would say to the extent they
22 would intend that to be an ongoing treatment, that
23 it would not be unreasonable for them to order
24 Laclede to in some way keep accounting records
25 consistent with that finding, if that answers your

1 question.

2 Q. And in response to one question, you
3 talked about how it's possible where the amount of
4 cast iron that was removed is similar to the amount
5 that's installed and so you don't even -- the
6 plastic is, I guess I'm not sure what word you
7 used, but the plastic doesn't really matter. Do
8 you recall that?

9 A. I think the scenario I suggested, and
10 I think it holds true in at least several of the
11 work orders that have been discussed in this case,
12 is where the amount of cast iron in the replacement
13 pipe is less than the cast iron in the pipe that
14 was replaced even after taking into account the
15 plastic pipe that was also replaced.

16 Q. Now, for each work order we don't
17 know whether the new pipe that went in went
18 alongside cast iron or plastic or the pipe that was
19 abandoned where there's no line now going near it
20 was cast iron or plastic. Would you agree with
21 that?

22 A. I would think the company would have
23 records for the pipe that's replaced, what the
24 components were, but I may not be understanding
25 your question.

1 Q. Let's say, for example, down a single
2 street they've got plas-- or a cast iron segment,
3 all right, and they replaced that with plastic.
4 And then say in another area there's a cast iron
5 main that they just abandoned, they've not put
6 another plastic piece under there for part of this
7 project. We don't know the makeup of any
8 particular work order right here how -- which
9 portions were plastic, which portions were cast
10 iron to make the assumption that all of these
11 replacements you can just refer that they all
12 were -- replaced just the cast iron portion?

13 A. I guess I'm not familiar enough with
14 the source documents you're referring to to be able
15 to comment on that.

16 MR. POSTON: That's all I have.

17 JUDGE DIPPELL: All right, then. Is
18 there redirect from Staff?

19 MR. THOMPSON: Why, thank you, Judge.
20 May I approach?

21 JUDGE DIPPELL: Yes.

22 REDIRECT EXAMINATION BY MR. THOMPSON:

23 Q. I'm going to hand you a document.
24 Without losing your place there, I wonder if you
25 could take a look at the cover and tell me what

1 **that is?**

2 A. It is entitled Uniform System of
3 Accounts for Gas Utilities as of April 1st, 2004.

4 **Q. Okay. And is that, as far as you**
5 **know, authoritative today?**

6 A. I'm not aware that it has been
7 officially updated per the Commission rules, if
8 that's your question.

9 **Q. Okay. Take a look at the page that's**
10 **marked, there's an underlined paragraph. Do you**
11 **see that?**

12 A. I do.

13 **Q. Could you read that?**

14 A. Yes. Under the Section 22 studies,
15 the wording underlined is, Studies mandated by
16 regulatory bodies relative to facilities in service
17 shall be charged to Account 183.2, other
18 preliminary survey and investigation charges.

19 **Q. If I suggested to you that that's**
20 **applicable to the hydrostatic testing that we've**
21 **been discussing here today, would you have any**
22 **reason to disagree with me?**

23 A. It could be applicable to some
24 hydrostatic testing. This section appears to
25 discuss accounting for projects under construction.

1 MR. THOMPSON: Okay. Thank you. I
2 have no further redirect.

3 JUDGE DIPPELL: Thank you. Do you
4 have any further witnesses, Mr. Thompson?

5 MR. THOMPSON: I have no further
6 witnesses, Judge.

7 JUDGE DIPPELL: All right. Our last
8 within then is going to be with Public Counsel.
9 Let's take a really short ten-minute break here
10 before and then we'll finish up with Mr. Hyneman
11 when we come back. It is 2:24, 2:20ish by that
12 clock back there. So ten minutes, come back at
13 2:34. Go off the record.

14 (A BREAK WAS TAKEN.)

15 JUDGE DIPPELL: Okay. We're back on
16 the record, and it is OPC's turn to call witnesses.
17 Mr. Poston?

18 MR. POSTON: Thank you. We call
19 Charles Hyneman. Would you please state and spell
20 your --

21 JUDGE DIPPELL: Let me swear you in
22 first.

23 (Witness sworn.)

24 JUDGE DIPPELL: Thank you.

25 CHARLES HYNEMAN testified as follows:

1 DIRECT EXAMINATION BY MR. POSTON:

2 Q. State and spell your name.

3 A. Charles Hyneman, H-y-n-e-m-a-n.

4 Q. Are you the same Charles Hyneman that
5 caused to be prepared and filed OPC Exhibit No. 1?

6 A. Yes.

7 Q. If I were to ask you the same
8 questions in OPC Exhibit No. 1, would your answers
9 be the same or substantially the same?

10 A. Yes.

11 Q. Do you have any corrections to this
12 testimony?

13 A. No.

14 MR. POSTON: Your Honor, I offer OPC
15 Exhibit No. 1.

16 JUDGE DIPPELL: Would there be any
17 objection to OPC Exhibit No. 1?

18 MR. ZUCKER: No objection.

19 JUDGE DIPPELL: Then I will go ahead
20 and admit OPC Exhibit No. 1.

21 (OPC EXHIBIT 1 WAS RECEIVED INTO
22 EVIDENCE.)

23 MR. POSTON: I tender Mr. Hyneman for
24 cross-examination.

25 JUDGE DIPPELL: Is there

1 cross-examination by Staff?

2 CROSS-EXAMINATION BY MR. THOMPSON:

3 Q. Good afternoon, Mr. Hyneman.

4 THE WITNESS: Judge...

5 JUDGE DIPPELL: Thank you. Get my
6 technical stuff down here. Go ahead, Mr. Thompson.

7 MR. THOMPSON: Thank you.

8 BY MR. THOMPSON:

9 Q. Mr. Hyneman, good afternoon.

10 A. Good afternoon.

11 Q. Did you not have any work papers?

12 A. No, I have none for this case.

13 MR. THOMPSON: Okay. Thank you.

14 That's all I have. Thank you, Judge.

15 JUDGE DIPPELL: Laclede?

16 MR. ZUCKER: Thank you, your Honor.

17 CROSS-EXAMINATION BY MR. ZUCKER:

18 Q. Good afternoon, Mr. Hyneman.

19 A. Good afternoon.

20 Q. Do you have any professional or
21 educational experience in the design, planning and
22 construction of distribution systems for gas
23 utilities?

24 A. I'm sorry. Could you repeat that
25 again?

1 Q. I certainly can, it turns out. Do
2 you have any professional or educational experience
3 in the design, planning and construction of
4 distribution systems for gas utilities?

5 A. No.

6 Q. You do not have an engineering
7 degree; is that correct?

8 A. That is correct.

9 Q. Do you have any professional
10 certifications or degrees of any other kind
11 relating to the installation, construction or
12 cathodic protection of natural gas distribution
13 facilities?

14 A. No.

15 Q. Do you have any professional
16 certifications or experience in terms of complying
17 with federal, state and local safety regulations
18 relating to the construction and operation of
19 natural gas distribution facilities?

20 A. Again, I apologize. I tried to keep
21 up with that. Could you repeat that question?

22 Q. Again I can. Do you have any
23 professional certification or experience in terms
24 of complying with federal, state and local safety
25 regulations relating to the construction and

1 **operation of natural gas distribution facilities?**

2 A. My experience would be the years and
3 years of working with pipeline safety requirements
4 prior to ISRS and subsequent to ISRS. So that's
5 probably over a 22-year period. So that would be
6 my experience in that area.

7 **Q. Okay. No professional**
8 **certifications, though?**

9 A. No.

10 **Q. Have you ever supervised or**
11 **participated in a project for replacing or**
12 **rehabilitating natural gas distribution facilities?**

13 A. No.

14 **Q. Are you aware that on November 30th**
15 **the Office of the Public Counsel toured various**
16 **ISRS sites in the St. Louis area where Laclede Gas**
17 **was performing ISRS-related work?**

18 A. Yes.

19 **Q. And did you attend that?**

20 A. No. I was preparing direct testimony
21 at the time for another rate case. My intention
22 was to, but I just couldn't spare the time.

23 **Q. Have you ever toured a Laclede Gas**
24 **ISRS site?**

25 A. No. Staff -- during my time with

1 Staff, I don't believe Staff has ever done that.

2 Q. Okay. So I'm asking you if you've
3 done it.

4 A. With my time with OPC, I was not able
5 to attend that time OPC did.

6 Q. Okay. Have you visited an MGE ISRS
7 work site?

8 A. I think so. I think in years past I
9 have.

10 Q. Can you remember when?

11 A. No. It was -- I don't even know if
12 it was related to ISRS or the -- or MGE's service
13 line replacement program, which was essentially the
14 same as ISRS. But I do have memories of going out
15 to the work site during that time.

16 Q. So you're not specifically familiar,
17 then, with how Laclede is replacing their cast iron
18 and steel main?

19 A. No. We have no concern with that in
20 this case.

21 Q. Okay. By no concern, do you mean you
22 have no objection to it?

23 A. Currently, correct. I mean, there
24 were some issues that were raised during this about
25 the prudence of it, the process, are you changing

1 pipe out, going from low pressure to intermediate
2 pressure, is that the purpose why you're replacing
3 so many plastic mains?

4 Those are questions that came up that
5 will be looked at thoroughly in a rate case, but
6 OPC is not taking any position on how Laclede is
7 operationally replacing its service lines or its
8 mains.

9 The only position that OPC is taking
10 with respect to the plastic pipes is strictly, and
11 I mean strictly, a cost allocation issue. Should
12 the cost of non-ISRS plant be included in ISRS?
13 We're saying no, it should be allocated out.

14 We have no questions, comments or
15 concerns with how Laclede operationally is
16 replacing its lines and mains.

17 **Q. Okay. Thank you.**

18 **A.** And I wanted to clear that up.

19 **Q. Is it true that you believe that**
20 **hydro testing -- I'm sorry -- hydrostatic testing**
21 **is testing for leaks in pipes?**

22 **A.** Water pressure in the pipes for an
23 extended period of time to determine the potential
24 longevity of the pipe for leaks. That's the
25 general knowledge I have of that, yeah. And if I

1 could supplement that, I think --

2 Q. I don't think you need to.

3 A. Okay.

4 Q. Do you have any basis for doubting
5 the validity of Mr. Lauber's testimony this morning
6 that it would have been operationally impractical
7 to try to incorporate the older patches of plastic
8 pipe in the new facilities being installed?

9 A. Again, I have a lot of respect for
10 Mr. Lauber, but that testimony to me is not
11 relevant to any issue in this case. We are not
12 taking issue with how Laclede --

13 Q. Okay. So once again -- well, you
14 know what, go ahead and finish that sentence.

15 A. We are not taking any issue with how
16 Laclede replaces its pipes under the ISRS. We are
17 just saying do not include non-ISRS costs in your
18 ISRS application.

19 Q. Okay. Thank you. When Laclede does
20 an ISRS filing, the depreciation expense and
21 deferred taxes are updated to a point that's near
22 the operation of law date. Are you familiar with
23 that?

24 A. Yes. In fact, I initiated that while
25 I was on Staff.

1 Q. You initiated that idea?

2 A. Yes, with Missouri Gas Energy. I had
3 a lot of communications with Mr. Noack about that
4 in an MGE ISRS case.

5 Q. Okay. Let me ask you the next
6 question, then. Do you oppose the updating process
7 where Laclede tries to update its ISRS for two
8 months?

9 A. We're talking about two separate and
10 distinct and nonrelated items here.

11 Q. Okay. Just answer the question I
12 just asked.

13 A. Yeah, I do strongly oppose that.

14 Q. Okay. Do you oppose the ISRS itself?

15 A. No.

16 Q. Do you wish it didn't exist?

17 A. I wish it had more consumer
18 protections, significantly more, and the ones that
19 exist, I would hope they'd be enforced. So given
20 that, I think it could be improved a lot.

21 Q. And do you consider that the ISRS
22 surcharges are being forced on Missouri ratepayers?

23 A. Yes.

24 Q. Do you believe that the ISRS
25 legislation was proposed by the Missouri LDCs and

1 **their lobbyists?**

2 A. I do. Specifically my understanding
3 is that --

4 Q. Okay. I think a yes, I do, answered
5 the question for me. Let me ask you another
6 question.

7 A. Okay.

8 Q. Is the purpose of the legislation to
9 protect utility shareholders through the
10 elimination of regulatory lag related to plant and
11 plant costs?

12 A. Yes, I believe that's -- I cited that
13 in a response to a Staff data request. I could --
14 if you can allow me to refer to --

15 Q. No. You have answered the question
16 perfectly, and I have no -- I'm looking at your
17 data request --

18 A. But I'm not --

19 Q. -- and I have no complaint with how
20 you've answered.

21 A. But I'm not sure that that answer was
22 complete, is how I responded in that data request.

23 Q. Well, let me move on to another
24 question.

25 A. Okay.

1 Q. Would you agree that the ISRS statute
2 is fairly detailed on how to calculate ISRS
3 charges?

4 A. No.

5 Q. Okay. Does it not lay out the --
6 that the Commission will look at the return, the
7 depreciation, the property taxes and other costs of
8 capital rates?

9 A. On those basic components, yes. But
10 I think the legislation was very narrow in
11 describing the type of audit that needs to take
12 place.

13 Q. Okay. And you said you had no work
14 papers, right?

15 A. That's correct.

16 Q. So at the bottom of page 7 of your
17 direct testimony, you have a chart there with
18 specific numbers. Did you just do all of those in
19 your head?

20 A. No. I think that was taken from data
21 provided by Laclede.

22 Q. So you did do some calculations?

23 A. Well, I mean, the calculations there
24 are the percent. I mean, I don't think you need a
25 work paper that says the same thing as what's

1 included in your testimony.

2 Q. So you're saying that if I looked at
3 the work order for 900836, I would find 5,168 feet
4 of plastic?

5 A. Yes. And the whole focus of this
6 chart is not to be detailed. It's to give an
7 example of the number of feet of plastic that's in
8 your current ISRS application. The detail, the
9 technically correct, it doesn't have to be. It
10 just is -- on these work orders, it shows this
11 many, many, many thousands of feet of almost new or
12 relatively new plant that's being removed and
13 charged to the ISRS.

14 Q. Okay. So you're saying the accuracy
15 isn't important because you know that those numbers
16 are, in fact, inaccurate?

17 A. No. I know they're -- if they're not
18 exactly correct, which they may be, they're at
19 least substantially correct.

20 Q. Do you know --

21 A. The only requirement that I'm
22 concerned here is that they are substantially.
23 They show that there's thousands of feet. I mean,
24 if I had testimony saying that there's 28,000 feet
25 in these work orders, that's to give the -- let the

1 Commission know, hey, this is a substantial number.
2 This is not minimal patchwork, as I think Staff has
3 characterized.

4 Q. And are you aware that the
5 information you got these numbers from was from an
6 estimate, a work order estimate?

7 A. Well, that goes to the problem of you
8 doing estimates in our application and
9 supplementing with actual data. If you filed --

10 Q. Okay. Well, I'm not asking about the
11 update issue. My understanding is --

12 A. Well, it's directly related to the
13 update issue.

14 Q. -- you've pulled that issue.

15 A. It's directly related to the update
16 issue because it --

17 Q. Okay. Well, I'm not asking that
18 question.

19 A. Well, I'm answering that.

20 Q. Well, I don't want you to answer it.

21 A. That's okay.

22 JUDGE DIPPELL: Mr. Hyneman, please
23 only answer the questions that are asked you.

24 THE WITNESS: Okay.

25 BY MR. ZUCKER:

1 Q. Let me give you a hypothetical,
2 Mr. Hyneman. Let's say that Laclede Gas or MGE has
3 an ISRS project in which the utility installs 2,000
4 feet of new plastic main and replaces -- have you
5 got a paper there?

6 A. I think so, yes.

7 Q. -- and replaces 3,000 feet of cast
8 iron main. At the same time, another thousand feet
9 of plastic main comes out along with the cast iron
10 main or is abandoned along with the cast iron main.
11 The thousand feet is made up in part of patches
12 that were done to enhance the integrity of the old
13 cast iron main.

14 In this instance, you would agree
15 with me, simple math, that the cast iron main
16 removed exceeded the plastic installed?

17 A. Okay. And I tried to write as fast
18 as you spoke.

19 Q. Do you want me to give it to you
20 again?

21 A. Yes, please.

22 Q. 2,000 feet of new plastic main goes
23 in, 3,000 feet of old cast iron main is abandoned,
24 and 1,000 feet of plastic main is abandoned.

25 A. Okay.

1 Q. So would you agree with me that the
2 cast iron main removed exceeded the amount of
3 plastic installed?

4 A. Yes.

5 Q. And so just matching plastic in to
6 cast iron out, the project unquestionably qualifies
7 for ISRS treatment; would you agree with me?

8 A. The new plastic main to replace the
9 old cast iron main would qualify for ISRS
10 treatment. Any cost related to retirement of the
11 plastic main specifically would not be ISRS
12 eligible.

13 Q. Okay. So in that case there was no
14 cost to retire the plastic main. That was just a
15 bonus --

16 A. I think I need to --

17 Q. -- as part of the --

18 A. I think I need to rephrase. The cost
19 to replace existing plastic main with plastic main
20 would not be ISRS eligible.

21 Q. Okay. But there was no replacement
22 of plastic main with other plastic main. There was
23 replacement of cast iron with plastic main.

24 A. Then that's fine.

25 Q. Let me give you another hypothetical.

1 Let's say 5,000 feet of plastic is installed, new
2 plastic main. 4,000 feet of cast iron is retired,
3 and 1,500 feet of plastic is retired. Are you with
4 me?

5 A. Yes.

6 Q. How would you determine the ISRS
7 eligibility in this situation?

8 A. I would determine that the plastic
9 plant, the plastic pipe that was installed to
10 replace the plastic would not qualify for ISRS
11 treatment because you have a cost to remove plant
12 that's not deteriorated or in a worn-out condition.

13 Q. Okay. So we have all this specific
14 information in the ISRS statute on what the
15 Commission is supposed to look at but nothing on
16 allocating between cast iron and plastic; is that
17 correct?

18 A. Yeah. I don't -- I understand that
19 point. I don't think the Legislature intended you
20 to replace plastic with plastic.

21 Q. Well, are you aware --

22 A. Otherwise --

23 Q. Are you aware that Laclede was --

24 MR. POSTON: Judge, can he let him
25 finish his answers? Mr. Zucker keeps interrupting

1 him mid sentence.

2 MR. ZUCKER: I think he had finished
3 his point or made his point.

4 JUDGE DIPPELL: I'll ask both of you
5 to try not to talk over one another, but obviously
6 if Mr. Zucker believes that the witness has
7 answered the question, it's all right for him to
8 jump in there.

9 MR. POSTON: Before he's finished
10 with his sentence?

11 JUDGE DIPPELL: I will allow you to
12 object to that.

13 BY MR. ZUCKER:

14 Q. So are you aware that Laclede was
15 doing plastic replacements of small amounts of cast
16 iron prior to the ISRS legislation?

17 A. No. I had no experience with Laclede
18 prior to the ISRS legislation.

19 Q. Were you aware any utilities were --

20 A. Under --

21 Q. -- fixing cast iron?

22 A. Under MGE's service line replacement
23 program, I cannot recall, but I think that ended
24 with the ISRS in 2003. I can't recall that far
25 back if it did or not.

1 Q. Mr. Hyneman, you're aware that
2 Laclede Gas acquired MGE in 2013, are you not?

3 A. That sounds correct.

4 Q. And as part of that acquisition, MGE
5 agreed to make ISRS presentations or provide ISRS
6 materials for its upcoming ISRS plans; are you
7 aware of that?

8 A. I was not involved in that case, that
9 acquisition case.

10 Q. Okay.

11 A. So I don't doubt that that's true,
12 but I don't have any direct knowledge of that.

13 Q. Okay. So are you aware that each
14 August for the last three years, 2014, 2015 and
15 2016, MGE has provided its ISRS plans to Staff and
16 OPC?

17 A. Am I aware that that occurred?

18 Q. Yes.

19 A. No.

20 Q. So my guess is you didn't go to any
21 of those meetings?

22 A. Not that I can recall.

23 Q. Nor did you read the materials sent?

24 A. Who was it sent to?

25 Q. To Staff and OPC.

1 A. Do you know who at OPC you sent it
2 to?

3 **Q. Mr. Poston.**

4 A. You know, in my performance of my
5 duties, I review thousands of documents. I can't
6 exactly say I haven't reviewed those. I don't
7 recall reviewing those.

8 MR. ZUCKER: Okay. Permission to
9 approach the witness.

10 JUDGE DIPPELL: You may.

11 MR. ZUCKER: I've handed the witness
12 what's been marked Laclede Exhibit No. 7.

13 (LACLEDE EXHIBIT 7 WAS MARKED FOR
14 IDENTIFICATION BY THE REPORTER.)

15 BY MR. ZUCKER:

16 **Q. Mr. Hyneman, can you tell me what
17 this document is?**

18 A. The title is MGE ISRS Plan 2015 to
19 2017.

20 **Q. And what is it dated?**

21 A. It's dated August 29, 2014.

22 **Q. And do you know what it purports to
23 be?**

24 A. I guess a high-level summary of MGE's
25 service line replacement program and ISRS.

1 Q. Could you turn to page 11 for me?

2 A. Yes.

3 Q. And that page is titled Integrity
4 Verification of Transmission Lines; is that
5 correct?

6 A. It is.

7 Q. And does it say that those projects
8 would be performed through hydro testing to comply
9 with state and federal safety requirements?

10 A. It does.

11 Q. And does it also say that this allows
12 the company to extend the useful life of
13 transmission lines in lieu of expensive replacement
14 of those lines to meet safety requirements?

15 A. Yeah. I mean, it makes that
16 statement. The FERC specifically said that's not
17 true. They said hydro testing alone does not
18 extend the life of the plant. MGE, Mr. Noack or
19 whoever at MGE may think it does, but the FERC does
20 not consider that it does and it does not allow
21 hydrostatic testing, except in very limited
22 circumstances, to be capitalized as plant in
23 service.

24 Q. Okay. So this document indicates
25 that in 2014 MGE communicated to Staff and OPC that

1 **it was doing hydro testing projects?**

2 A. Right. And --

3 MR. POSTON: I'm going to object to
4 it. There's no -- he's assuming facts not in
5 evidence, that this document was provided to OPC
6 before.

7 JUDGE DIPPELL: Mr. Zucker, do you
8 have a response?

9 MR. ZUCKER: Well, it doesn't sound
10 like Mr. Hyneman is able to corroborate it, but let
11 me continue asking him a few questions. We can
12 find out.

13 JUDGE DIPPELL: I'll sustain the
14 objection to the -- your statement was that OPC had
15 provided -- or that Laclede had provided -- or MGE
16 had provided it to OPC, and I don't believe that
17 that fact is in evidence.

18 BY MR. ZUCKER:

19 **Q. Okay. Assume with me, if you will,**
20 **that it was sent.**

21 A. Okay. I was not --

22 **Q. That's an assumption.**

23 A. I was not employed by OPC in 2014.

24 **Q. Okay.**

25 A. So I was on the Staff, and this

1 document, to my knowledge, was not shared with me
2 by Staff.

3 Q. Okay. So if I were to show you this
4 same document from the next year, 2015, with the
5 same page in it and the same document from the year
6 2016 with the same page in it, would you recognize
7 any of those?

8 A. No. I have no doubt that they were
9 likely provided. I'm not going to quibble with
10 that, but I just have not seen them, to my
11 knowledge.

12 Q. Okay. And do you know whether OPC
13 raised any concerns regarding the ISRS eligibility
14 of hydrostatic testing costs during this period,
15 since August 2014?

16 A. I was not an employee of OPC until
17 December 1st of 2015.

18 Q. Okay. Well, how about since then?

19 A. I think that may have been two or
20 three cases. No. It was an oversight. We just
21 didn't get that thorough. And I know you don't
22 want to, but that goes back to the issue of
23 supplementing your filing with the very limited
24 audit time that OPC would have.

25 Q. You're right, I don't want to.

1 A. But I mean, that is the cause, likely
2 cause of not noting that you inappropriately
3 included hydrostatic testing.

4 Q. Okay. I didn't ask you why. I just
5 said, do you know of any.

6 A. I'm sorry. Do I know of any what?

7 Q. Do you know of any concerns that OPC
8 raised over the eligibility of hydrostatic testing
9 before Laclede did this work?

10 A. No.

11 Q. Thank you. One moment, please.

12 If MGE and Laclede Gas were to change
13 their ISRS practices to attach new main to old
14 plastic main, would you consider that to be
15 imprudent?

16 A. I must not understand the question
17 because that's what you're doing currently, right,
18 you're replacing old main with --

19 Q. So currently we are putting in new
20 main at a different level and a different position
21 straight across. Now, if we were to change that
22 practice to incorporate the old plastic with the
23 new plastic, in other words new plastic to old
24 plastic, then back to new plastic, instead of just
25 going straight across and abandoning all of it --

1 A. OPC is not suggesting that.

2 **Q. -- would you consider that to be**
3 **imprudent?**

4 A. I can't answer that sitting here
5 today. That's a prudence issue. It would probably
6 take a lot of discovery and meetings and
7 discussions on why all of a sudden do you need to
8 retire all this plastic plant. Is it a pressure
9 issue?

10 **Q. Well, I'm sorry. I haven't given you**
11 **a clear hypothetical, I think. We wouldn't be**
12 **retiring any plastic line. We would only be**
13 **retiring cast iron. We would be connecting --**

14 A. Right.

15 **Q. -- into the old plastic.**

16 A. Yeah. And my question goes to the
17 prudency. Right now I have no knowledge that
18 Laclede is acting imprudent in the method it's
19 replacing. I do know that it is including
20 inappropriate costs in the ISRS. So --

21 **Q. So if we were to do it the other**
22 **way --**

23 A. I can't answer.

24 **Q. -- do you know?**

25 A. I have no knowledge today that it is

1 imprudent or that the new method -- or going back
2 to the old method would be imprudent.

3 MR. ZUCKER: One moment, your Honor.
4 That's all I have, your Honor.

5 JUDGE DIPPELL: Thank you. Are there
6 questions from the Commissioners? Mr. Chairman?

7 CHAIRMAN HALL: Yes.

8 QUESTIONS BY CHAIRMAN HALL:

9 Q. Good afternoon.

10 A. Good afternoon.

11 Q. If the Commission were to determine
12 that hydrostatic testing is not an ISRS-eligible
13 item, would there be a way going forward for the
14 company to recover its costs related thereto?

15 A. Yes.

16 Q. And what would that be?

17 A. Well, Laclede is not doing
18 hydrostatic testing. It's just Missouri Gas
19 Energy, and I'm seeing they do very few of it. But
20 what that would be included is in a normalized
21 level of maintenance that's recovered in base
22 rates. They would fully recover their costs in
23 base rates, just not in the ISRS surcharge.

24 Q. Let me give you another hypothetical
25 because I'm not quite sure I understood all of your

1 **answers to the hypotheticals provided to you by**
2 **Mr. Zucker. Let's say that there's currently**
3 **100 feet of pipe in the ground, and 90 feet of that**
4 **is cast iron and 10 feet of that is plastic. With**
5 **me so far?**

6 A. Yes.

7 Q. And the company replaces that entire
8 100 feet with 80 feet of plastic. Now, my
9 understanding of OPC's position is that ten feet of
10 plastic replaced is not ISRS eligible?

11 A. Yes. Any segment --

12 Q. So how would OPC recommend that we
13 determine the amount that is ISRS eligible in that
14 scenario?

15 A. Again, there are many ways.

16 Q. Give me one.

17 A. One is just simply what is the cost
18 of the main that's replaced, the plastic main
19 replaced, and they normally assign dollar amounts
20 to that, what is that cost to the total work order
21 cost.

22 Q. So 80 -- so we're putting in 80 feet
23 of plastic.

24 A. Okay.

25 Q. What percent of that would you say is

1 **recoverable?**

2 A. If they put 80 feet of plastic that
3 replaces 10 feet of plastic?

4 Q. Well, 80 feet to replace 100 feet,
5 but of the 100 feet, 10 feet's plastic.

6 Q. Then I would say that 90 percent
7 would be ISRS eligible; 10 percent related to the
8 10 percent of the pipe that's removed, the plastic
9 that's removed would be.

10 Q. So you would say that the company
11 should retire 100 feet and only get credit for 72,
12 or is that --

13 A. No. I'm saying the portion of the
14 plastic that's installed that goes to replace the
15 plastic that's in the ground --

16 Q. But that's the problem is that -- I
17 mean, because you're replacing the entire line.
18 It's difficult for me to figure out what plastic is
19 replacing what plastic because the entire line is
20 being replaced and it's being replaced with less
21 total footage.

22 A. And given -- I don't know how common
23 that scenario is, but when you come to cost
24 allocations, you can have levels of precision. I
25 think we illustrated earlier, there are some costs

1 that can't be directly allocated in an exact
2 manner. This could be one of them.

3 In those situations, you come up with
4 reasonable allocation factors; for example, the
5 Massachusetts formula. When you need to allocate a
6 specific cost that you don't have a really close
7 allocation method, you do it under factors that are
8 general in nature. Here you could put amount of
9 time worked on a work order, total cost of
10 materials. There are -- there is some way that you
11 could do it to ensure that the piece -- that any
12 costs related to new plastic does not go in the
13 ISRS.

14 And it's important because it's --
15 that small piece, they're recovering that
16 currently. Especially Laclede with its current
17 earnings, it's recovering all of its costs. So the
18 big issue here is it's going to recover the costs,
19 just not in a separate surcharge.

20 **Q. Let me ask you this, then: Let's say**
21 **you had 100 feet of existing plastic line and there**
22 **is a leak in one section of it. Would it be**
23 **possible to replace that entire 100 feet and have**
24 **that be ISRS eligible?**

25 **A. If that's a 100-foot segment that has**

1 a leak?

2 Q. Uh-huh.

3 A. Yes.

4 Q. So you're replacing plastic with
5 plastic, and the entire 100 foot is ISRS eligible?

6 A. Because it's in a deteriorated
7 condition. It's leaking.

8 Q. One inch of the hundred feet.

9 A. Well, again, if you can go in and
10 repair that, if Laclede can do that, repair it and
11 charge it to expense. If it cannot be repaired and
12 it has to be replaced, then that would be ISRS
13 eligible, the 100 feet if that's the segment of the
14 pipe.

15 Q. So you would essentially give them
16 some discretion to define segment, then, in that
17 scenario?

18 A. Yes, I give them deference on
19 segment.

20 CHAIRMAN HALL: I have no further
21 questions. Thank you.

22 JUDGE DIPPELL: Commissioner Coleman?

23 COMMISSIONER COLEMAN: No, thank you.

24 JUDGE DIPPELL: All right. I think
25 that's all the bench questions for you. Is there

1 further cross-examination from Staff?

2 MR. THOMPSON: No, thank you, Judge.

3 JUDGE DIPPELL: Laclede?

4 MR. ZUCKER: Thank you, your Honor.

5 RECROSS-EXAMINATION BY MR. ZUCKER:

6 Q. The examples you just discussed with
7 Chairman Hall for allocating or -- yeah, I guess
8 allocating in some way costs, if I were to look at
9 the ISRS statute, could I find any of that?

10 A. No, because the ISRS statute does not
11 allow replacement of plastic pipe. Only pipe
12 that's in worn out and deteriorated condition.

13 Q. But when there is a mix of the two?

14 A. I don't think the statute assumes
15 there's a mix.

16 MR. ZUCKER: All right. Thank you.

17 JUDGE DIPPELL: Is there redirect
18 from Public Counsel?

19 MR. POSTON: Yes.

20 REDIRECT EXAMINATION BY MR. POSTON:

21 Q. I'm going to try to work backwards.
22 You had questions from the Chairman about giving
23 deference to Laclede on segments. I'm not sure
24 exactly what you meant by that. If in his scenario
25 the 100-foot segment had a leak and Laclede could

1 just patch that leak and not replace the 100-foot
2 segment but they went ahead and replaced the
3 100-foot segment instead, would that be a prudence
4 issue?

5 A. It would. But when I said I'd give
6 the deference, I said if Laclede can fix it, can
7 repair it, then it goes to maintenance expense.
8 And the deference goes if they made a determination
9 that this can't be fixed, it has to be replaced,
10 they would have deference on that to make the
11 judgment of they're going to replace the pipe.

12 Q. So what do you think determines what
13 a segment of pipe is?

14 A. I don't -- I think it's used with
15 different definitions in different terms. I have
16 not seen one single definition of it.

17 JUDGE DIPPELL: Mr. Hyneman, can I
18 get you to speak into your microphone, please?

19 THE WITNESS: Yes. Sorry.

20 JUDGE DIPPELL: Thank you.

21 BY MR. POSTON:

22 Q. Mr. Zucker asked you questions
23 about --

24 MR. ZUCKER: Can we pronounce it
25 Zucker just for --

1 MR. POSTON: Zucker?

2 MR. ZUCKER: Zucker.

3 MR. POSTON: Didn't I say Zucker?

4 MR. ZUCKER: You said Zucker.

5 MR. POSTON: Sorry. I've probably
6 been doing that for ten years, haven't I?

7 MR. ZUCKER: No. I think you just
8 picked it up.

9 MR. POSTON: Sorry.

10 BY MR. POSTON:

11 Q. Okay. Mr. Zucker --

12 MR. ZUCKER: Zucker.

13 MR. POSTON: Zucker, like Tucker?

14 MR. ZUCKER: No.

15 MR. POSTON: No?

16 MR. ZUCKER: Like hooker.

17 MR. POSTON: Okay.

18 BY MR. POSTON:

19 Q. Okay. So Laclede counsel asked you
20 if you change practices to attach the new main to
21 the old main instead of doing the way they
22 practice, would there be an objection. And do you
23 think that's likely that Laclede would go back to
24 their old method?

25 A. I would hope that they would not put

1 the safety of their customers in jeopardy by trying
2 to recover a few more dollars in the ISRS, so I
3 would hope they would not do that if the new method
4 is safer, more efficient.

5 Q. If it is, but do you know if it is or
6 not?

7 A. I don't know that it's not.

8 Q. Do you think the pressure of
9 Laclede's system might have something to do with
10 whether they would go back to the old method?

11 A. Yeah. My -- and I just have a
12 general understanding of the reason why that so
13 much current plastic pipe is being replaced is that
14 they're going from a low pressure, which required
15 more plastic pipe in the ground, to an intermediate
16 pressure pipe which requires less pipe, and that's
17 the reason why so much plastic pipe is being
18 replaced.

19 That's a general understanding that I
20 developed in this case, and it's going to take a
21 lot of discovery, discussions to find out more
22 about that.

23 Q. Laclede's counsel gave you a copy of
24 the MGE ISRS plan 2015-2017 and he referred you to
25 page 11. Do you recall that?

1 A. Yes.

2 Q. He was pointing you to the language
3 that talks about hydro testing.

4 A. Correct.

5 Q. And it says here that, performed
6 through hydro testing to comply with state and
7 federal safety requirements. Do you think the way
8 they are trying to recover the hydro testing costs
9 is in compliance with accounting requirements?

10 A. No. I'm absolutely certain that
11 their -- the cost of the hydro testing needs to be
12 charged to expense. I've done a lot of research on
13 that. I've read a lot of FERC orders and
14 discussions. There's only one exception that FERC
15 says that you can capitalize hydro testing, and
16 that is if you're doing it in a major
17 rehabilitation project, not in an ongoing service
18 line replacement program or ISRS that MGE is doing.

19 So there is no indication at all. In
20 fact, FERC has specifically prohibited this type of
21 hydro testing to be capitalized. I'm absolutely
22 convinced of that. I was curious of
23 Mr. Oligschlaeger, why he couldn't produce a
24 document to support his testimony, and that's part
25 of the reason why I think we'd like to look at

1 that.

2 Q. And there was questions about whether
3 or not OPC had gotten a copy of this document.
4 Even if Laclede did provide it, does that make
5 hydro testing eligible for ISRS?

6 A. This document here?

7 Q. Yes.

8 A. No. This --

9 Q. I'm saying if we had received that
10 and were aware of it, does that make hydro testing
11 eligible?

12 A. No. In fact, this doesn't indicate
13 they were capitalizing the hydro testing to their
14 ISRS. It doesn't say anything like that. It just
15 says that they've done integrity verification
16 projects, hydro tests in 2012, '13, '15, '16 and
17 '17. That's all it says.

18 Q. And so these plans, at least ISRS
19 plan goes up through 2017. Have you seen a similar
20 MGE ISRS plan that goes beyond 2017?

21 A. Yes. I think I looked at a similar
22 document yesterday.

23 Q. And what was that?

24 A. I can't recall the document. I'm
25 sorry.

1 Q. All right.

2 A. It was like budgeted ISRS, I think,
3 costs.

4 Q. And what did that show?

5 A. Again, my memory, I can't speak
6 specifically to what it showed. I could yesterday
7 but not today.

8 Q. Do you recall if it showed
9 significant increases in ISRS expenditures?

10 MR. THOMPSON: Judge, I'm going to
11 object. He says he does not recall.

12 MR. POSTON: I'm asking him if he
13 recalls specifics. If he doesn't remember that, he
14 can say so.

15 THE WITNESS: In general, I do.

16 MR. ZUCKER: That's also a leading
17 question.

18 MR. POSTON: I'm asking him to recall
19 the specific part of it. I'm not leading him in
20 any way. Either he recalls that or he doesn't.
21 I'm able to try to refresh his memory.

22 JUDGE DIPPELL: I'll overrule the
23 objections and let him answer.

24 THE WITNESS: My memory is that it
25 does show significant increases, and I think that's

1 consistent with what this document shows.

2 BY MR. POSTON:

3 Q. If a company has ended some of their
4 pipeline replacement programs, does it give you
5 concern if their ISRS expenditures are increasing?

6 A. Yes.

7 Q. And why is that?

8 A. Because the lower number of mains and
9 service lines to replace, you have a -- you'd
10 expect a lower number of projects to be completed.

11 Q. Does the company have an incentive to
12 increase their ISRS expenditures --

13 A. Yes.

14 Q. -- beyond reasons for safety?

15 A. Yes.

16 Q. Or financial reason?

17 A. Absolutely. It's part of Laclede's
18 strategy is --

19 MR. ZUCKER: I'm going to object.
20 Can we tie this to something that was talked about
21 in cross or from the Bench?

22 MR. POSTON: He's entered this
23 exhibit into the record showing their expenditures.

24 JUDGE DIPPELL: Actually, he didn't
25 enter that into the record.

1 MR. POSTON: He's used this as a
2 demonstrative exhibit during this case.
3 Commissioners have looked at it. Everybody's
4 looked at it.

5 MR. ZUCKER: I did not enter it into
6 the record because when I was questioning him,
7 Mr. Hyneman said he wasn't familiar with it.

8 MR. POSTON: He still asked him
9 questions about it, and I'm asking him about things
10 we see on here. It's the same thing. It's just
11 applying this beyond the dates beyond. That's all.

12 MR. ZUCKER: There's nothing on there
13 about having an incentive to do ISRS work.

14 MR. POSTON: Well, it's -- I don't
15 have to ask everything the same questions you have
16 asked.

17 JUDGE DIPPELL: I'm going to sustain
18 the objection for the reasons that Mr. Zucker
19 discussed. However, I think that there was some
20 testimony about incentives. So I will let you ask
21 questions about his incentive. I'm sorry. I'm
22 going to over-- I'm going to sustain his objection,
23 but I will let you ask questions about his concerns
24 for Laclede's incentives because I do believe there
25 was cross-examination or questions about that from

1 the Bench.

2 MR. POSTON: Okay. Thank you.

3 BY MR. POSTON:

4 Q. Now I can't recall what my question
5 was. Do they have incentives --

6 A. Yes.

7 Q. -- and does that give you concerns?

8 A. And I was saying that Laclede has a
9 strategy of growth, and they've added, I think
10 since their new CEO two years ago took over the
11 company, and their growth is through acquisitions,
12 we've seen they're out acquiring companies, and the
13 growth through rate base, because the higher the
14 rate base, the higher the profit for the company.

15 So ISRS is perfectly set up to boost
16 a rate base as high as they possibly can to boost
17 their earnings, and that is part of their overall
18 strategy.

19 Q. And could what -- is what we're
20 seeing with them going through and replacing
21 plastic that was just replaced recently, replacing
22 it again, could that be part of this strategy?

23 A. Could it? Yes. I have no knowledge
24 that it is.

25 MR. ZUCKER: Objection. Speculation.

1 JUDGE DIPPELL: I'll sustain.

2 BY MR. POSTON:

3 Q. And I believe Laclede's counsel
4 walked you through some scenarios, some
5 hypotheticals --

6 A. Right.

7 Q. -- using different footages. I
8 believe the first hypothetical he gave you was
9 there's 2,000 feet of new main being put in. He
10 says it replaces 3,000 foot of cast iron, and at
11 the same time 1,000 feet of plastic comes out. And
12 he asked you if you agree that the cast iron
13 removed -- scratch that.

14 In that scenario, do you know whether
15 the 2,000-foot main is replacing the 3,000-foot
16 cast iron or the 1,000-foot plastic?

17 A. No. That would be information the
18 company would have, and that would be part of their
19 allocation of the costs to non-ISRS/ISRS.

20 Q. Okay.

21 A. The company with the data, they have
22 the specifics, and we could -- I'm very comfortable
23 that we could come up with a reasonable and
24 rational allocation method. That's not that hard
25 to do. We don't need precise because we don't work

1 with precision in this type of work. So I'm
2 confident that, working with the company and the
3 Staff, we could come to a reasonable allocation
4 factor that we all could agree on.

5 Q. If the Commission determines that the
6 plastic is ineligible, what are our options?

7 A. Well, the options are, then, if it's
8 not going to be allocated out, then you cannot
9 include in ISRS any of the costs of the plant.

10 Q. Any of those work orders?

11 A. Right.

12 Q. He gave you some hypotheticals. I
13 would just like to look at some real examples, and
14 I'm going to hand you a copy of Laclede's Exhibit
15 No. 2, the Revised Summary of OPC Work Orders that
16 was part of Mr. Buck's testimony.

17 A. Yes.

18 Q. I don't believe you have this.

19 A. I do have a copy.

20 Q. Oh, you've got a copy?

21 A. Yes.

22 Q. Okay. So if we look down on
23 services, do you see the Work Order 900547?

24 A. Yes.

25 Q. In this instance, did the plastic

1 **retirements exceed the footage installed?**

2 A. Yes.

3 Q. **And the work order below it, did the**
4 **plastic retirements exceed the footage installed?**

5 A. Yes, by approximately 100 feet,
6 120 feet.

7 Q. **So in some cases, then, it's the**
8 **plastic retirements that are more is coming out**
9 **than the plastic that's going in?**

10 A. Correct. And that's the unusualness
11 of this situation.

12 Q. **And you were asked questions about**
13 **the chart on the bottom of page 7 of your**
14 **testimony.**

15 A. Yes.

16 Q. **What's the purpose of that chart?**

17 A. It's just to demonstrate the number
18 of work orders that we've seen, and there could be
19 many more, but the number of work orders that we've
20 seen that has a substantial number of feet of
21 plastic mains, recent plastic mains -- we're
22 looking at 2013, '16, 2015 -- that's been replaced
23 that are non-ISRS-eligible.

24 Q. **You were asked questions about -- I**
25 **guess in one of your answers you were talking about**

1 **a Staff data request.**

2 A. Yes.

3 **Q. Do you recall that? What was that**
4 **data request?**

5 A. Let me refer to that. The question
6 was related to what I thought the intent of the
7 legislation. There was quite a number of data
8 requests by Staff in this case, so it's hard to
9 track it down, but I believe I did answer it in my
10 testimony, if I can find it. And I can't. I don't
11 have the data request with me.

12 But what it is, is the intent of the
13 legislation was spelled out by, I think, the court,
14 the Supreme Court, and the Supreme Court said
15 basically it's to eliminate or mitigate the
16 regulatory lag rate recovery of the plant
17 replacements. That was the intent.

18 **Q. Okay. And I think at the very**
19 **beginning of the cross-examination you were asked**
20 **about whether OPC objected to Laclede's strategy**
21 **generally. And when you said no, were you**
22 **referring to just for purposes of this case?**

23 A. Yes. I mean, this could be -- the
24 situation they're doing now, replacing a lot of new
25 pipe, may be addressed in the rate case that

1 they're going to be filing here in a few months.
2 That may be a scope where we determine the prudence
3 or the reasonableness of that policy in that case.
4 But the purpose of this ISRS case, we're not
5 questioning the reasonableness, prudence of their
6 operational requirements.

7 Q. Could we raise prudence issues in
8 this?

9 A. No.

10 Q. What is the purpose of this case?

11 A. To determine that the costs that are
12 going to be charged in the surcharge are ISRS
13 eligible costs and it's calculated correctly.

14 Q. And that's the only issue?

15 A. That's the whole thing.

16 MR. POSTON: Okay. That's all I
17 have. Thank you.

18 JUDGE DIPPELL: Thank you. Okay.
19 Mr. Hyneman, I believe that concludes your
20 testimony, and you may be excused. And all the
21 other witnesses may be excused if I didn't excuse
22 you already.

23 So that concludes the hearing in
24 the -- the evidentiary part of the hearing. I
25 believe all of the exhibits have been entered. We

1 did request that these transcripts be expedited
2 until tomorrow and -- or for tomorrow, and briefs
3 are due on Friday.

4 I would just ask that you include in
5 your Briefs, Mr. Poston, if you'll remember to
6 include that Kansas citation.

7 MR. POSTON: Yes. Thank you.

8 JUDGE DIPPELL: And if you can, I
9 would encourage you to maybe include what it is
10 that the Commission can or can't do from a legal
11 standpoint in relation to a formula for
12 reallocation should they side with OPC, and also
13 any legal definitions of the term segment as it is
14 in the statute, any clarifications you could make
15 with regard to how depreciation is calculated, but
16 not a treatise, please, and also the interplay
17 perhaps of the FERC Order that we discussed with
18 the Commission's authority and rules, statutes, so
19 forth.

20 Those items would help me. I'm not
21 going to order you to provide those things, but
22 just some things that I noticed as we were going
23 through the hearing that I think would be helpful.

24 So seeing nothing else, I think that
25 that will adjourn the hearing. We can go off the

1 record.

2 (WHEREUPON, the hearing concluded at
3 3:42 p.m.)

4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

1	I N D E X	
2	LACLEDE'S EVIDENCE:	
3	GLENN BUCK	
4	Direct Examination by Mr. Zucker	53
5	Cross-Examination by Mr. Thompson	58
	Cross-Examination by Mr. Poston	59
6	Questions by Chairman Hall	92
	Recross-Examination by Mr. Poston	98
7	Redirect Examination by Mr. Zucker	108
8	MARK LAUBER	
	Direct Examination by Mr. Zucker	118
9	Cross-Examination by Mr. Poston	120
	Questions by Chairman Hall	134
10	Questions by Judge Dippell	140
	Recross-Examination by Mr. Poston	143
11	Redirect Examination by Mr. Zucker	145
12	STAFF'S EVIDENCE:	
13	JENNIFER GRISHAM	
14	Direct Examination by Mr. Thompson	154
	Questions by Judge Dippell	155
15	KIM BOLIN	
16	Direct Examination by Mr. Thompson	157
	Cross-Examination by Mr. Poston	160
17	Questions by Chairman Hall	170
	Recross-Examination by Mr. Poston	171
18	Redirect Examination by Mr. Thompson	173
19	MARK OLIGSCHLAEGER	
	Direct Examination by Mr. Thompson	177
20	Cross-Examination by Mr. Poston	178
	Questions by Chairman Hall	196
21	Recross-Examination by Mr. Zucker	198
	Recross-Examination by Mr. Poston	201
22	Redirect Examination by Mr. Thompson	203
23		
24		
25		

1	OPC'S EVIDENCE:	
2	CHARLES HYNEMAN	
3	Direct Examination by Mr. Poston	206
4	Cross-Examination by Mr. Thompson	207
	Cross-Examination by Mr. Zucker	207
5	Questions by Chairman Hall	229
	Recross-Examination by Mr. Zucker	234
6	Redirect Examination by Mr. Poston	234
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		

1	LACLEDE'S EXHIBITS INDEX	
2		RECEIVED
3		
4	EXHIBIT NO. 1	
5	Direct Testimony of Glenn W. Buck	54
6	EXHIBIT NO. 2	
7	Rebuttal Testimony of Glenn W. Buck	57
8	EXHIBIT NO. 3	
9	Rebuttal Testimony of Mark D. Lauber	120
10	EXHIBIT NO. 4	
11	Verified Application and Petition of Laclede Gas Company to Change its Infrastructure System Replacement Surcharge in its Laclede Gas Service Territory	58
12	EXHIBIT NO. 5	
13	Verified Application and Petition of Missouri Gas Energy, an Operating Unit of Laclede Gas Company, to Change its Infrastructure System Replacement Surcharge in its Missouri Gas Energy Service Territory	58
14	EXHIBIT NO. 6	
15	Graph - Laclede ISRS Cast Iron Replacement	*
16	EXHIBIT NO. 7	
17	MGE ISRS Plan (2015-2017)	*
18	STAFF EXHIBITS INDEX	
19	EXHIBIT NO. 1	
20	Direct Testimony of Caroline Newkirk	153
21	EXHIBIT NO. 2	
22	Direct Testimony of Jennifer K. Grisham	155
23	EXHIBIT NO. 3	
24	Direct Testimony of David M. Sommerer, Case No. GO-2016-332	153

1	EXHIBIT NO. 4	
2	Direct Testimony of David M. Sommerer,	
3	Case GO-2016-0333	153
4	EXHIBIT NO. 5	
5	Rebuttal Testimony of Kimberly K. Bolin	159
6		
7	EXHIBIT NO. 6	
8	Rebuttal Testimony of Mark L. Oligschlaeger	178
9		
	OPC'S EXHIBITS INDEX	
10	EXHIBIT NO. 1	
11	Direct Testimony of Charles R. Hyneman	206
12	EXHIBIT NO. 2	
13	Legend for State or Federal Safety Requirements, 393.130.1	64
14	EXHIBIT NO. 3	
15	900547 Retirements	92
16	EXHIBIT NO. 4	
17	Subchapter F - Accounts, Natural Gas Act	186
18	EXHIBIT NO. 5	
19	FERC Order on Accounting for Pipeline Assessment Costs, Docket No. AI05-1-000	192
20		
21		
22		
23		
24		
25		

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

C E R T I F I C A T E

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

I, Kellene K. Feddersen, Certified Shorthand Reporter with the firm of Midwest Litigation Services, do hereby certify that I was personally present at the proceedings had in the above-entitled cause at the time and place set forth in the caption sheet thereof; that I then and there took down in Stenotype the proceedings had; and that the foregoing is a full, true and correct transcript of such Stenotype notes so made at such time and place.

Given at my office in the City of Jefferson, County of Cole, State of Missouri.

Kellene K. Feddersen, RPR, CSR, CCR

EVIDENTIARY HEARING - Vol. I 1/3/2017

A	167:9 184:9	34:3 106:11	affect 161:8,13	202:20 215:1
A's 62:20	189:9,25 190:5	added 71:25	163:1 180:4	218:14 219:1,7
a.m 3:3	195:6	73:1 77:15	affirm 136:20	244:12 245:4
abandon 146:12	accounting 50:2	243:9	afternoon 160:3	agreed 58:6,9
abandoned	102:22 106:24	adding 170:22	160:4 170:5,6	222:5
94:22 202:19	162:7,8,17	addition 13:25	178:15,16	agreeing 11:23
203:5 218:10	163:6 167:5,15	26:15	196:17,18	agreement
218:23,24	174:8 179:24	additional 31:20	198:21,22	11:19 12:12,15
abandoning	181:4 183:3	31:21 108:1,22	207:3,9,10,18	17:20,22
25:1 227:25	186:17 189:8	140:2 144:25	207:19 229:9	agreements
abbreviated	189:24 190:17	additions 91:15	229:10	71:13
154:15	191:3,14 192:2	97:15,21 158:2	age 44:11,18	ahead 3:22 7:9
ability 188:13	193:7 195:5	183:12	91:2	7:11,18 19:2
able 21:10 31:25	199:7,15,25	addressed 19:5	aging 132:7,13	27:1 35:20
99:10 106:25	200:2,8 201:24	43:5 79:1	132:17,19	50:11 53:5
110:17 115:16	204:25 238:9	247:25	ago 41:20 115:8	92:19 98:9,14
115:18 169:7	254:17	addresses 65:15	166:23 167:19	108:2 151:6
169:12,18,21	accounts 183:15	182:15	243:10	152:22 154:6
172:9 178:21	184:19,21	adds 57:8	agree 6:17 38:15	157:10 206:19
179:13 188:16	185:17 186:3,4	adequacy	41:12 47:9	207:6 212:14
203:14 210:4	186:18 187:4	187:17	60:3,15,24	235:2
225:10 240:21	187:25 188:14	adequate 65:6	61:8 62:22	AI05-1-000
above-entitled	190:24,25	65:16 76:24	63:2,18 65:4	254:17
255:8	204:3 254:15	adjoining 70:16	65:17 69:5,10	aligned 36:3
absence 98:20	accuracy 216:14	adjourn 249:25	69:12 70:12	allocate 93:17
absent 44:9	accurate 84:2,7	adjustment	75:23 78:6,17	93:18 94:5
100:22	100:15 123:7	106:10,21	79:4 80:18	95:3 173:2
absolutely 96:13	126:5 132:23	175:17	81:2,9 86:9	232:5
110:12 112:8	134:6 173:3	administration	87:5,12,15	allocated 211:13
138:7,7,18	194:9	11:24	88:2 91:15	232:1 245:8
140:15 238:10	acquired 222:2	admission 6:3	99:9 100:8	allocating
238:21 241:17	acquiring	58:12 159:12	102:13 107:13	220:16 234:7,8
accelerate 132:7	243:12	admit 6:4 54:20	107:16 111:1	allocation
accept 80:3,23	acquisition	57:24 58:17	123:7,14,19	172:24 211:11
acceptable	222:4,9	64:19 92:5	124:1,15,24	232:4,7 244:19
191:2	acquisitions	119:25 152:2	125:7 130:7	244:24 245:3
access 3:18	243:11	153:13 155:16	135:14 165:15	allocations
accessible 139:1	act 184:19	159:17 178:5	165:24 166:9	231:24
139:8	193:17 254:15	186:12 192:7	166:12 168:11	allocator 173:5
accomplish	acting 228:18	206:20	168:14,24	allow 8:17 17:24
20:12	activities 192:14	admittance	172:7 173:24	17:25 19:1
account 99:23	193:14	119:19	174:4 182:3,13	46:5 49:24
183:20 190:16	actual 44:19	adopt 51:20	182:24 184:20	88:13 112:22
198:5 202:14	87:6 99:18	170:8 171:3	186:16 187:19	112:25 132:1
204:17	125:24 170:25	adopted 46:11	188:23 191:13	134:1 146:10
accountant	217:9	168:4	191:17 195:24	162:18 170:13
102:19 103:2	add 5:21,24 21:5	advised 17:8	199:5 201:14	181:10 183:4

MIDWEST LITIGATION SERVICES

EVIDENTIARY HEARING - Vol. I 1/3/2017

214:14 221:11 224:20 234:11 allowable 20:3 20:12 21:11 23:15,23 146:9 allowed 9:21 10:7,16 12:4,6 18:19 49:23 114:23 182:21 183:12 195:8 allowing 133:2 168:4 allows 51:13 188:1 224:11 alluded 197:25 alongside 202:18 alternative 4:21 amount 11:22 31:1,2,10 57:5 71:9 93:1 94:7 99:5,8 100:8 100:20,20 105:7,19 115:14 116:16 117:1 161:3 175:13,14,21 176:1 197:21 198:1,2,7 200:16 201:2 202:3,4,12 219:2 230:13 232:8 amounts 11:25 83:10 93:13 109:14 114:22 133:2 221:15 230:19 analogous 44:21 analysis 50:19 129:17,19 angle 28:20 annual 97:24 annually 143:16 anodes 125:1 answer 16:24 26:20 27:7	32:1 68:12 73:24 76:8 88:14 89:7,23 90:16 104:9,11 113:1 114:24 132:2 161:24 162:7,19,20 163:11 167:2 179:13 180:22 181:1,4 188:19 197:17 198:12 213:11 214:21 217:20,23 228:4,23 240:23 247:9 answered 17:7 88:12 150:10 181:1 214:4,15 214:20 221:7 answering 16:15 53:2 67:16 147:9 217:19 answers 17:5 32:21 54:9 55:4 57:15 86:10 119:14 155:3 159:4 177:19,22 182:17 201:25 206:8 220:25 230:1 246:25 antsy 18:21 anybody's 48:21 93:4 anymore 104:8 104:16,17 anyway 102:23 110:6 apologize 97:4 130:13 208:20 Apparently 133:12 appeal 11:1 Appeals 9:5 appear 46:1 109:8 185:19 appearance	3:23 APPEARAN... 2:1 appearing 4:6 appears 44:15 87:9 184:23 191:14,18 199:6 200:1 204:24 appendix 62:10 62:20 96:19,22 96:25 97:1,3,9 97:14,16,20 applicable 187:7 189:17 204:20 204:23 application 1:10 1:15 9:17 58:7 58:8 95:12 96:14,16,23 97:13,14 156:5 170:15 212:18 216:8 217:8 253:9,13 applied 9:7,14 42:20 189:12 applies 8:6 13:14 72:7,19 apply 9:9 16:7 39:22 43:8 71:21,24 72:9 73:1 100:12 189:7,15 applying 121:20 242:11 appreciate 6:14 140:5 approach 6:3 8:23 28:2 55:18 86:5 130:11 138:4 171:3 184:2 197:11 203:20 223:9 approaching 68:11 appropriate	4:15 31:14 approved 11:20 12:12 75:9 approximately 65:22 94:20,24 113:18 201:3 246:5 April 15:13,17 204:3 arbiter 191:1 area 27:17 103:1 121:4 138:12 139:22 203:4 209:6,16 areas 130:21 argue 7:7 10:5 11:8 19:15 66:6 195:13 argued 5:1,7 8:20 9:2 16:6 argues 15:10 arguing 5:18 7:25 8:14 195:20 argument 7:18 8:12 10:15 15:7 16:5 31:3 131:24 132:5 194:3 arguments 7:8 9:3 15:16 19:3 19:8,9 113:3 117:21 arises 19:20 arms 28:13 arrangement 32:6 arrows 34:19 asked 16:2 17:9 33:25 46:7 54:8 55:3 57:14 60:23 66:20 72:6 85:22 86:15,21 90:13,14 91:11 99:3,7,14 100:6 102:23	114:21 117:7 119:12 129:3 134:24 145:7 147:2,8 150:1 160:24 162:6 165:5 169:7,12 169:19,21 171:17 173:12 173:21 174:20 175:22 179:12 181:8 188:9 213:12 217:23 235:22 236:19 242:8,16 244:12 246:12 246:24 247:19 asking 18:5 22:7 51:10,15 66:4 66:13,19,23 67:2,18 88:19 101:13 110:18 110:24 112:16 113:20 117:17 129:1,6 131:23 133:4,17,19 162:15 165:23 167:6 210:2 217:10,17 225:11 240:12 240:18 242:9 asks 192:12 Assembly 13:21 42:16 assess 33:16 137:1 assesses 33:21 assessing 193:17 assessment 191:15 192:3 192:13 193:13 254:17 asset 21:16 23:13,19 146:17 160:19 161:1 174:5 179:18,22 180:1,10,10
---	--	--	--	--

MIDWEST LITIGATION SERVICES

EVIDENTIARY HEARING - Vol. I 1/3/2017

181:13 189:20 193:19,23 194:1,5 assets 104:19 160:7 161:7,12 161:18 162:25 163:7 180:3,13 assign 230:19 assigned 3:11 associated 45:20 183:11 assume 78:19 80:23 85:8 88:6 97:8 108:8 135:9,10 138:15 181:24 183:14 190:5 191:25 225:19 assumed 138:4 179:21 assumes 234:14 assuming 46:2 225:4 assumption 81:15 203:10 225:22 attach 227:13 236:20 attached 65:4 156:2 182:10 attaching 125:1 attack 187:25 188:5,7 attend 209:19 210:5 attorney 2:3,4 66:6 72:21 113:2 125:6 audit 8:19 215:11 226:24 auditing 156:9 177:9 auditor 157:20 August 222:14 223:21 226:15 authoritative 204:5	authority 17:15 68:18,20 72:16 78:23 111:9 190:4 249:18 authorization 83:13,18 84:7 84:22 158:9 166:8 available 99:20 99:25 194:18 average 16:16 81:24,25 101:25 105:13 161:8,13,19 163:1,8 180:4 180:14 181:17 181:21 avoid 167:24 aware 13:22 15:25 24:16,16 24:17 46:10 77:7 89:18 108:11 175:19 189:6 204:6 209:14 217:4 220:21,23 221:14,19 222:1,7,13,17 239:10	102:8 106:7,17 114:8 115:7 118:4 123:2 128:14 138:12 148:3,11 153:21,24,25 162:5 170:14 171:18 175:23 176:2 194:21 205:11,12,12 205:15 221:25 226:22 227:24 229:1 236:23 237:10 backed 174:24 background 135:10 174:10 174:18 backing 197:12 backwards 234:21 balance 93:14 ballpark 175:20 200:19,25 ban 15:15 band 51:12 bare 60:12 65:21 76:11 128:7 bargain 12:8 base 83:10 89:21 89:25 90:15 160:16,21 162:16 229:21 229:23 243:13 243:14,16 based 39:19 83:18 88:6 157:4 162:6,8 163:5 167:7,21 171:11 181:11 184:23 basement 140:24 141:2 142:10 basements 140:25	basic 140:9 215:9 basically 4:20 10:11 21:18 34:20 114:23 192:5 247:15 basis 87:16 126:8 212:4 began 3:2 beginning 247:19 begins 192:18 behalf 4:10 7:22 belief 155:7 159:9 177:22 believe 3:21 4:21 30:6 34:5 35:5 36:17 56:10 57:11 62:7 63:7 64:25 65:18 74:1 75:6,11 88:20 98:7 128:15 130:5 130:10 132:4,8 134:21 148:25 161:4 166:15 171:9 176:15 176:21 183:18 197:13 198:16 210:1 211:19 213:24 214:12 225:16 242:24 244:3,8 245:18 247:9 248:19 248:25 believes 33:19 38:17 221:6 belong 5:1 50:3 bench 3:14 7:24 8:24 28:2 233:25 241:21 243:1 benefit 12:8 22:6 50:15 best 8:11 19:11 27:9 155:6	159:8 172:16 177:21 better 6:13 17:18 31:25 53:2 64:24 68:6 73:5 74:2 74:13 78:5 81:1 172:21 179:9 beyond 166:9,10 239:20 241:14 242:11,11 big 232:18 bigger 93:17 binding 190:18 190:21 bit 61:25 85:17 130:13 147:18 bits 152:23 blame 16:12 block 27:21 board 32:19 bodies 204:16 Bolin 152:8 157:12,14,16 160:3 176:21 178:18 179:12 251:15 254:5 bonus 219:15 booking 180:1 books 90:10 103:1,13,14,20 104:6,16 boost 243:15,16 bore 27:20 bottom 28:7,19 57:2 69:1 87:19 137:25 158:23 215:16 246:13 Box 2:9,14 4:1 brand 45:11 brand-new 45:9 107:6 break 86:18 92:16,20 98:14 98:17,19
	B			
	B 62:24 64:6 68:19 71:19 78:11 96:19 97:1,3,16,20 122:18 B-o-l-i-n 157:18 B-u-c-k 53:13 back 3:13 7:23 8:20 9:20 14:2 25:3 28:25 32:18 39:3 54:6 56:17,22 76:23 79:22 83:5 84:24 92:11 94:11 96:21 98:16,18			

MIDWEST LITIGATION SERVICES

EVIDENTIARY HEARING - Vol. I 1/3/2017

152:19,24 153:23 205:9 205:14 breaks 80:1 brief 6:10 7:8,18 47:16,19 66:6 98:19 113:3 briefly 58:23 briefs 117:21 195:12,22 249:2,5 bring 8:9 12:3 194:21 bringing 6:14 broader 192:22 broadly 38:9 193:13 197:16 brought 46:24 Bruno 19:21,24 Buck 53:8,13,13 53:17,19,23 54:3,25 55:24 58:3 59:14 66:5,8 72:11 91:19,21 108:6 108:21 109:4 112:20 113:13 120:14 128:15 251:3 253:5,6 Buck's 245:16 budgeted 240:2 buildings 140:25 built 20:1 104:21 160:13 160:15,18,25 161:3 179:13 179:17 business 16:18 16:20 businesses 149:24 butt 137:3	70:19,21,22 73:12 74:3 78:11 96:25 255:1,1 calculate 93:21 100:7 178:18 178:22 215:2 calculated 48:21 48:22 175:5 248:13 249:15 calculation 57:4 93:5,7,24 95:8 95:11 99:4 105:22 115:16 171:3 calculations 59:4 60:20 97:17 215:22 215:23 calculator 87:17 call 19:16 22:18 34:23 106:25 136:24 154:1,2 205:16,18 called 20:3 21:3 46:12 189:9 192:23 calling 3:16 89:6 111:2 calls 53:7 72:3 118:9 127:2 157:12 165:19 176:24 181:6 capital 22:25 23:1,2,6,8 51:24 105:14 183:11 200:13 215:8 capitalization 183:4 capitalize 23:12 200:10 238:15 capitalized 23:18 50:1 146:24 183:8 188:2 189:11 190:13 192:14	195:8 199:13 199:16,21 200:4,20 224:22 238:21 capitalizing 239:13 caption 255:9 care 25:2 152:18 196:9 Caroline 151:23 153:3 253:21 case 1:11,16 3:5 5:2,7,25 7:10 7:12 8:2,3,14 9:3,19 10:18 10:19 11:3,18 11:25 12:9,12 12:13,21 14:17 14:19,22,24 15:4 18:23 19:15 21:2 22:2 24:4 29:19,19,19 30:4 38:22 40:19 42:24 43:4,5 44:21 45:4,17,22,24 47:3 48:24,25 51:2,8 53:24 54:4 59:24 61:4 91:21 97:22 106:4 109:4,16 111:17 113:15 115:18 116:19 116:22 118:3 119:2 131:5,10 137:20 144:1 145:23 147:22 153:5,6 156:6 160:14 165:11 175:12,15 178:19 179:14 196:20 197:9 200:22 202:11 207:12 209:21 210:20 211:5	212:11 213:4 219:13 222:8,9 237:20 242:2 247:8,22,25 248:3,4,10 253:25 254:3 cases 4:14 10:14 10:16 11:24 12:15,22 14:18 16:1,7 18:25 111:16 139:2 141:14 142:14 142:24 148:2 160:19 161:1 179:18 226:20 246:7 cast 5:14 19:18 24:5,10,13,17 24:22,25 25:1 25:2,6,17 26:10 27:25 28:4,11,14,22 30:2,16 31:1 32:11 33:8,9 33:12,18 34:4 34:7,10,21 35:3,16 36:6 36:24 37:7 46:1 47:2 48:17 60:8 65:20 67:19 68:9 69:13,16 69:24 71:9 74:17 75:1,5,7 76:14 82:3 84:18 85:2,12 89:19,24 94:6 94:23,24 106:13 108:7,8 108:14 111:24 112:6,14 113:8 113:24 114:6,9 114:13 115:15 115:23,23 116:12,18,20 116:23 124:11 125:15 127:20	127:22 128:4,7 128:19 129:19 132:14,21 137:20 140:22 149:12,15 150:24,25 158:19,23 168:19,21 169:1 170:23 172:11 182:10 198:1,8 202:4 202:12,13,18 202:20 203:2,4 203:9,12 210:17 218:7,9 218:10,13,15 218:23 219:2,6 219:9,23 220:2 220:16 221:15 221:21 228:13 230:4 244:10 244:12,16 253:17 category 84:19 cathodic 75:19 76:4,6,10 124:22,25 126:19 208:12 cathodically 76:12 cause 91:13,15 154:19 157:22 177:11 227:1,2 255:8 caused 206:5 causeway 83:24 caveat 80:22 120:13 CCR 1:25 255:17 cease 179:25 CEO 243:10 certain 28:10 80:25 173:2 175:12,14 177:12 183:5 238:10
<hr/> C <hr/> C 2:3 3:1 4:10 62:24 64:6				

MIDWEST LITIGATION SERVICES

EVIDENTIARY HEARING - Vol. I 1/3/2017

<p>certainly 8:6,22 13:22 16:3,23 18:7 20:23 75:10 112:2 114:13 136:3 137:5 182:6 188:16 190:20 201:14 208:1</p> <p>certification 208:23</p> <p>certifications 208:10,16 209:8</p> <p>certified 102:19 103:1 184:9 255:4</p> <p>certify 255:6</p> <p>cetera 83:25 97:15</p> <p>Chairman 1:21 13:6 18:11 22:10,25 23:5 24:2 26:16 29:2,7,16 30:3 30:17 31:3,13 31:17,20 32:2 37:13,15 38:2 38:11,18 39:9 39:14,17,23 41:4,19,25 46:7 51:19 52:3,9,16,24 92:17,20,22,23 98:4 99:3 103:9 113:14 134:17,18 135:25 136:2 136:11 137:7 137:24 139:24 152:16,20 170:2,4 171:6 171:18 174:20 196:14,15,16 198:14 229:6,7 229:8 233:20 234:7,22 251:6 251:9,17,20</p>	<p>252:5</p> <p>Chairman's 171:11</p> <p>challenge 134:9</p> <p>challenged 15:5</p> <p>challenging 45:17,24 128:10 132:24 134:7</p> <p>chance 86:3 191:10</p> <p>change 1:11,16 3:8 18:7 32:5,8 46:14,19 49:12 51:11,16 55:20 56:6 57:2,13 90:11 121:22 125:2 127:12 128:25 129:11 179:20 183:17 190:14 227:12 227:21 236:20 253:10,14</p> <p>changed 56:12 65:19,23 90:18 90:20,22 166:7</p> <p>changes 49:8 54:11 56:9 119:16 121:19 154:24 177:15 187:16</p> <p>changing 24:21 44:17 52:22 210:25</p> <p>characterized 217:3</p> <p>charge 233:11</p> <p>chargeable 187:3</p> <p>charged 90:21 99:22 193:10 196:24 204:17 216:13 238:12 248:12</p> <p>charges 111:11 111:21 204:18 215:3</p>	<p>Charles 205:19 205:25 206:3,4 252:2 254:10</p> <p>chart 186:3 215:17 216:6 246:13,16</p> <p>check 56:17 117:5 151:4</p> <p>cherry 34:2</p> <p>chief 2:13 189:9 189:25 190:5 195:6</p> <p>choice 20:21 146:11</p> <p>choices 172:3</p> <p>choose 74:5</p> <p>chose 13:23 35:14 74:12</p> <p>chosen 21:1</p> <p>chunks 48:17</p> <p>circle 64:9</p> <p>circumstances 183:5 188:3 189:10,14 193:24 195:7 224:22</p> <p>citation 78:22 249:6</p> <p>citations 17:14 17:15</p> <p>cite 6:9 47:15 64:6 68:19,20 72:16 128:24 129:4 130:3</p> <p>cited 62:23 63:3 77:9 192:21 214:12</p> <p>cites 65:2</p> <p>citing 66:19 75:14</p> <p>City 1:7 2:10,15 4:2 21:4 255:14</p> <p>claim 49:16 72:15</p> <p>claimed 46:6</p> <p>claims 66:9</p>	<p>clamp 124:11</p> <p>clarification 154:14 157:1</p> <p>clarifications 249:14</p> <p>clarified 117:4</p> <p>clarify 136:18 190:11</p> <p>class 180:10 181:13</p> <p>classified 99:24</p> <p>clean 147:20</p> <p>cleaner 11:6</p> <p>cleaning 123:17 147:10</p> <p>clear 13:15 42:18 43:1,10 43:12,25 140:14 192:20 197:20,23 211:18 228:11</p> <p>clearing 187:4</p> <p>clearly 17:22 44:21 187:25 188:10</p> <p>clock 98:14,15 98:19 153:19 205:12</p> <p>clockwork 11:12</p> <p>close 11:17 92:15 114:17 120:25 232:6</p> <p>closely 81:14 84:2</p> <p>coated 76:7,11</p> <p>codes 62:18,19 62:24 63:8</p> <p>coils 137:11,17</p> <p>cold 141:6</p> <p>Cole 255:3,15</p> <p>Coleman 1:22 140:6,7 152:14 233:22,23</p> <p>collected 104:24</p> <p>Columbia 173:15</p>	<p>column 56:10,25 57:1 62:14,17 94:18 158:21</p> <p>columns 56:19 56:23</p> <p>combination 69:25 74:8</p> <p>come 9:8 25:3 28:23,24 38:14 48:15 98:16 100:3,19 102:6 136:6,7 137:9 137:15 153:21 170:17 172:3,5 178:23 194:6 205:11,12 231:23 232:3 244:23 245:3</p> <p>comes 51:25 90:8 95:17 99:19 118:4 127:3 142:19 218:9 244:11</p> <p>comfortable 244:22</p> <p>coming 6:21 11:11,12 34:4 52:19 93:14 100:17 246:8</p> <p>comment 6:12 203:15</p> <p>comments 41:20 211:14</p> <p>Commission 1:2 2:14,17 4:1 8:8 8:17 9:4,13 10:7,22 11:20 12:9 13:11,17 14:1,7,18 15:7 15:10,18,19 16:2 18:5,22 30:6,17 36:2 42:17,19 43:6 43:9,12,25 44:13 46:20 51:20,22 60:15 74:6,7 75:9</p>
---	---	---	--	--

MIDWEST LITIGATION SERVICES

EVIDENTIARY HEARING - Vol. I 1/3/2017

77:4 101:6 102:11 111:9 127:14 131:4 131:25 134:17 143:16 152:1 152:12 157:21 170:1,8 171:9 171:19,21,22 174:21 177:10 178:20 183:3 190:19,22 191:2 196:13 197:5 201:12 201:15,19 204:7 215:6 217:1 220:15 229:11 245:5 249:10 Commission's 14:14 15:12 18:2 38:21 43:7 50:2 64:1 68:21 69:2 76:21 77:14 165:16,24 186:17 193:6 249:18 Commissioner 3:15,16 47:20 48:14,23 49:3 50:9,10,12,13 50:21 51:5,17 92:19 98:7 108:1,16,17,20 108:23 122:7 135:25 136:4 136:11,20 137:8,13,16,22 140:2,4,6,7 145:1 152:14 155:22 198:16 233:22,23 commissioners 1:23 3:18 35:21 64:24 92:14 190:6 229:6 242:3	common 231:22 communicated 224:25 communicatio... 213:3 companies 184:22 187:20 188:24 243:12 company 1:11 1:16 2:4,7 3:7 3:7 4:11,14 7:22 20:13 36:3 38:25 39:6 46:16 50:15,18 51:11 51:23 53:22 58:7 71:13 75:17 104:18 107:12 110:11 118:24 167:24 176:16 197:7 200:20 202:22 224:12 229:14 230:7 231:10 241:3,11 243:11,14 244:18,21 245:2 253:10 253:14 company's 30:3 compared 91:3 114:1 comparing 100:18 comparison 114:9 compensation 5:12 complaint 214:19 complete 25:19 77:1 99:17 214:22 completed 241:10 completely 107:14 118:2	141:24 142:8 compliance 43:14 83:20 143:12 146:6 238:9 complications 179:7 comply 40:12 43:17 61:10 79:2 224:8 238:6 complying 208:16,24 component 135:5 components 37:19 43:17 202:24 215:9 compound 142:3 computer 29:25 153:19 concept 167:5 199:11 concern 51:7 95:17 99:15 210:19,21 241:5 concerned 216:22 concerning 37:16 51:22 concerns 211:15 226:13 227:7 242:23 243:7 conclude 151:15 190:12 concluded 250:2 concludes 53:4 151:10 176:21 248:19,23 conclusion 12:24 50:5 66:5 72:3 89:6 117:18 129:2 131:21 165:20 conclusions	156:9 condensation 141:7 condition 22:20 40:14 41:1,11 42:23 44:4,8 44:11 79:6,12 79:15,17 81:19 87:14 88:4,8 168:13 174:5 187:14 193:8 193:14 220:12 233:7 234:12 conditions 80:10 174:16 conductive 139:7 conduct 193:25 conducted 161:15 conference 3:16 confident 245:2 confront 195:23 confused 127:17 185:5 conjunction 145:18 connect 31:8,22 33:5 136:7,12 136:15 138:5 139:11 144:20 connected 80:2 132:20 135:21 135:21 139:3 165:18 166:1 connecting 67:21 68:10 144:10,13 228:13 connection 136:23 142:20 144:17 198:24 connections 135:13 137:3,4 137:25 connective 66:3 67:13 connects 73:18	140:18,20 consequence 33:14,16 consider 93:10 101:13 126:3 149:15,17 164:18,22 165:11 173:15 176:9 213:21 224:20 227:14 228:2 considered 67:22 101:12 102:17 146:6 considering 80:6 consist 123:4 consisted 24:19 consistent 44:25 199:7 200:1 201:25 241:1 constantly 141:7 constructed 23:17 construction 83:20 99:23 109:19 136:25 137:6 189:12 199:15,17 204:25 207:22 208:3,11,18,25 construed 111:8 consult 186:6 consumer 213:17 contained 78:23 111:7 contains 168:8 contemplated 26:9 100:5 101:5 112:14 contemplates 25:9 contents 155:5 159:7 contesting 128:2 context 164:23
--	--	---	--	--

MIDWEST LITIGATION SERVICES

EVIDENTIARY HEARING - Vol. I 1/3/2017

180:11 182:7,8 189:11 continue 23:24 27:6 29:8 31:4 51:24 106:3 109:1 138:20 146:10 151:19 194:12 225:11 continued 138:16 continuing 52:10 continuous 69:23 79:25 80:2 135:11,20 contradicting 194:23 contribute 143:23 control 121:4 convention 174:8 converse 91:10 Conversely 106:13 convinced 238:22 cop-- 95:2 copies 35:20,21 122:8 143:25 copper 56:12,20 56:23 81:23 86:1 copy 62:4 63:22 63:23 64:10 86:2 119:5 122:5 188:17 191:11 194:14 194:17 237:23 239:3 245:14 245:19,20 corporate 173:2 corporation 111:11,13 correct 29:7 39:13,16 51:9 54:1 55:25	56:1,22 59:4,5 60:2,9,10,19 61:6,7,14,19 62:15,16,18,25 63:9,10,21 64:2,7 68:22 68:23 69:2 70:14,16,17 71:1 72:1 73:10,19,20 74:18,19,23,24 75:16,21,22 76:2,17,19 77:11,12,17 78:10,25 82:2 82:3,6 83:1,3,8 83:9,13,14 85:4 86:17 87:10,21,22,25 88:1,23,24 89:21 90:1,12 90:19 91:1,17 107:11 109:12 113:18,23 116:4 120:18 120:19 121:15 121:19,25 122:16,17,23 123:12,24 124:6,22,23 125:13 128:4,8 128:12,13,18 130:25 131:5,6 131:16 135:7,8 135:22 136:9 138:2 139:23 147:14,23 149:21,25 150:13,15 152:6 155:6 156:16 159:8 160:8 162:4 163:13 166:14 167:25 168:9 168:10 174:6 174:25 175:1,2 175:13 177:22	182:18,22,23 183:5,6,19 184:7,8,10,11 184:13 187:1 187:10,11 197:9,10 200:23 201:3,4 208:7,8 210:23 215:15 216:9 216:18,19 220:17 222:3 224:5 238:4 246:10 255:11 corrected 137:23 159:7 correction 55:5 55:6,7 corrections 154:23 158:1,3 158:25 159:3 177:16 206:11 correctly 248:13 corroborate 225:10 corroded 169:2 corrosion 43:23 121:4 125:3,8 corrosive 121:10 cost 21:6,15 22:8 32:23 33:2 34:21 35:9 39:10 45:20 46:4 50:22 51:6 93:18 95:4,23 95:24 100:13 101:2,21,25 102:2,3,8,15 105:5,13 106:12 114:2,8 114:8,10,17 115:6,9 126:9 127:22,23 128:2 146:25 170:25 172:17 172:19 174:24	179:4,5 183:7 187:3 198:9 211:11,12 219:10,14,18 220:11 230:17 230:20,21 231:23 232:6,9 238:11 cost/benefit 50:19 costs 9:22 10:3 17:10 24:7 31:6 33:7 42:5 45:3 46:1,6 47:12 49:4,24 49:25 50:5 51:6,12 52:23 59:23 60:1,4,5 60:7,11,16,18 60:24,25 66:10 66:18 100:23 111:19 113:21 114:23 115:19 127:10 134:10 156:19,24,24 168:5 170:14 171:18 172:8 172:13 173:2 182:21,25 190:15 191:15 192:3,13 193:7 193:11 200:3,4 200:21 212:17 214:11 215:7 226:14 228:20 229:14,22 231:25 232:12 232:17,18 234:8 238:8 240:3 244:19 245:9 248:11 248:13 254:17 counsel 2:8,8,11 2:13,13 4:4,6 10:1 40:3 50:14 59:11 95:19 98:23	120:8 143:6 154:12 159:25 171:15 175:8 175:16 178:13 201:8 205:8 209:15 234:18 236:19 237:23 244:3 Counsel's 196:6 Counselor 60:22 count 115:14 116:1 County 255:3,15 couple 11:12 22:11 37:13 117:7 134:25 135:12,12 couplings 137:3 course 25:6 court 3:21 9:4,6 9:18 42:19,20 43:1,11 53:11 62:7 63:19 64:10 92:16 154:6 177:2 247:13,14,14 Court's 43:10 43:11 45:1 cover 185:17 203:25 CPA 102:20 103:5 credit 34:14,15 35:2,4 91:7 98:2 231:11 crew 168:23,25 169:3 crews 42:7 criteria 138:19 139:14 cross 58:22 241:21 cross-examina... 58:25 59:11,13 120:6,10 143:4 155:22 157:4 159:23 160:2
--	--	---	--	--

MIDWEST LITIGATION SERVICES

EVIDENTIARY HEARING - Vol. I 1/3/2017

178:11,14 198:17 206:24 207:1,2,17 234:1 242:25 247:19 251:5,5 251:9,16,20 252:4,4 crude 125:4 CSR 1:25 15:20 70:22 130:6 255:17 curb 27:16,17 28:6,7 139:1 curious 238:22 current 75:4 93:11 144:12 144:12 216:8 232:16 237:13 currently 48:16 210:23 227:17 227:19 230:2 232:16 customer 34:13 34:15 35:2,3 51:7 73:19 127:2 142:24 200:16 customer's 140:24 142:19 customers 24:24 27:23 90:22 91:7 98:2 140:18 194:13 200:11,22 201:1 237:1 customers' 22:6 cut 32:7 42:5 51:6 132:18	DANIEL 1:21 data 16:14 85:20 86:2,10,14,20 214:13,17,22 215:20 217:9 244:21 247:1,4 247:7,11 date 72:10 190:8 212:22 dated 223:20,21 dates 242:11 Dave 151:23 David 153:4 253:24 254:2 day 8:2 14:7 16:24 17:4,5 days 8:8,9 9:23 12:5 13:13,13 13:18 14:1,21 14:23,25 15:3 15:6,12,21 16:3,7,15,16 16:18,20,20 18:6 de 114:9 dead 98:16 deadline 8:2,4,5 8:13,19 9:7,9 9:10,14 10:17 10:20 14:13 dealt 48:1 decades 24:11 December 14:10 14:12 17:7,8 17:10,13 53:25 54:4 71:22,25 72:8 73:2,23 119:3 226:17 decide 7:12 195:9 decided 128:23 decision 29:18 38:21 39:22 43:10,12 128:16 130:21 130:24,24 131:3,7 195:15	198:4 declines 181:13 decrease 161:19 163:8 180:13 181:17,21 decreased 181:24 deductions 113:16,17 deeper 28:12 32:25 defect 137:6 defects 136:25 defer 71:16 73:11 75:2 78:4 91:21 109:15 deference 233:18 234:23 235:6,8,10 deferred 118:3 212:21 define 79:23,24 163:21,25 233:16 defined 69:20 70:5 78:3 173:17 definite 175:13 175:17 definitely 31:11 definition 69:21 70:6,10 164:21 165:6,10 235:16 definitions 235:15 249:13 definitive 198:12 degree 208:7 degrees 208:10 demonstrate 44:7 47:10 246:17 demonstration 46:25 demonstrative	26:24 242:2 denied 9:25 deny 14:20 15:18 79:8 80:7,12 136:20 department 83:21 177:9 depend 182:6 depends 91:2 depreciable 160:7 161:5 162:9 166:9,11 166:13,16 174:9 depreciate 81:24 depreciated 167:20,22 173:24,25 174:7 depreciation 34:17,23 81:22 90:8,9,20 91:3 95:24 96:2,3,7 96:8,10 97:21 97:24,25 98:2 103:11,13,14 103:18,20,22 103:23,25 104:4,6,13,14 104:15,21 105:2,6,9,22 105:24 106:3,5 106:8,11,17,19 106:23 107:3 113:14 116:9 160:13,15,17 160:20,24 161:2,9,14,15 161:21,25 162:14,16 163:2,3,10 167:4,12,21 179:13,16,22 179:25 180:5,7 180:11 181:14 181:18,22	182:1,2 183:10 200:18 212:20 215:7 249:15 depth 28:10 142:2 Deputy 2:8 describe 36:9 78:20 101:14 describing 125:5 215:11 description 78:19 design 139:22 207:21 208:3 designate 71:7 120:15 designated 37:24 38:5 78:15,18 161:18 163:7 180:13 designed 22:13 destiny 49:10 destroyed 42:25 detail 17:14,16 105:23 216:8 detailed 215:2 216:6 details 31:14 detecting 121:9 detection 126:8 deteriorated 22:14,20 29:22 30:8 36:25 40:8,14,19 41:3,11,14,15 41:17,21 42:13 42:23 44:8 46:3 60:9,13 65:10,14 66:1 67:11 79:5,11 79:14,17,21 80:10 81:18 87:14 88:3,8 89:3,16 117:12 125:17 126:16 127:15 128:17
D				
D 2:8 3:1 74:16 74:20 78:12 118:9,15 119:1 251:1 253:8 damage 43:1 138:10 danger 74:23				

MIDWEST LITIGATION SERVICES

EVIDENTIARY HEARING - Vol. I 1/3/2017

130:22 149:16 149:18 163:17 166:18,24 169:9,14,20 182:10 220:12 233:6 234:12 deterioration 43:22 determination 235:8 determine 22:13 30:18,20 46:8 99:4,10 100:8 100:9 102:8,15 125:16 126:14 138:20 172:9 179:2 187:15 187:21 188:25 193:9 197:5 211:23 220:6,8 229:11 230:13 248:2,11 determined 29:21 30:7 39:4 128:19 129:19 170:14 174:21,23 determines 235:12 245:5 determining 84:1 develop 172:8 developed 175:3 175:5,19 237:20 diameter 125:12 difference 57:3 140:12 156:10 156:12 differences 55:13 different 16:9 19:22 21:5 22:17 33:1 67:7 68:12 83:12,15 90:13 101:3 116:16	116:24 123:16 124:9 125:18 137:2 141:24 142:1,2,5,6,9 142:12,13,21 144:22 156:20 156:21 199:3 227:20,20 235:15,15 244:7 differential 50:22 differently 48:1 difficult 10:24 29:13 120:25 138:13 231:18 dig 27:19,21 28:19 31:7 35:10 37:6 38:25 diminish 132:9 Dippell 1:19 3:4 3:10 4:3,8,13 5:3,8,16,20 6:1 6:11,17,25 7:17,23 8:22 8:25 12:11 13:4,8 18:10 18:13,16,20 26:23 27:1 28:3 35:18 39:25 40:3 47:13,18 50:7 50:11 53:3,10 53:14 54:16,19 55:19 57:19,23 58:11,16,21 59:10 61:23 62:2 63:13 64:15,18 66:12 66:20,25 67:6 72:4,17,22 82:14,18 86:6 86:25 88:13 89:7 91:22 92:1,4,9,13,18 97:11 98:6,13	98:18 107:25 108:19,25 110:19 111:1 112:18,24 113:5 117:19 117:24 118:1,6 118:11,14 119:21,24 120:5,8,23 122:9 129:3 132:1 133:5,8 133:14,22 134:16 136:19 140:1,6,8,10 143:3,6 144:25 151:6,9,13,17 151:24 152:4 152:10,17,21 153:9,18,24 154:5,10 155:12,15,21 155:24 157:3,6 157:9 158:11 158:14 159:13 159:16,22,25 162:18 165:21 166:3 167:10 167:15 169:25 170:3 171:8,14 173:8 176:20 177:1 178:1,4 178:10,13 180:21,25 181:8 183:23 184:4 185:1,4 185:11,22,25 186:11 188:6 188:18 191:6 191:22 192:4,6 194:25 195:9 195:24 196:13 198:15 199:23 201:7 203:17 203:21 205:3,7 205:15,21,24 206:16,19,25 207:5,15	217:22 221:4 221:11 223:10 225:7,13 229:5 233:22,24 234:3,17 235:17,20 240:22 241:24 242:17 244:1 248:18 249:8 251:10,14 Dippell's 149:19 dire 185:24 186:1 direct 16:2 17:17 53:18,24 54:6 90:4 112:22 118:16 133:23 153:3,4 153:5 154:18 154:20 155:10 157:15 177:5 197:20 206:1 209:20 215:17 222:12 251:4,8 251:14,16,19 252:3 253:5,21 253:23,24 254:2,10 directed 13:25 directing 14:2 direction 26:4,5 directly 217:12 217:15 232:1 directs 14:4,9,11 disagree 107:14 204:22 disallow 60:16 111:18 disallowance 175:17 178:25 discovers 127:5 discovery 17:24 17:25 228:6 237:21 discrete 81:20 discretion 233:16	discuss 109:20 130:23 160:7 204:25 discussed 4:18 202:11 234:6 242:19 249:17 discusses 69:15 discussing 204:21 discussion 103:9 161:5 192:18 192:21,22,23 192:23 discussions 228:7 237:21 238:14 dishonored 12:19 disincentive 168:16 disingenuous 16:6 dismiss 4:20 7:19 dismissed 4:23 12:25 176:22 dispense 152:3 dispute 11:21 40:10 dissenting 49:3 distinct 213:10 distinction 140:13 distinguish 29:16 30:9,14 38:20 distinguishing 41:8 distractions 42:9 distribution 44:2 77:16 125:16 129:15 129:18 130:15 207:22 208:4 208:12,19 209:1,12
---	---	---	---	---

MIDWEST LITIGATION SERVICES

EVIDENTIARY HEARING - Vol. I 1/3/2017

District 9:5	drawing 27:8	44:24 193:20	239:11 248:13	49:7,18 147:4
disturbance	31:7 32:18	efficient 84:4	eliminate 74:21	148:6,17 149:4
27:22	drawn 35:9	114:19 237:4	247:15	218:12
disturbing	DRs 16:15,16,17	Eight 137:13	eliminated	enhancing
24:24	16:25 17:1,2	eight-inch 136:6	74:25 113:21	148:15
Docket 254:17	due 16:22 17:3	137:14	elimination	ensure 43:14
document 55:24	44:7,24 147:10	either 11:8	214:10	143:9 147:19
96:18 184:16	249:3	15:14 20:19	embedded 168:6	193:15 232:11
184:18,20	duplicate 135:2	28:15 29:18	emphasis	ensuring 44:2
188:4 194:15	duplicated	68:14 76:9	129:22	enter 241:25
194:23 195:1	56:25	83:24 85:3	employed	242:5
195:17,21,25	duties 223:5	93:22 95:9	118:23 157:19	entered 7:2
196:8 197:3	dynamics 51:8	103:5 172:3	177:7,8 225:23	152:24 241:22
203:23 223:17		198:11 240:20	employee	248:25
224:24 225:5	E	electro 137:4	226:16	entire 24:22
226:1,4,5	E 3:1,1 75:19	electrons 125:2	employer 53:21	36:18,19,25
238:24 239:3,6	78:12 251:1	element 147:10	53:22 172:1	37:7 38:25
239:22,24	255:1,1	elevation 144:22	encapsulate	39:4,6,12
241:1	earlier 15:23	eligibility 40:6	124:8	50:24 100:10
documents 9:22	19:8 95:18	43:13 44:7	encapsulation	108:12 115:18
184:13 203:14	192:22 196:24	51:4 66:10	37:21 123:6	128:23 130:21
223:5	199:8 231:25	72:15 122:15	124:5,18 135:1	131:8 172:12
doing 12:16	early 91:12	220:7 226:13	149:3 150:25	175:23,25
24:20,23 27:12	105:17 106:1,6	227:8	151:1	176:1 188:13
33:3 35:9,15	107:10,18	eligible 21:22	encourage 32:13	188:17 198:2,7
41:15 42:8	180:9	22:2 24:7,9	61:23 167:24	201:1 230:7
46:16,17 51:16	earn 107:16	29:22 30:9,19	249:9	231:17,19
87:15 102:1	earning 90:25	32:7 34:8	ended 9:24 22:4	232:23 233:5
109:8 110:6	earnings 232:17	38:13,17 40:10	56:18 75:25	entirely 46:11
111:23 113:10	243:17	41:24 43:2	221:23 241:3	131:19 197:19
116:24 175:4	ease 139:20	44:23 46:22	Energy 1:12	entitled 77:18
217:8 221:15	easier 55:12	49:15 51:13,15	4:11 58:9	156:5 184:18
225:1 227:17	82:12 136:13	52:5 61:9	183:2 213:2	186:24 204:2
229:17 236:6	easily 139:1	66:18 70:20	229:19 253:13	entries 3:22
236:21 238:16	easy 93:6 99:3	79:4 89:3,16	253:15	entry 57:17
238:18 247:24	100:6	111:12 126:10	enforced 213:19	environment
dollar 175:19,21	economical	126:25 127:10	engineer 83:19	36:10
230:19	20:23	127:16,23,24	83:20 120:18	equal 105:9
dollars 45:14	economically	134:10 150:13	120:21 135:7	106:22 181:25
104:24 156:18	29:12 30:4	150:20 163:17	167:1,8 174:17	equipment
237:2	113:11	170:10 182:12	engineering	29:17 30:5
double 52:13	educational	182:25 183:17	81:1 83:20	38:21 39:18
95:19	207:21 208:2	190:15 201:16	109:20 122:24	43:6,16 44:1
doubled 57:5	effect 38:10 96:8	219:12,20	132:4 135:9	44:14,18
doubt 222:11	effectively 12:9	230:10,13	208:6	error 57:4
226:8	17:6 198:9	231:7 232:24	enhance 22:1	136:24
doubting 212:4	efficiency 44:17	233:5,13 239:5	25:13 41:16	especially 93:9

MIDWEST LITIGATION SERVICES

EVIDENTIARY HEARING - Vol. I 1/3/2017

232:16	ex-- 197:23	62:21 189:3,5	192:7,8 194:22	34:17 95:24
essence 98:1	exact 12:7 44:20	189:6	194:25 206:5,8	96:3,7,8,10
essentially 43:4	164:5 170:19	excerpt 185:8	206:15,17,20	97:21,25 98:3
90:4 105:23	172:17,19	188:3 193:6,12	206:21 223:12	103:22 104:14
148:18 210:13	173:3 175:19	excerpts 188:9	223:13 241:23	104:15 105:3,6
233:15	176:4 199:25	188:10	242:2 245:14	113:15 116:9
establish 21:10	232:1	exchange 12:2	253:4,6,7,9,12	160:13,15,18
147:24	exactly 26:13	12:22	253:16,18,21	160:20,25
established 9:23	72:22 84:25	exclude 171:24	253:22,24	179:13,17,22
16:1 42:15	93:16 100:23	172:13	254:1,4,6,9,11	180:11 182:2
64:5 146:8	116:22 141:17	excuse 37:19	254:13,14,16	183:10,16
193:16	161:16 164:1	61:15 137:8	exhibits 3:20,21	187:4,22 189:1
establishing	188:7 195:1	185:1 248:21	58:18 153:14	190:13 193:10
14:8	197:20 216:18	excused 91:20	153:15 248:25	196:20,25
estimate 178:25	223:6 234:24	118:2 248:20	253:1,20 254:8	197:7 201:2
217:6,6	examination	248:21	exist 213:16,19	212:20 233:11
estimated 156:4	13:17 53:18	exhibit 26:24	existed 71:21	235:7 238:12
156:18,18,24	108:5 118:16	27:2,3,4 35:21	72:8 73:23	expensed 23:11
181:12	145:4 154:18	54:7,15,17,17	existing 40:13	192:14 198:25
estimates 83:18	157:15 173:11	54:20,21,25	42:12 81:3	expenses 50:1,3
217:8	177:5 186:1	57:18,20,24	138:5,16,21	104:21 105:9
et 83:25 97:15	203:22 206:1	58:1,6,8,12,13	139:10,18,19	106:4 183:12
evaluate 43:13	234:20 251:4,7	58:17,17 62:8	142:25 144:10	187:5
evaluating	251:8,11,14,16	63:12,14,15,20	144:14,15,18	expensive 29:3
43:15	251:18,19,22	63:22 64:14,14	144:21 193:15	35:12,15,16
Eventually	252:3,6	64:16,19,20	219:19 232:21	224:13
106:17	examine 37:8	68:20,24 70:24	expand 132:8	experience
everybody 7:24	39:7	82:13,15,16,18	expect 18:6	108:15 111:15
Everybody's	examining	86:24 87:1,2,6	166:22 167:18	174:11 207:21
242:3	174:18	91:23 92:2,6,8	173:22,23	208:2,16,23
evidence 6:16	example 28:13	96:24 99:9	175:9 178:21	209:2,6 221:17
15:16 17:15	33:23 71:6	119:9,20,22,25	178:23 181:13	experienced
43:18 45:4	83:2,4,19,23	120:1 122:4	241:10	161:20 163:9
47:3 49:22	93:10 99:20	153:2,3,5,10	expected 121:24	180:14
50:4 54:15,22	197:24 203:1	153:10,11	167:2	explain 56:6
57:18 58:2,19	216:7 232:4	154:20 155:10	expedient 30:5	90:2 95:10
64:21 81:16	examples 38:15	155:13,16,17	expedite 11:24	124:25 140:11
92:7 109:4	114:16 122:21	157:24 159:12	12:7 17:23	144:6 170:20
119:20 120:2	234:6 245:13	159:14,17,18	expedited 249:1	195:3
153:16 155:18	excavator 42:25	177:13,25	expediting	explained 17:14
159:19 178:7	exceed 89:4,17	178:2,5,6	12:22 17:21	explaining
186:14 192:9	246:1,4	183:22,23,25	expenditure	130:20
206:22 225:5	exceeded 218:16	184:7,16 185:7	51:24	explanation
225:17 251:2	219:2	185:9,16,20,23	expenditures	17:18
251:12 252:1	exception	186:12,13,21	240:9 241:5,12	explored 51:2
evidentiary 1:5	183:10 238:14	191:5,6,7,11	241:23	expounded
15:14 248:24	exceptions	191:20,23	expense 23:3	147:17

MIDWEST LITIGATION SERVICES

EVIDENTIARY HEARING - Vol. I 1/3/2017

extend 21:21,25 25:15 49:7,17 124:18 127:6 146:2 147:3 148:9,12,22 149:2,8 224:12 224:18	212:24 216:16 225:17 238:20 239:12 factor 172:24 245:4 factors 232:4,7 facts 40:19 179:7 225:4	feel 200:6 feet 28:11,12 34:3,9 36:20 36:20 47:5,22 47:25 48:18 57:9 67:20 85:10 94:13,20 94:24,25,25 95:4,21,22 96:4 100:17,18 115:23,24 137:9,11 158:17 164:22 216:3,7,11,23 216:24 218:4,7 218:8,11,22,23 218:24 220:1,2 220:3 230:3,3 230:4,8,8,9,22 231:2,3,4,4,5 231:11 232:21 232:23 233:8 233:13 244:9 244:11 246:5,6 246:20	97:14 filed 5:22 9:18 13:18 14:6,21 15:12 17:12 53:24 54:3 61:17 119:2 206:5 217:9 files 61:12 filing 13:2 14:3 15:21 97:19 212:20 226:23 248:1 filling 49:5 121:13 final 35:7 106:8 finance 103:1 financial 241:16 find 13:19 16:5 23:11 55:7 100:22 126:2 145:8 168:2 178:20 196:7 201:12,19 216:3 225:12 234:9 237:21 247:10 finding 145:12 201:25 findings 190:17 finds 171:20 191:2 fine 6:9,24 40:25 97:5,8 219:24 finish 205:10 212:14 220:25 finished 221:2,9 firm 255:5 first 19:16 22:11 22:17 24:9 25:22 33:2 40:16 53:5,6 65:2 74:4,21 83:17 87:11 94:17,18 95:7 95:14 99:2,7 102:3 123:10 151:14 154:1	158:6 162:24 178:17 182:20 184:16 186:23 189:20 193:6 205:22 244:8 fits 139:21 fitting 141:22 143:16,21 five 16:16 28:12 36:20 166:23 167:19 190:6 fix 25:25 26:1,3 49:20 163:23 164:2,17 165:8 235:6 fixed 102:2 235:9 fixes 24:18 25:12,17,23 26:6 fixing 32:10 221:21 Floor 2:5 flow 125:2 focus 37:20 42:14 168:19 216:5 focused 125:19 focusing 168:20 follow 18:7 19:11 47:20 132:25 134:8 186:18 followed 14:17 14:18 18:1,2,3 67:25 following 40:23 74:5 90:23 107:22 115:4 123:4 156:1 173:14 181:18 181:22 follows 53:17 118:15 154:17 157:14 177:4 205:25 foot 34:10,10
F				
F 78:12 184:19 254:15 255:1 faces 3:12 facilities 22:19 40:13 117:11 128:22 193:15 204:16 208:13 208:19 209:1 209:12 212:8 facility 41:10 65:5 144:14,18 144:19 fact 8:12 10:18 11:6 26:12 31:8,21 33:21 37:1 38:1 46:13 72:12 93:10 98:1 109:19 110:15 112:8 147:18 196:1 198:7	far 5:25 34:20 42:6 87:12 106:5 109:23 204:4 221:24 230:5 fashion 12:4 24:21 30:13 fast 218:17 favor 201:20 feasible 30:12 Feddersen 1:25 255:4,17 federal 40:12,22 43:18 61:10 62:14 63:24 79:3 129:10 183:2 189:18 208:17,24 224:9 238:7 254:11 feed 144:16 feeder 74:17 75:21	feet's 231:5 FERC 183:3 186:3 187:24 188:1,13 189:8 190:1,2,6,10 191:14 192:18 195:6,14,15,17 196:23 199:7 224:16,19 238:13,14,20 249:17 254:17 FERC's 183:15 184:21 190:17 field 83:22 84:4 191:3 figure 31:2 100:2 231:18 figured 50:14 figures 95:11 file 9:9 11:11 13:14 14:4,10 16:8 18:4		

MIDWEST LITIGATION SERVICES

EVIDENTIARY HEARING - Vol. I 1/3/2017

48:5,11 102:9 102:16 107:17 136:8 233:5 244:10 footage 57:3,7 83:10 84:17 85:22 87:8,20 94:13,19 115:14,22 137:19 231:21 246:1,4 footages 244:7 Footnote 193:11 forced 213:22 forcing 20:8 Forck 2:13 3:25 foregoing 255:11 forgot 116:7 formal 75:7 formula 172:3,6 172:8,24 232:5 249:11 forth 96:15 132:6 139:15 249:19 255:9 forward 13:2 197:7 229:13 found 15:7 63:8 four 8:1 11:4 49:3 62:23 78:6 frame 10:25 frames 7:13 frankly 68:5 free 9:10 11:14 Friday 17:6 249:3 friendly 3:12 front 85:7 119:9 148:4 frustrate 32:9 fuel 142:25 full 16:14,19 17:7 27:18 104:18 105:19 107:1,7 255:11	fully 81:23 167:19,22 173:24,25 174:7 229:22 Fulton 173:15 function 39:10 39:11 103:24 functioning 45:19 further 18:17 59:8 98:4 139:25 143:4 171:6 176:18 190:10 198:17 205:2,4,5 233:20 234:1 fusion 137:3 fusion-type 137:4 future 18:3 138:10 161:9 161:13 163:2 180:4	187:20 188:24 204:3 207:22 208:4,12,19 209:1,12,16,23 213:2 218:2 222:2 227:12 229:18 253:10 253:11,13,14 253:15 254:15 Gas' 63:9 Gas's 113:15 gather 73:24 general 13:21 42:15 52:12,21 65:5 90:11 102:10 114:14 129:20 135:14 139:6 149:17 149:21 180:8 186:5 189:2,4 189:15 200:2 200:12 211:25 232:8 237:12 237:19 240:15 generality 181:12 generally 63:1 71:2 84:11 138:22,24 144:9 148:20 161:23 164:3 187:7 199:6 247:21 gentlemen 61:24 getting 35:2,4 103:16 104:14 105:10,21 107:19 108:17 112:3 115:7 141:8 154:15 give 8:8,18 27:2 34:13 35:20,20 54:9 55:4 66:23 88:24 101:10 116:18 120:13 133:19 170:12 216:6	216:25 218:1 218:19 219:25 229:24 230:16 233:15,18 235:5 241:4 243:7 given 3:20 27:8 114:16 116:15 175:20 180:9 213:19 228:10 231:22 255:14 gives 107:12 122:21 156:7 giving 11:22 16:20 26:21 32:14 98:2 141:15 234:22 glad 117:4 Glenn 53:8,12 53:17,23 54:2 251:3 253:5,6 go 3:22 7:11,18 8:20 13:1 15:19 19:2 20:2 21:23 23:3,12 26:3,5 27:1 28:20,25 32:18 35:20 39:7 42:6 50:11 53:4 56:9,17,22 58:9 76:23 84:24 92:18,19 94:10 96:19 98:8,13 102:8 102:14 105:22 106:7,17 108:2 109:18 115:8 126:7 151:6 152:22 154:6 157:9 158:4,18 162:24 196:7,7 205:13 206:19 207:6 212:14 222:20 232:12 233:9 236:23 237:10 249:25	GO-2014-0006 14:19 GO-2014-0179 14:22 GO-2014-0212 14:24 GO-2016-0196 15:2 GO-2016-0332 1:12 3:6 GO-2016-0333 1:17 3:6 254:3 GO-2016-332 253:25 goal 149:12 goes 21:16 23:19 34:17 44:9 83:22 217:7 218:22 226:22 228:16 231:14 235:7,8 239:19 239:20 going 3:17 6:4,4 6:20 7:7,8,9,10 7:11 18:22 19:2 24:20,24 27:1 28:10 32:8,9,10,17 34:4,8 47:4 54:6 71:7 72:2 80:20 82:12 83:5 88:9,13 91:22 93:20,20 98:8,10 99:1,1 102:22 105:5 106:18 107:7 110:16 112:22 112:25 122:2,5 122:6 131:20 133:22 135:2 138:10 142:4 151:19 162:5 166:3 188:18 191:25 195:13 195:19,21 197:7 202:19 203:23 205:8
---	--	--	--	---

MIDWEST LITIGATION SERVICES

EVIDENTIARY HEARING - Vol. I 1/3/2017

210:14 211:1 225:3 226:9 227:25 229:1 229:13 232:18 234:21 235:11 237:14,20 240:10 241:19 242:17,22,22 243:20 245:8 245:14 246:9 248:1,12 249:21,22 good 3:4,13 4:5 13:10 27:7 53:19,20 59:14 59:15 84:9 92:24,25 107:23 108:23 118:17,18 120:11,12 145:5,6 160:3 160:4 170:5,6 170:19 178:15 178:16 196:17 196:18 198:21 198:22 207:3,9 207:10,18,19 229:9,10 gotten 239:3 GR-2013-0171 12:14 Grain 21:3 grants 15:20 graph 158:16 253:17 grass 27:13 grassy 27:17 28:21 gray 28:8 greater 129:22 198:2 greatest 74:22 green 27:13 Grisham 152:8 154:3,9,17,21 155:11 157:7 251:13 253:23	gross 90:5,7 103:22 105:7 105:15 ground 33:1,22 35:17 52:15 68:4 71:10 76:12 80:21 82:5 88:16 94:4,6,21,22 94:24 95:4,17 100:18,19 102:1 107:20 114:3,10,15,20 115:25 136:14 165:8 174:19 230:3 231:15 237:15 group 71:14 109:20 136:13 growth 243:9,11 243:13 GSRs 46:12 guess 7:20 8:11 19:23 30:11,14 32:18 52:21 74:3 84:25 94:2 101:22 107:20 111:23 124:13 147:9 165:5 166:7 172:2 173:17 197:18 202:6 203:13 222:20 223:24 234:7 246:25 guidance 42:18 guidelines 183:3 196:23 gunked 6:18 guys 50:14 GWB 90:4 GWB-1 55:9,25 56:3 57:25 83:6 94:11 109:6 115:11 <hr/> H <hr/>	H-y-n-e-m-a-n 206:3 half 11:22,25 200:19 Hall 1:21 13:6 18:11 22:10,25 23:5 24:2 26:16 29:2,7 29:16 30:3,17 31:3,13,17,20 32:2 37:13,15 38:2,11,18 39:9,14,17,23 41:4,19,25 51:19 52:3,9 52:16,24 92:17 92:20,22,23 98:4 134:18 136:2 137:7,24 139:24 152:16 152:20 170:2,4 171:6 196:15 196:16 198:14 229:7,8 233:20 234:7 251:6,9 251:17,20 252:5 Hall's 113:14 hand 55:14 118:12 122:4 203:23 245:14 handed 63:19 134:22 184:12 185:12 223:11 handout 9:1,20 26:21,22 32:21 35:8 hands 132:19 hang 156:11 happen 26:1 111:16 happened 66:14 66:21 happening 33:24 56:19 happens 104:24 138:25 160:17	160:24 162:9 179:16,19 Happy 7:24 59:16 hard 244:24 247:8 hazardous 143:20 149:7 head 215:19 header 78:20 hear 35:24 42:2 93:22 198:23 heard 36:9 42:1 67:1 hearing 1:5 3:2 3:11 4:18 7:11 14:16,21,23,25 15:3,6,14,23 17:13 19:3,6 98:15 248:23 248:24 249:23 249:25 250:2 height 28:15 held 121:3 Hello 134:19,20 help 69:20 102:25 142:24 249:20 helpful 201:14 249:23 helping 42:5 hereunder 187:8 hesitant 84:9 hey 50:9 217:1 hide 46:13 high 19:25 20:9 74:25 181:11 243:16 high-level 223:24 higher 31:6 106:20 114:13 129:21 137:6 139:3 148:20 243:13,14 highlighted	56:16 highly 190:24 historical 161:19 163:8 180:14 history 125:20 hit 86:18 hold 103:4 132:19 holding 55:14 holds 20:10 202:10 home 127:4 142:19 143:1 homes 149:24 Honestly 6:7 Honor 5:5 7:15 7:21 13:3 19:14 53:16 58:5,20,24 64:17 108:4 109:2 113:4 117:23 145:3 151:4 157:5 159:15,24 176:24 178:12 198:18 206:14 207:16 229:3,4 234:4 honored 12:17 hook 28:21,25 hooker 236:16 hope 213:19 236:25 237:3 hour 153:21 house 142:9,11 housekeeping 151:14 152:19 houses 140:25 142:5 human 136:24 humorous 174:13 hundred 233:8 hydraulic 22:12 23:5 37:16,23 hydro 5:9 22:8
---	--	--	--	---

MIDWEST LITIGATION SERVICES

EVIDENTIARY HEARING - Vol. I 1/3/2017

123:17 150:2 200:21 211:20 224:8,17 225:1 238:3,6,8,11 238:15,21 239:5,10,13,16 hydrostatic 5:13 19:16,19 20:8 20:20 21:2,12 23:7,9,14 36:4 36:8 38:16 47:11 49:4,5 59:25 121:12 122:16 125:10 145:8,11,22,24 147:10,19,22 148:1 150:4 182:16 183:4 188:2 189:7,10 190:12,15 193:22 194:3 195:7 196:19 196:23,25 197:8 198:24 199:2 200:3 204:20,24 211:20 224:21 226:14 227:3,8 229:12,18 hydrostatically 150:6 Hyneman 9:3 59:2 205:10,19 205:25 206:3,4 206:23 207:3,9 207:18 217:22 218:2 222:1 223:16 225:10 235:17 242:7 248:19 252:2 254:10 Hyneman's 83:7 hypothetical 80:5,11 116:19 183:19 218:1 219:25 228:11 229:24 244:8	hypothetically 170:7 hypotheticals 230:1 244:5 245:12 <hr/> I <hr/> idea 213:1 identical 190:25 IDENTIFICA... 27:5 63:16 87:3 184:1 191:8 223:14 identified 11:13 33:25 83:7 175:16 identify 85:25 99:8 121:17 126:20 184:16 identifying 122:19 illegal 66:21 67:3,23 illustrated 231:25 impact 158:22 impair 111:9 impaired 44:4 impairment 44:10,19 impediments 171:2 implement 71:4 implication 71:24 72:7,9 72:24 implying 32:24 important 183:7 194:23 216:15 232:14 impossible 26:17 impractical 212:6 improper 188:4 188:5,7,8 improve 193:19	improved 147:11 213:20 improvement 135:5 imprudent 227:15 228:3 228:18 229:1,2 imprudently 111:17 inaccurate 216:16 inappropriate 228:20 inappropriately 227:2 incentive 5:12 32:4,8 107:12 107:15 132:10 168:7,18 241:11 242:13 242:21 incentives 242:20,24 243:5 incentivize 132:6 176:16 inch 117:10 137:13,21 233:8 incident 19:21 incidental 35:4 incidentally 94:9 inclined 196:7 include 40:20 46:4 47:18 60:17 61:5 63:4 79:9,13 79:19 80:8 84:19 116:2 117:15 197:8 212:17 245:9 249:4,6,9 included 60:18 61:13,18 63:23 79:9 80:7 82:14 101:17	101:17 116:9 128:11 156:18 187:8 194:12 211:12 216:1 227:3 229:20 includes 61:20 61:21 84:23 85:1 87:6 187:4 196:25 including 88:21 111:11 228:19 inclusion 44:11 161:17 163:6 180:12 incorporate 212:7 227:22 incorrect 183:15 increase 91:13 91:16 97:25 138:6,9 156:6 181:18,22 182:1 193:18 241:12 increases 31:9,9 193:22 240:9 240:25 increasing 241:5 incremental 102:2 156:6 incurred 60:11 187:6 193:7,11 INDEX 253:1 253:20 254:8 indicate 239:12 indicated 158:7 158:9 200:3 indicates 49:12 191:16 224:24 indicating 28:8 indication 238:19 indicative 84:12 individual 37:2 39:8 140:18 ineligible 17:10 26:12 30:21 39:19 40:20	44:22 45:2,20 46:22 52:6 59:24 60:17 170:15 171:18 171:20 172:2,4 174:24 176:3 178:21 197:12 201:13 245:6 infeasible 29:12 113:12 142:14 inflation 114:14 informal 75:7 information 34:2 99:18,19 117:8 193:14 217:5 220:14 244:17 infrastructure 1:11,16 3:8 111:12 132:8 132:13,17,20 253:10,14 inherent 135:17 141:5 initial 105:8,20 initially 87:24 initiated 212:24 213:1 insert 148:19 inserting 123:23 insertion 37:21 123:5,22 135:1 148:16 inside 141:1,9 142:20 143:1 inspect 193:8 inspecting 187:13,16 193:17 install 110:13 117:1 150:23 installation 113:25 114:2 115:19 208:11 installations 89:4,17 installed 40:12
--	--	---	--	---

EVIDENTIARY HEARING - Vol. I 1/3/2017

40:24 43:17	176:16 220:19	28:14,22 30:2	244:12,16	163:16 166:14
45:6,12 57:4,7	intent 43:15	30:16 31:1	253:17	166:16,21
57:10 61:9	247:6,12,17	32:11 33:8,9	iron's 27:25	170:10 175:23
72:10 73:7,9	intention 209:21	33:12,18 34:4	irrelevant	176:13 182:5
77:21 78:1	interested 93:22	34:7,10,21	131:19	182:12,21
80:13 81:4,10	93:25	35:3,16 36:6	ISRS 5:2,7 8:3	183:13,17
82:4 83:11	interior 123:11	36:24 37:7	10:14,18 11:10	190:15 199:3
84:18 85:24	intermediate	46:1 47:2	11:15,22,24	201:15 209:4,4
87:24 94:12,19	211:1 237:15	48:17 60:8	14:14,18 16:6	209:16,24
107:6 115:14	Internet 3:17	65:21 67:19	18:25 21:22,24	210:6,12,14
115:22 132:12	interplay 249:16	68:9 69:13,16	22:1,9,17 23:2	211:12 212:16
146:5 164:19	interpret 110:24	69:24 71:9	23:4,12 24:7,8	212:18,20
166:23 167:19	112:17 122:7	74:17 75:1,5,7	24:12 25:7,8	213:4,7,14,21
202:5 212:8	190:20	76:14 82:3	26:12,14 29:18	213:24 215:1,2
218:16 219:3	interpretation	84:18 85:2,12	29:19,22 30:8	216:8,13 218:3
220:1,9 231:14	19:22 39:19	85:25 89:19,24	30:19,20 32:4	219:7,9,11,20
246:1,4	41:8 42:21	94:6,23,24	32:7,13 33:5	220:6,10,14
installing 45:9	122:25	106:13 108:7,8	33:19,20 34:8	221:16,18,24
88:23	interpreted 8:7	108:14 111:24	34:13,18,21	222:5,5,6,15
installs 144:12	interpreting	112:6,14 113:8	35:1,6 36:15	223:18,25
218:3	39:11	113:24 114:6,9	37:11 38:13	226:13 227:13
instance 43:1	interrupt 41:5	114:13 115:15	40:5,10,20	228:20 229:23
142:20 218:14	47:14 136:1	115:23,24	42:10,21 44:7	230:10,13
245:25	interrupting	116:12,18,20	45:3,7,14	231:7 232:13
instances 80:19	220:25	116:23 124:12	46:11,12 49:15	232:24 233:5
80:22 88:21	interspersed	125:15 127:20	49:23,24 50:3	233:12 234:9
91:4,6,8	19:18 33:17	127:23 128:4,7	51:4,13,13,14	234:10 237:2
190:24	168:22	128:20 129:20	52:5,8,18 60:4	237:24 238:18
instrumentation	investigation	132:14,21	60:18,25 61:9	239:5,14,18,20
126:8	204:18	137:20 140:22	62:4 89:1,14	240:2,9 241:5
integral 140:17	investment	149:12,15	91:13,14,15	241:12 242:13
141:12	105:8,16,20	150:24,25	93:4,10,11,15	243:15 245:9
integrated 30:2	involve 115:15	158:19,24	95:11,14 96:12	248:4,12
36:6,23	123:16 135:5	168:19,21	97:17,19 99:21	253:17,19
integrity 21:13	involved 25:10	169:1 170:23	103:12,19	ISRS-eligible
22:1 23:10,22	27:9 222:8	172:11 182:10	104:5 110:3,7	109:24 183:11
25:13 49:8,18	involves 49:5	198:1,8 202:4	110:10,22,23	197:6 229:12
77:17 129:15	121:12 123:14	202:12,13,18	111:17,19,20	ISRS-related
130:8,15	123:20 124:1	202:20 203:2,4	112:3,5,11,13	209:17
145:19 147:4	125:1 175:12	203:10,12	113:15,21	issue 5:6,9,11,12
148:7,15,17,20	involving 179:7	210:17 218:8,9	114:22 115:16	5:14,15,17 8:9
149:4 197:1	201:20	218:10,13,15	116:3,5 126:10	10:19,24 11:22
198:25 218:12	iron 5:14 19:18	218:23 219:2,6	126:25 127:10	11:23 14:16
224:3 239:15	24:5,10,13,17	219:9,23 220:2	128:7 133:1,2	18:24 19:17,17
intend 6:9 56:2	24:22,25 25:1	220:16 221:16	134:11 145:20	19:20,20 22:11
201:22	25:2,6,18	221:21 228:13	145:25 150:12	24:4 36:4,5
intended 176:14	26:10 28:4,11	230:4 244:10	150:20 156:6	40:5 41:7

MIDWEST LITIGATION SERVICES

EVIDENTIARY HEARING - Vol. I 1/3/2017

42:10,10,18	Jefferson 1:7	97:11 98:6,13	198:15 199:23	108:17,23
43:19,24 44:20	2:10,15 4:1	98:18 107:25	201:7 203:17	135:25 136:4
45:22 48:7,12	255:15	108:19,25	203:19,21	136:11 137:8
51:3,3 93:17	Jennifer 152:8	110:16,19	205:3,6,7,15	137:13,16,22
99:16 127:13	154:3,17,21	111:1 112:18	205:21,24	140:2,4
131:4,10,13	155:11 251:13	112:24 113:5	206:16,19,25	kept 48:24
163:13 168:4	253:23	117:19,24	207:4,5,14,15	Kevin 2:13 3:24
170:17 175:7	jeopardy 237:1	118:1,6,11,14	217:22 220:24	Kim 152:8
201:20 211:11	job 53:2 84:13	119:21,24	221:4,11	157:12,14
212:11,12,15	102:3	120:5,7,8,23	223:10 225:7	251:15
217:11,13,14	joined 124:6	122:7,9 129:3	225:13 229:5	Kimberly 254:5
217:16 226:22	joins 70:2	132:1 133:5,8	233:22,24	kind 10:22
228:5,9 232:18	joint 37:21 80:2	133:14,22	234:2,3,17	27:16 30:13
235:4 248:14	123:6 124:5,5	134:16 136:19	235:17,20	32:21 95:18
issued 14:7	124:8,11,13,16	140:1,6,8,10	240:10,22	109:22 139:15
19:21 190:3	124:18 135:1	143:3,5,6	241:24 242:17	140:9 147:10
191:15	143:13 149:3	144:25 149:19	244:1 248:18	160:5,6 178:17
issues 4:21,22	150:25 151:1	151:6,9,13,17	249:8 251:10	208:10
4:25 5:6,22 6:5	joints 80:1 137:9	151:24 152:4	251:14	kinds 142:6
6:15 7:4 8:1,1	143:10 149:6	152:10,17,21	judgment	know 5:25 10:25
8:3 9:10 10:10	judge 1:20 3:4	153:1,9,17,18	198:13 235:11	12:18 25:12
10:11,12,17	3:11 4:3,8,13	153:24 154:5	jump 138:11	48:9,20 50:17
11:4,4,7,14	5:3,8,16,20 6:1	154:10 155:12	221:8	52:20 68:15,16
12:3,20,24	6:11,17,23,25	155:15,20,21	June 191:15	68:17 72:11
13:13 14:1	7:17,23 8:22	155:24 157:3,6	justify 44:11	74:2,11 75:4
16:3 17:9 18:5	8:25 11:2	157:9,11		75:10 77:2
19:15 29:4,6	12:11 13:4,8	158:11,14	K	80:24 82:17
29:13 36:4	18:10,13,15,16	159:13,16,20	K 1:25 62:25	85:18 93:21
40:5 81:1	18:20 26:23	159:22,25	64:6 77:11	95:3,9 100:4
126:20 131:25	27:1 28:3	162:12,18	78:12 154:3,9	108:6,24
142:6 210:24	35:18 39:25	165:21 166:3	154:17,21	109:13 111:22
248:7	40:3 47:13,18	167:10,15	155:11 253:23	111:25 114:24
item 23:3,3,6,8	50:7,9,11 53:3	169:25 170:3	254:5 255:4,17	115:2 121:14
189:18 196:20	53:10,14 54:16	171:8,14 173:8	Kansas 21:4	133:3 136:23
197:7 199:15	54:19 55:19	173:10 176:20	46:10,17 47:15	137:5 142:6,24
200:10,10	57:19,23 58:11	177:1 178:1,4	249:6	144:5 160:11
229:13	58:16,21 59:10	178:8,10,13	keep 20:24	160:23 161:7
items 164:23	61:23 62:2	180:18,21,25	201:24 208:20	161:11,17,23
187:10 189:12	63:13 64:13,15	181:8 183:23	keeps 149:7	162:19,20,25
200:13 213:10	64:18 66:12,17	184:4 185:1,4	220:25	163:25 164:21
249:20	66:20,25 67:6	185:11,22,25	Kellene 1:25	166:19 167:1
	72:4,17,22	186:11 188:6	255:4,17	169:15 170:18
J	82:14,17,18	188:18 191:6	ken 131:22	170:24 172:6
J 1:22	86:6,25 88:10	191:22 192:4,6	Kenney 1:21	172:15,16,20
J-e-n-n-i-f-e-r	88:13 89:7	194:25 195:9	3:15 50:9,10	180:2 190:4,8
154:8	91:22,24 92:1	195:19,24	50:13,21 51:5	196:19,22
January 1:6	92:4,9,13,18	196:10,13	51:17 108:16	202:17 203:7

MIDWEST LITIGATION SERVICES

EVIDENTIARY HEARING - Vol. I 1/3/2017

204:5 210:11 212:14 216:15 216:17,20 217:1 223:1,4 223:22 226:12 226:21 227:5,6 227:7 228:19 228:24 231:22 237:5,7 244:14 knowing 16:1 knowledge 117:10 127:8 155:6 159:9 162:7,8 167:16 174:14 177:21 180:8 183:9 211:25 222:12 226:1,11 228:17,25 243:23 known 189:25 knows 89:8 113:1 168:12	54:17,20,21,25 57:18,20,24 58:1,6,7,7,12 58:13,17,18 59:19,19 60:17 61:12,17 62:8 63:9 65:19 68:14 71:3,7 71:12 73:21 74:12,25 75:4 75:11 76:1,3 76:18 77:5 82:18 96:24 97:13 108:9,12 110:22 111:16 111:22 112:14 113:15,20 115:13,16,18 116:11,15,24 117:15 118:9 118:23 119:9 119:20,22,25 120:1,14,15 121:4 124:8 125:15 126:13 126:23 127:3 128:15 129:18 130:20 132:24 134:7 138:3 142:23 143:12 143:15 145:2 145:23 150:11 158:7,10 159:23 161:20 163:9 164:7,12 165:16,25 166:8 168:7,11 168:17 169:6 169:11,18 178:11 180:15 182:4 196:21 198:17 201:15 201:24 207:15 209:16,23 210:17 211:6 211:15 212:12 212:16,19	213:7 215:21 218:2 220:23 221:14,17 222:2 223:12 223:13 225:15 227:9,12 228:18 229:17 232:16 233:10 234:3,23,25 235:6 236:19 236:23 239:4 243:8 253:10 253:11,14,17 Laclede's 7:8 9:24 15:18 16:5 40:20 41:7 45:18 52:17 63:23,24 65:24,25 66:22 67:9,10,24 68:2,8 70:25 75:24 77:19,24 81:22 86:10 89:20,25 97:6 118:7 121:9 127:9 131:12 131:18 149:11 156:4,21 190:14 237:9 237:23 241:17 242:24 244:3 245:14 247:20 251:2 253:1 lag 214:10 247:16 language 13:15 17:21 123:1 163:15 238:2 large 109:17 165:11 largely 95:1 larger 48:17 109:22 125:12 128:20 Lastly 44:13 late 9:24 10:21 11:8,16 17:7	107:10,18 Lauber 31:24 68:5 71:16 73:6,11 74:2 74:14 75:2 78:4 80:25 91:20 109:16 118:4,10,15,17 118:21 119:1 120:3,11,23 145:5 151:7,10 198:23 212:10 251:8 253:8 Lauber's 131:22 212:5 law 1:20 2:3,4 3:11 40:17 42:11 66:2 67:12 196:2 212:22 lawful 15:8,24 lawfulness 15:5 laws 61:13,18 64:25 78:6 128:24 129:7 129:25 lay 141:17 215:5 laying 24:25,25 layperson 176:12 LDCs 213:25 lead 180:10 leading 240:16 240:19 leak 121:15 126:7,10,16 127:10 163:23 164:2 232:22 233:1 234:25 235:1 leakage 125:19 126:1,2,3,6,22 leaking 233:7 leaks 49:6 127:5 127:5 143:20 145:8,12 149:7 211:21,24	learned 19:24 leave 12:25 76:14 152:7 194:19 leaves 5:13 152:5 leaving 136:14 left 19:15 112:15 160:6 178:18 legal 2:13 13:12 42:14 66:5,13 66:23 72:3,13 72:16 89:6 111:2 112:19 113:3 117:18 117:20 129:1 131:21,22 165:20 195:10 195:14,20 249:10,13 legally 11:8 12:4 12:4,5 182:25 legend 63:8,23 63:24 77:10 254:11 legislation 25:8 32:4,13 176:15 213:25 214:8 215:10 221:16 221:18 247:7 247:13 Legislature 24:15 25:20 26:9,13 32:9 37:4,10 149:1 176:13 220:19 Legislature's 43:15 length 37:7 39:1 50:24 139:8,18 165:9 lengths 47:4 137:15 138:25 lesson 19:23 let's 4:22 7:18 61:22 67:20 68:18 70:18
---	---	--	---	--

L

L 254:7
L-a-u-b-e-r
118:22
labeled 62:24
labor 187:5
Laclede 1:10,15
1:17 2:4,7 3:7
4:8,10,15,20
7:20,22 9:21
11:18,19 14:10
14:24 15:4,10
15:14,25 16:2
16:6,12,17,19
19:13 20:17,22
21:1,8 26:16
27:2,4,12,14
33:19 36:18
37:6 40:23
41:20 43:16
44:3,22 45:5
46:4,5,8 53:6,7
53:22 54:7,14

MIDWEST LITIGATION SERVICES

EVIDENTIARY HEARING - Vol. I 1/3/2017

73:12 79:24	21:22 22:3,5,7	74:17 75:21,21	167:11	209:16
92:18 95:21	23:16,17,19,24	77:6,21 78:1,9	longer 44:6 52:1	love 18:18
96:1,5 98:13	23:25 24:5,13	79:11 80:13,15	82:1 104:12	low 109:14
105:4,18 108:2	24:17,19 25:5	81:3,18,23	138:24 139:10	139:5 140:21
116:19 117:20	25:13,15,20,23	87:13 112:6	longevity 211:24	141:3 211:1
152:22 153:20	26:2,7,10,11	116:25 125:11	look 9:17 11:5	237:14
168:23 170:7	26:18 27:18,20	125:12 126:14	14:2 17:21	lower 33:4 241:8
203:1 205:9	27:21 28:20,23	127:15 130:9	29:14 32:20	241:10
218:2 220:1	30:16 33:18	137:17 138:11	38:4 46:25	lunch 152:19,25
230:2 232:20	36:11,13,18,19	138:17 149:23	47:3 48:8 49:2	153:25 160:6
letter 62:17,19	36:22 37:20	158:23 168:24	61:22 68:25	
65:2 70:19	38:24 39:4,6	176:7 182:5	71:17 88:5	M
77:9,11	39:12,15,20	193:4 211:7,16	96:4 97:17	M 253:24 254:2
letters 64:9	40:11 41:16	224:4,13,14	102:5 106:8,18	Madison 2:9,15
189:9 190:1	66:3 67:13	241:9	109:10 122:18	magic 47:24
level 179:21	73:18,19 80:9	lining 148:14	126:21 134:24	MAIDA 1:22
181:11 227:20	80:19 83:3	list 40:5 187:6	191:10 203:25	main 19:18 25:5
229:21	85:23 94:17	listed 70:19	204:9 215:6	29:1 36:24
levels 179:20,20	108:12 116:17	84:21	220:15 234:8	37:2,7,20 38:1
231:24	116:19,23	Litigation 1:25	238:25 245:13	40:11 60:8
Liberty 14:19	123:5,15,22,23	255:6	245:22	66:1,3 67:11
licensed 120:20	123:24 124:2	little 11:6 21:24	looked 6:12	67:13,19 68:10
lieu 224:13	126:15,24	27:8 33:13	18:21 20:22	73:19 75:24
life 21:21,24,25	127:5,7 135:1	47:1,7 48:13	50:21 81:13	80:9,19,20
22:3,5 25:15	137:25 140:12	61:25 85:17	211:5 216:2	85:23 88:7
36:13 38:1,3	140:13,16,23	114:19 130:13	239:21 242:3,4	93:19 94:4,6,7
38:13 39:5	141:12,13,19	147:18 154:14	looking 25:20	94:19,25 95:4
49:7,18 106:14	142:8,14,15,17	live 144:11	28:12 37:15	95:5,21,23,24
124:19 125:8	144:21 146:12	lived 161:18	48:4 84:14	95:25 96:4,9,9
127:6 146:2,16	146:20 147:12	lives 161:9,13	85:6,19 87:11	106:13 108:8,9
147:4,17 148:9	147:20,25	162:9,11 163:2	126:4 148:3	108:13,13
148:12,22	148:16 150:5,8	167:21 174:9	184:25 214:16	116:12 117:2
149:2,8 160:7	150:11,17	180:4	246:22	121:23 123:2,4
161:5,19 163:9	158:6,13,16	lobbyists 214:1	looks 27:25 64:3	123:10 124:19
166:9,11,13,16	164:8,9,13,14	local 208:17,24	86:18 97:1	132:12 134:25
180:10,14	169:2 173:14	locate 138:13	156:13	137:17 140:12
181:12,18,22	199:10 202:19	located 29:25	losing 203:24	140:16,17,18
181:25 193:19	210:13 221:22	location 33:1	lot 20:1,23 30:23	140:22,23
193:23 194:5	223:25 228:12	138:8 139:7,19	34:1 42:2 47:9	141:13,16,18
224:12,18	231:17,19	141:25 143:2	99:22 101:3	141:23,24
limit 4:21,22	232:21 238:18	158:12	112:19 141:4,7	144:11,21
133:1	lines 19:25,25	logical 95:8	167:5 212:9	147:7,12 148:6
limited 134:9	32:11,11 35:8	100:21 101:9	213:3,20 228:6	148:11 149:12
195:6 224:21	37:17 44:23,24	102:4 104:10	237:21 238:12	149:16,20,24
226:23	59:25 63:5	long 3:13 89:3	238:13 247:24	150:23,24,25
line 20:6,6,21,24	65:1 73:15,15	89:17 96:18	Louis 2:5 4:12	158:18 164:19
20:25 21:3,8,9	73:22,22 74:17	111:22 137:11	140:25 142:5	166:23 167:19

MIDWEST LITIGATION SERVICES

EVIDENTIARY HEARING - Vol. I 1/3/2017

168:24 169:1 182:10 203:5 210:18 218:4,8 218:9,10,10,13 218:15,22,23 218:24 219:2,8 219:9,11,14,19 219:19,22,22 219:23 220:2 227:13,14,18 227:20 230:18 230:18 236:20 236:21 244:9 244:15 mains 36:7,16 37:17 44:22,24 59:25 63:5 65:1 74:18 75:21 76:5,7 77:6,20,25 78:9 79:10 80:13,14,16 81:3,17 84:15 84:20 87:20,23 88:3,16 91:13 94:15 109:9 125:16,25 127:14,20,21 176:17 182:4 211:3,8,16 241:8 246:21 246:21 maintain 121:14 maintenance 50:1 70:7,23 145:17 146:14 183:16 186:25 187:2,3,6,22 189:1 193:10 229:21 235:7 major 238:16 majority 45:25 46:6 60:4,18 60:24 62:22 63:3 80:24 87:12 114:23 115:3 128:6,11	137:18 166:10 makeup 203:7 making 122:2 131:21 144:18 164:9,14 management 21:13 23:10,22 77:17 129:15 130:8,16 145:19 198:25 manager 177:8 mandated 20:15 71:9 129:25 204:15 mandates 77:20 77:25 maneuver 7:14 manner 23:8 110:11,14,23 112:15 116:13 232:2 manufacturer 44:6 MAOP 147:25 Marc 2:8 4:5 60:21 107:21 Marcella 2:13 3:25 mark 26:23 27:3 68:5 118:9,15 118:21 119:1 152:8 176:24 177:4 251:8,19 253:8 254:7 marked 27:4 54:7,25 55:24 63:12,13,15,19 82:13 86:24 87:2,6 119:8 122:5 157:23 177:13 183:22 183:25 184:7 184:15 185:5 185:16 191:5,7 194:21 204:10 223:12,13 Market 2:5 4:11	Massachusetts 172:24 232:5 match 34:9 185:19 matching 219:5 material 25:17 materials 114:8 168:6 187:5 222:6,23 232:10 math 82:7 109:9 200:24 218:15 mathematical 30:21 matter 1:10,15 3:6 4:19 6:8,10 11:2,6 47:15 84:1 152:19 195:22,22 202:7 matter's 196:9 matters 19:5 maximum 20:3 20:12 21:11 23:15,23 146:9 mean 4:16 19:9 33:25 34:6 48:4 70:6 72:25 76:3 100:7 107:15 114:1 142:21 172:2 190:23 194:20 197:16 198:11 210:21 210:23 211:11 215:23,24 216:23 224:15 227:1 231:17 247:23 meaning 17:3,6 means 82:1 194:1 meant 234:24 measure 34:9 mechanical 143:15 mechanisms	106:25 meet 21:20 40:21 109:19 224:14 meetings 222:21 228:6 Memorandum 156:2 memories 210:14 memory 48:25 240:5,21,24 mention 13:19 14:5 mentioned 154:11 196:24 meter 127:4,6 140:20,20 141:1 142:7 143:1 meters 141:5,7,8 141:11 method 32:23 170:19 178:24 179:1,5,6,9 228:18 229:1,2 232:7 236:24 237:3,10 244:24 methodology 105:24 170:13 175:4,6,10 MGE 3:7 4:16 7:23 11:19 14:22 20:17 21:8 59:20 71:7,8 74:12 75:11 120:15 129:18 145:23 150:5,8 168:7 210:6 213:4 218:2 222:2,4 222:15 223:18 224:18,19,25 225:15 227:12 237:24 238:18 239:20 253:19	MGE's 97:4 210:12 221:22 223:24 Michael 2:3 4:10 microphone 5:4 61:24 89:9 120:24 133:9 235:18 mid 221:1 mid-2000s 129:16 middle 68:25 168:3 Midwest 1:25 255:5 mileage 31:9 Miles 45:6 million 9:22 21:6 98:1 113:16,17 200:21 201:3 millions 45:13 45:14 mind 37:4,10 61:3 159:3 mine 121:7 minimal 31:1 217:2 minimum 27:22 31:1 minus 114:9 minor 56:9 minus 34:22 minute 12:21,21 117:6 152:16 minutes 98:16 153:20,21 205:12 miraculously 98:20 misled 136:5 Missouri 1:1,7 1:12 2:14,17 3:25 4:2,11,12 9:4,6 42:19,20 58:8 65:3
--	---	--	--	---

MIDWEST LITIGATION SERVICES

EVIDENTIARY HEARING - Vol. I 1/3/2017

157:20 177:9 186:17 190:18 191:2 213:2,22 213:25 229:18 253:13,15 255:2,15 mitigate 247:15 mix 234:13,15 MO 2:5,10,15 moisture 141:4 mold 124:14 moment 27:10 41:5,20 88:24 103:4 117:5 149:11 151:5 185:4 201:9 227:11 229:3 moments 115:8 money 175:13 175:15 monitoring 44:2 126:20 months 11:13 213:8 248:1 morning 3:4 4:5 13:10 53:19,20 59:14,15 92:24 92:25 98:16 118:17,18 120:11,12 145:5,6 198:24 212:5 motion 4:19,20 7:3,7,9,10,19 7:19 14:20,23 15:23 18:23 motioned 14:25 15:2 motivated 32:19 44:17 move 57:17 61:3 66:16 68:18 70:18 82:8 119:19 141:11 159:11 162:5 180:23 214:23 moved 12:17	moving 24:3 47:11 54:24 74:15 182:3 multiple 61:21 multiply 179:3 <hr/> N <hr/> N 3:1 251:1 name 53:11,12 118:19,21 154:6 157:17 177:2 206:2 Nancy 1:19 3:10 narrow 42:21 51:12 215:10 narrowly 43:14 National 184:19 natural 184:21 208:12,19 209:1,12 254:15 nature 199:3 232:8 near 80:20 138:25 202:19 212:21 necessarily 41:16 99:25 101:24 167:8 necessary 18:21 31:22 need 19:5 25:25 35:22 41:18 42:14 49:19 133:1 147:24 152:16 168:8 168:14 187:15 187:21 188:25 193:9 196:2 212:2 215:24 219:16,18 228:7 232:5 244:25 needed 24:11 156:25 169:16 needing 92:15 needs 38:5 39:15	45:20 178:19 189:17 194:6 215:11 238:11 negative 34:22 93:13 97:24 106:21 neighborhood 24:25 25:3 131:8 139:22 neighborhoods 24:22 neither 40:21 net 50:15 96:11 97:25 105:13 106:4 never 25:24,25 26:1 61:3 100:4 162:2,13 new 7:24 10:11 15:16 19:22 22:7 25:5 27:14 28:13,25 33:7 34:20 42:3 45:11,19 52:4 59:16 71:25 73:1,8 80:19 90:24,25 95:23 96:9,11 116:17 123:23 128:24 129:9 131:18 132:25 134:8 141:17 142:17 143:1 144:13,18,21 145:14 146:19 148:14,18,24 150:23 170:9 202:17 212:8 216:11,12 218:4,22 219:8 220:1 227:13 227:19,23,23 227:24 229:1 232:12 236:20 237:3 243:10 244:9 247:24 newer 40:24	42:4 80:14 148:19 Newkirk 151:23 152:12 153:3 253:21 newly 153:19 nine 14:25 33:24 34:2 85:9 109:5 115:17 115:20 ninety-eight 98:1 Noack 213:3 224:18 non-attorney 72:24 non-ISRS 211:12 212:17 non-ISRS-elig... 246:23 non-ISRS/ISRS 244:19 nonrelated 213:10 norm 199:15 normal 200:15 normalized 229:20 normally 20:7 94:23 138:14 230:19 Nos 3:5 note 28:9 notes 117:6 151:5 255:12 notice 195:11 196:3 noticed 249:22 notify 74:7 noting 227:2 November 9:19 14:5 16:18 17:3,3 156:15 209:14 number 11:7 12:16 27:2 47:24 56:16,18	56:21 83:16 85:20,21 100:3 123:16 125:18 137:2 156:3,7 156:8,10,17,20 156:23 170:18 216:7 217:1 241:8,10 246:17,19,20 247:7 numbers 30:24 86:12 130:13 158:17 215:18 216:15 217:5 <hr/> O <hr/> O 3:1 O-l-i-g-s-c-h-l... 177:3 O&M 23:3 196:20 197:8 object 6:20 72:2 88:9 89:6 110:17 131:20 162:12 165:19 187:23 221:12 225:3 240:11 241:19 objected 247:20 objecting 114:22 objection 6:20 7:1 54:17 57:20 58:10,12 58:14 64:16 66:4,13 67:1 92:2 112:16 117:17 133:5 133:11,15,16 133:23 136:2 153:10 155:13 159:14,16 166:4,25 167:11 181:6 185:23 186:10 188:7,19 191:23,24
---	---	--	--	--

MIDWEST LITIGATION SERVICES

EVIDENTIARY HEARING - Vol. I 1/3/2017

192:4 206:17 206:18 210:22 225:14 236:22 242:18,22 243:25 objections 119:22 178:1 240:23 objective 197:17 objectives 145:15 observing 3:17 obviously 5:17 6:20,25 22:6 57:1 93:8 192:1 221:5 occur 8:17 116:6 occurred 44:14 222:17 occurs 36:10 October 14:2 156:14,16 offer 54:14 64:13 91:23,25 92:8 97:10 153:7 155:10 177:24 185:20 191:20 206:14 office 2:8,11 4:1 4:3,6 10:1 175:8 209:15 255:14 official 64:10 195:5,17 officially 204:7 offset 116:5 oh 9:8 97:4 150:16 152:10 156:11 245:20 okay 3:4 4:17 5:8 6:1,25 7:5 11:1,2 24:3 26:21 32:2 38:18 39:23 41:19,25 51:5 51:17 52:24 54:6,11,14	55:10,17 56:6 56:16 57:3,8 57:13,17 59:20 59:21 62:12,13 64:12 66:15 67:18 69:7 70:18 73:12,14 79:1,24 85:16 86:19 92:18 94:15,16 97:5 97:12 98:20 100:1 101:13 101:14,19 103:7,17 104:3 108:25 110:1 113:7 116:1,21 117:4,22 119:12 121:1 129:24 132:3 133:14 134:23 137:22 139:24 142:4 143:3 145:16,22 146:13,24 148:16 151:24 152:17 153:24 156:17,25 157:2,9 158:14 160:12 163:12 170:11 171:6 173:21 174:10 174:20 176:6 179:1 182:3 184:6 185:11 186:9 187:2,9 190:10 191:13 192:25 198:14 200:20 201:12 204:4,9 205:1 205:15 207:13 209:7 210:2,6 210:21 211:17 212:3,13,19 213:5,11,14 214:4,7,25 215:5,13 216:14 217:10	217:17,21,24 218:17,25 219:13,21 220:13 222:10 222:13 223:8 224:24 225:19 225:21,24 226:3,12,18 227:4 230:24 236:11,17,19 243:2 244:20 245:22 247:18 248:16,18 old 28:4,14,17 33:5 34:12,14 34:21 35:10 44:5 52:4 89:19,24 90:25 93:1 96:9 112:15 113:9 114:7 123:24 127:21,21 128:3 141:17 141:23 142:15 170:9 218:12 218:23 219:9 227:13,18,22 227:23 228:15 229:2 236:21 236:24 237:10 older 34:24 51:22 52:5,7 52:18,18 106:16 145:14 146:3 148:20 168:6 212:7 Oligschlaeger 152:9 176:24 177:4,6 186:2 188:12 198:21 238:23 251:19 254:7 Oligschlaeger's 188:1 once 14:6 51:25 71:15 73:5 75:10 78:4	81:14 105:25 180:1 212:13 one-time 21:13 21:19 146:13 146:15 150:21 189:16 ones 4:23 99:24 145:14 146:4 213:18 ongoing 197:1 201:22 238:17 OPC 7:25 8:9,12 9:2,18 10:4,15 11:3,20,23 12:2,9,19,25 13:12,19,22,24 13:25 14:5,13 14:15,16,24 15:2,5,11 16:2 16:7 18:5 32:24 33:15,21 33:25 41:7 59:22 60:5,7 60:16,25 63:14 63:15,20,22 64:14,16,20 68:19,24 82:20 86:25 87:2,6 91:23 92:2,6 95:18 99:9 114:22 128:10 132:23 133:4 134:6 178:18 178:21,23 183:23,25 184:7 185:16 185:20,23 186:12,13,21 191:6,7,11,20 191:23 192:7,8 197:11 206:5,8 206:14,17,20 206:21 210:4,5 211:6,9 222:16 222:25 223:1 224:25 225:5 225:14,16,23	226:12,16,24 227:7 228:1 230:12 239:3 245:15 247:20 249:12 OPC's 14:20,22 15:8,16,23 16:15 37:5 47:22 51:20 93:23,25 127:22 128:2 132:9 133:17 133:25 138:4 167:23 168:3 170:8 201:19 205:16 230:9 252:1 254:8 open-ended 106:5 opening 19:10 19:12 42:2 53:4 141:16 operable 43:21 operated 146:10 operating 3:7 20:4,13 21:11 23:15,23 76:1 76:18 97:13 121:24 146:9 187:4 253:13 operation 193:15 208:18 209:1 212:22 operational 31:16 248:6 operationally 29:12 211:7,15 212:6 operations 187:7 operator 74:5,8 74:21 operators 129:17 132:6 opinion 36:14 45:1 65:8,12 66:14,24 72:18
--	---	--	---	--

MIDWEST LITIGATION SERVICES

EVIDENTIARY HEARING - Vol. I 1/3/2017

111:2 129:13 132:5 148:24 183:17 190:14 opinions 72:13 112:19 opportunity 7:6 10:2 61:4 oppose 8:14 60:16 213:6,13 213:14 opposed 10:20 139:12 opposing 59:23 60:5,7,11 61:1 opposite 12:7 option 74:8 options 74:5,8 74:11 145:13 245:6,7 oral 19:8 order 7:6 8:9 12:10 14:2,8 15:9 18:5,24 19:9 21:21 25:21 29:20 31:22 39:3 41:21 43:7,14 45:1,25 56:15 59:23 61:14,19 71:11 77:5 78:20 82:25 83:13,17 84:21 86:16,21 87:7 93:14 94:12,18 99:10,12,20,21 100:11,12,13 100:24 101:2 101:16,19,21 110:5 158:9,17 158:18,19 166:7 172:10 172:13 179:3,4 191:14 192:2,2 199:17 201:15 201:23 202:16 203:8 216:3 217:6 230:20	232:9 245:23 246:3 249:17 249:21 254:17 ordered 14:3,9 14:11 74:6 75:8 orders 18:2 33:24 34:1 43:20,20 62:23 63:4 71:12 79:8 80:7 83:6 85:9,22 93:11 99:13 109:5 112:9 115:17 115:20 127:20 158:7 166:6 202:11 216:10 216:25 238:13 245:10,15 246:18,19 original 56:11 56:16,21 97:19 198:10 originally 81:10 99:22 105:3 outlet 140:19 outside 21:4 141:6,11 142:7 189:11 over-- 242:22 over-recovered 106:15 overall 126:18 126:21 139:21 243:17 overarching 75:12 overheads 187:5 overrule 133:22 167:10 188:18 240:22 Overruled 180:25 oversight 226:20	P 3:1 p.m 17:5 250:3 P.O 2:9,14 page 9:20 27:11 32:20 64:11 65:3 68:19,25 69:1,2 70:24 77:15 82:11,15 82:25 86:18 87:11,18,19 96:19 97:1,18 97:18,20 156:3 156:8,11,13,15 156:17,20 158:5,13,15 160:9,10 161:6 165:1,3 168:1 168:3 185:17 186:20,21 192:11,12,17 192:23,25 204:9 215:16 224:1,3 226:5 226:6 237:25 246:13 pages 64:3 96:20 130:19 185:8,9 185:18 paid 201:1 painstaking 93:9 paper 215:25 218:5 papers 8:21 59:2 207:11 215:14 paragraph 14:3 14:9,11 74:4 156:4,8 193:1 204:10 parallel 80:20 138:14 parameters 193:17 part 5:7 21:12 21:15 23:10,13 23:19,22 25:6 25:7 26:13	28:19 30:1,15 33:8 34:7 39:20 84:6 85:5 97:14 101:24 109:21 119:16 128:20 132:14,21 139:5 140:17 141:12 143:22 144:11 145:16 146:14,16 148:14 150:24 186:23,24 187:2 197:1 199:16 203:6 218:11 219:17 222:4 238:24 240:19 241:17 243:17,22 244:18 245:16 248:24 partial 134:11 participated 180:7 209:11 particular 49:10 125:17 126:14 169:8,13,19 172:10 174:11 179:25 190:11 190:17 201:20 203:8 parties 10:24 19:8 55:20 151:22 172:6 partly 16:12 45:7 parts 40:16 44:3 44:6 50:16 party 14:11,12 15:20 111:18 172:7 passages 186:22 193:1 passed 24:12 95:14 112:4,6 patch 135:16 163:18,19,21	164:3,10,15,20 164:22,24 165:2,6 235:1 patches 26:19 30:18 31:5,23 38:22 45:15 51:21 95:11 111:23 167:6 174:22 212:7 218:11 patchwork 217:2 pay 22:7 200:11 200:16 paying 34:16 200:22 201:2 PE 120:21 penalty 33:16,21 Pendergast 2:3 4:10 pending 4:19 percent 96:2,5 100:25 101:1 101:16,17,19 101:20 109:10 116:20,20,23 172:10,11,12 198:6 200:15 200:19 215:24 230:25 231:6,7 231:8 percentage 30:20 46:9 48:16,18 100:7 100:10,12,13 102:10 113:25 179:2 perfectly 6:23 214:16 243:15 perform 20:19 93:6,24 94:1 110:22 146:11 199:20 performance 223:4 performed 36:11 125:11
---	---	---	--	---

MIDWEST LITIGATION SERVICES

EVIDENTIARY HEARING - Vol. I 1/3/2017

125:25 129:19 199:14,19 224:8 238:5 performing 36:13 116:12 116:15 147:16 209:17 period 9:24 10:6 11:15 28:21 156:19 193:11 209:5 211:23 226:14 periodic 126:8 periods 93:13 permanent 26:1 61:6 164:10,15 permissible 36:15 Permission 55:17 223:8 person 68:6 78:5 personally 77:7 88:5 94:2 180:6 255:7 perspective 42:6 pertains 192:21 petition 13:18 14:20 42:10 61:22 63:9 66:9 78:8,17 78:24 100:11 128:12 253:9 253:13 petitions 13:23 16:19 17:9 18:4 40:20 45:8 47:6 48:5 60:4,19,25 61:12,17 62:5 79:9 80:8 128:7 182:22 phases 21:5 PHMSA 19:21 20:17 21:10,20 phone 3:16 physical 121:18 121:20,22	135:5 174:5 physically 26:17 29:3,8 picked 34:2 236:8 picking 56:23 picture 27:11 28:7 141:21 piece 28:22,23 28:25 37:8 47:23 48:2 51:6 66:1 67:10,20 105:4 105:4 132:18 135:11 158:16 163:22 164:1 164:16 165:7 197:25 203:6 232:11,15 piecemeal 24:23 pieces 24:13,19 32:18,25 36:23 37:2,2 39:1 47:7 81:20 136:7,8 153:7 pipe 20:9,14 21:15,16,17 22:14,21 27:14 29:9 30:6,13 31:18 32:25 33:7 36:6 37:2 39:1,8 40:7,18 40:24,25,25 41:1,23 42:12 42:22,24 45:5 45:6,6,9,11,12 45:19,19,20 46:22 47:4,22 47:23,25 49:5 49:7,9,10,13 49:17,19,20 50:16,24 65:9 65:13 68:4 69:18,23 70:3 70:10 71:14 79:5,14 80:1,1 80:2,3 83:23	89:2,15,19,20 89:24 90:24,25 90:25 91:2 94:5 100:10 101:25 102:1 105:18 114:2 114:10 121:10 121:13,15,19 121:21,24 122:3 123:11 124:6,22 125:2 125:3,8,20 128:3,8 130:1 131:9 136:23 137:14 139:9 139:10,18 163:16,22 164:1 165:7,8 165:17,18 166:1,2 167:3 167:25 168:5,7 168:9,12,12,15 168:17 169:8 169:13,19 171:25 173:23 174:12,15,18 176:3 179:2 194:11 197:19 197:22 198:1,1 198:10 201:17 201:21 202:13 202:13,15,17 202:18,23 211:1,24 212:8 220:9 230:3 231:8 233:14 234:11,11 235:11,13 237:13,15,16 237:16,17 247:25 pipeline 37:18 38:13 43:17 69:8,15,17 71:25 77:16 126:7 130:8 135:6,10,12,20	136:6 146:2,6 146:10,16,23 146:25 147:16 147:17 148:7 148:10,13,13 148:17,19,19 148:21,23,25 149:5,9 191:15 192:2,13 193:13,16,18 193:19,23 197:1 209:3 241:4 254:17 pipelines 71:21 72:8,10 73:7,9 74:22 137:1 146:4,5 pipes 22:18 72:10 136:5 211:10,21,22 212:16 pipng 31:10,21 31:22 144:13 197:13 place 13:24 89:18 94:22 95:7 102:4 112:10 142:22 164:17 189:20 203:24 215:12 255:8,13 placed 129:22 189:21 places 40:23 160:11 plan 223:18 237:24 239:19 239:20 253:19 planned 84:5,13 planning 6:2 207:21 208:3 plans 222:6,15 239:18 plant 43:13 88:22 90:6,8 103:12,19,23 103:24 104:5,7	104:11,16,25 105:1,13,17 107:1,5,6,17 110:11,13 123:3 170:22 170:22 187:7 187:14 189:18 193:8 211:12 214:10,11 216:12 220:9 220:11 224:18 224:22 228:8 245:9 247:16 plas-- 203:2 plastic 5:14 19:17 24:6,11 24:19 25:1,5 25:10,23 26:11 26:18 28:1,10 28:13,18,22,23 28:25 29:9 30:18,25 31:5 31:8,23 32:6 32:12 33:3,5 33:10,11,13,17 33:22 34:4,11 34:12,14,20,23 34:24,24 35:4 35:10 36:5,16 36:23 38:22 40:6,24,25 41:1,23 42:3,4 42:12 44:22 45:2,5,5,6,11 46:4,9,21 47:1 47:4,8 48:16 48:19 51:21,23 52:4,4,6,7,19 56:13,20,24 59:25 61:5 63:5 65:1,1,9 65:13,20 66:3 67:13,21 68:1 68:10 69:24 75:15 76:22 77:6,10,20,25 78:9,13,15
---	---	---	---	--

MIDWEST LITIGATION SERVICES

EVIDENTIARY HEARING - Vol. I 1/3/2017

79:2,10,10	202:6,7,15,18	plus 95:24	134:12 138:4	121:2 122:10
80:8,9,12,14	202:20 203:3,6	point 6:19 11:18	167:23 168:4	129:8 130:11
80:19,20 81:3	203:9 211:3,10	16:11 18:21	169:17 170:8	130:18 131:23
81:9,17,23	212:7 216:4,7	28:9 32:3,13	171:23,24	132:11 133:10
84:20 85:3,15	218:4,9,16,22	35:7 41:17	182:11,13,20	133:19 134:1,5
86:1 87:13,20	218:24 219:3,5	47:21 48:8	193:21 211:6,9	134:14,24
88:7 89:19	219:8,11,14,19	55:13 76:20	227:20 230:9	143:7,8 144:24
91:12 93:2	219:19,22,22	77:4 88:11,20	positions 121:3	145:7 147:2
94:8,8,19,23	219:23 220:1,2	88:25 89:14	positive 67:14	150:1,11 160:1
95:2,10 99:5,8	220:3,8,9,10	93:5 102:18	107:21	160:2 162:15
100:10 101:1	220:16,20,20	104:15 105:11	possible 12:18	162:21,23
101:17,20,24	221:15 227:14	106:2 108:2	29:3,8 30:19	165:22,23
102:2,9,16	227:22,23,23	128:14 142:1	102:9,12	166:5 167:4,17
105:18 108:9	227:24,24	142:13,13	107:13 168:25	169:23 171:12
108:13,13	228:8,12,15	163:15 190:18	169:5 172:14	171:16 173:6
109:14,18,21	230:4,8,10,18	212:21 220:19	172:16 197:4	173:12 175:22
109:23 110:2	230:23 231:2,3	221:3,3	202:3 232:23	178:14 181:2
111:24 112:6	231:5,8,14,15	pointing 130:17	possibly 39:2	181:16 183:21
112:10,15	231:18,19	238:2	101:11 243:16	184:2,5 185:2
113:9 114:12	232:12,21	policy 248:3	Post 4:1	185:3,7,14,20
114:17,20	233:4,5 234:11	poll 152:11	Poston 2:8 4:5,6	186:15 187:25
115:15 116:2,3	237:13,15,17	polyethylene	5:21,23 6:7	188:15,22
116:17,20	243:21 244:11	40:7 77:6	13:9,10 40:4	191:4,9,20
117:16 127:14	244:16 245:6	portion 48:11	41:4,12,22	192:10 195:2
127:21,24	245:25 246:4,8	79:25 95:1	42:1 47:13,17	195:13 196:8
130:1 132:12	246:9,21,21	123:8 130:22	48:3,20 49:2	196:11 198:6
132:16,18	plastics 178:20	172:2 187:24	50:8,17,25	201:9,11
134:10 135:20	played 199:22	203:12 231:13	51:10,25 52:7	203:16 205:17
135:21,21,22	plays 44:1	portions 71:25	52:11,20,25	205:18 206:1
137:1 138:5,5	pleading 15:22	73:1 171:20	59:12,13 62:3	206:14,23
138:16,21,25	please 3:23	174:23 201:13	63:11,17 64:13	220:24 221:9
139:19 142:16	13:11 28:3	203:9,9	64:22 66:8,15	223:3 225:3
150:23 163:13	36:1 61:2,16	posed 119:13	66:22 67:4,8	234:19,20
164:8,9,13,14	64:9 65:11	position 22:12	72:5,6,13,14	235:21 236:1,3
166:8,10 167:3	67:6 77:23	24:8 26:17	72:17,20,23	236:5,9,10,13
167:25 168:5,9	86:19 87:17	28:16 30:4	82:16,19,21,23	236:15,17,18
168:17,21,24	89:8,12,22,23	38:12 47:22	86:5,8,23 87:4	240:12,18
170:9,9,24,25	101:14 103:4	48:4 51:21	88:12,15 89:13	241:2,22 242:1
171:25 172:11	110:20 117:5	52:5,17 65:24	91:18,24 92:8	242:8,14 243:2
172:17 173:22	117:21 149:11	66:23 67:9,24	92:10,12 98:12	243:3 244:2
173:23 174:11	157:17 158:4	68:2,8,15	98:24,25	248:16 249:5,7
174:15,18,22	177:2 181:20	77:19,24 93:23	107:21,23	251:5,6,9,10
176:3 179:3	186:22 187:12	102:18 126:9	110:16,24	251:16,17,20
182:4 197:12	193:4 201:9	126:24 127:9	112:2,16,23,25	251:21 252:3,6
197:19,21	205:19 217:22	127:17,22	114:21 117:7	Poston's 115:7
198:3,7,9	218:21 227:11	128:1 133:18	117:17 118:1	potential 74:22
201:13,16,21	235:18 249:16	133:20,25	120:9,10,25	211:23

MIDWEST LITIGATION SERVICES

EVIDENTIARY HEARING - Vol. I 1/3/2017

potentially 197:12	211:22 228:8 237:8,14,16	process 11:8 15:23 16:21,24 18:7 93:9 124:21 136:14 136:16,18 170:12 210:25 213:6	projects 21:25 22:8,24,25 23:1 37:20,21 37:21,22,24 38:3,5 40:21 42:8 43:14 93:4 109:20 122:19,23 123:2,5,5,6,7 123:10,23 135:2,5 145:14 147:3,15 148:6 148:12,17 149:4 204:25 224:7 225:1 239:16 241:10	17:5 34:1 44:6 81:16 86:9 99:19 144:4 163:12 181:5 195:12 215:21 222:15 225:5 225:15,15,16 226:9 230:1
practical 11:2	pressurized 49:6 121:13	produce 238:23	professional 120:20 207:20 208:2,9,15,23 209:7	provides 8:4
practically 11:9	pretty 46:10 139:4	program 21:13 23:10 25:6 26:14 33:9,10 34:7 71:8,15 74:16 75:5,18 75:25 76:15,16 76:22 108:7,10 116:12,16 126:20 145:17 145:19 146:14 150:18,24 197:1 198:25 210:13 221:23 223:25 238:18	pronounce 235:24	providing 17:15 69:23
practice 16:1 18:3 67:10,25 68:17 227:22 236:22	prevent 29:13	profit 107:15,16 107:19 243:14	property 27:23 90:6,7 95:16 98:3 105:4,5,7 105:11,12 106:6,16 107:20 183:10 215:7	provisions 111:14
practices 65:25 121:9 124:10 227:13 236:20	previous 7:6 10:16 12:15	programs 70:23 71:1,4,18 73:13 75:7,8 241:4	propose 111:18 152:2	prudence 45:18 45:22 51:3 111:12 131:12 131:18,24 132:4 228:5 235:3 248:2,7
precedent 195:10,14	previously 34:16	progress 108:20	proposed 178:24 213:25	prudency 210:25 228:17 248:5
precise 244:25	price 33:4	prohibited 238:20	protect 214:9	prudent 29:15 35:13 110:11 110:13,23 113:8 116:13 130:24 131:4,9
precision 231:24 245:1	primarily 125:19	project 38:12 39:11,12 44:12 51:3 61:9 70:20 93:19 99:9,17 109:17 109:22,25 110:1 123:3 124:4,5 144:12 144:12 146:1 203:7 209:11 218:3 219:6 238:17	protected 76:13	PSC 7:23 9:20 9:25,25
predates 112:1	prior 15:17,25 16:6 17:20 39:19,22 93:13 112:3,11 146:5 209:4 221:16 221:18	prohibit 108:20	protection 75:20 76:4,6,10 124:22,25 126:19 208:12	public 1:2 2:8,8 2:11,12,14,17 3:25 4:4,6,7 10:1 40:3 59:11 98:23 102:19 120:8 143:6 154:12 157:21 159:25 171:14 175:8 175:16 177:9 178:13 184:9 196:6 201:7 205:8 209:15 234:18
prefer 6:21 32:10 102:14	prioritize 74:21	project 38:12	protections 213:18	public's 9:25
prefiled 6:6 133:24	priority 75:1	prohibit 108:20	proved 169:7,12 169:16,18,22	pull 27:21 134:21
preliminary 7:4 19:4 204:18	probably 4:14 29:4 48:6,12 52:8,11 53:1 68:6 71:16 73:5 75:6 76:23 78:3 85:14,15 88:8 93:17 96:20 103:2 114:17 149:1 209:5 228:5 236:5	prohibit 108:20	provide 9:21 32:4 47:16,17 50:20 72:13 162:7 168:6 181:3 193:7,14 194:13 222:5 239:4 249:21	
premarked 3:21	problem 164:2 164:17 200:7 217:7 231:16	prohibit 108:20	provided 16:13	
prepare 154:19 157:22 177:11	procedural 15:15	prohibit 108:20		
prepared 154:20 157:23 177:12 206:5	procedurally 7:14	prohibit 108:20		
preparing 209:20	procedure 14:16 14:17	prohibit 108:20		
prescribed 10:2	proceed 53:15 185:13	prohibit 108:20		
present 3:18 35:22 49:22 50:4 74:22 179:8 255:7	proceedings 1:4 19:2 181:19,23 255:7,10	prohibit 108:20		
presentations 222:5		prohibit 108:20		
presents 29:13		prohibit 108:20		
Presiding 1:19		prohibit 108:20		
pressure 19:25 20:2,4,7,8,9,13 20:20 21:11 23:16,24 121:14 139:3,6 140:21 141:3 146:9 211:1,2		prohibit 108:20		

EVIDENTIARY HEARING - Vol. I 1/3/2017

pulled 217:14	219:9 220:10	213:11 214:5,6	242:25 246:12	111:17 125:7
purports 192:1	quality 44:10	214:15,24	246:24 251:6,9	126:22 131:10
223:22	quantification	217:18 221:7	251:10,14,17	160:14,16,19
purpose 36:15	115:5	227:16 228:16	251:20 252:5	160:21 161:1
38:10 108:7	quantifying	240:17 243:4	quibble 226:9	179:14,18,20
145:12 211:2	115:9	247:5	quick 7:13 98:14	179:20 181:18
214:8 246:16	question 9:12	questioning	109:8 151:13	181:22 196:20
248:4,10	27:7 31:12	242:6 248:5	152:11 184:23	197:9 209:21
purposes 44:25	32:22 38:19	questions 13:5,6	quicker 16:25	211:5 243:13
59:18 79:24	41:6 42:11	18:11 22:11	quickly 12:18	243:14,16
80:4 180:1	46:7 50:10	32:1 35:17	167:3 173:22	247:16,25
200:14 247:22	51:20 53:1	37:13 54:8	174:15	ratemaking
pursuant 111:13	60:23 61:2,16	55:3 57:14	quite 111:25	200:13
push 37:5	65:11 67:1,2,5	59:9,18 64:23	126:2 229:25	ratepayers
put 20:5,6 21:14	67:7,15 68:13	66:18 68:7	247:7	213:22
23:18 28:19	72:5 73:6 74:2	80:4 83:5	quote 13:16,18	rates 22:9 52:12
34:11 39:3	77:22 78:5	91:19,21 92:14	15:9 40:11,15	52:22 61:6
52:15 83:23,24	79:22,25 81:8	92:19,21,23	43:9 78:11	81:23 90:11,15
90:24 94:4,8	84:9 86:19	98:5,7,8,10	106:15 122:14	90:18,21
94:19 95:6,21	89:11,22 90:13	99:2 102:23	130:3	106:12 111:10
100:18 105:18	91:12 95:15	108:1,22	<hr/>	160:16 161:3
107:17 114:2	103:8,15 104:1	110:18 112:1	R	181:15 215:8
114:10,15,19	104:10,20	117:8 118:3	R 3:1 254:10	229:22,23
115:25 116:17	107:22 110:20	119:13 122:11	255:1	ratio 100:19
117:20 125:6	110:21 113:14	127:13 134:17	raise 8:3 10:11	198:6
133:1 136:6,12	115:4,7 117:2	134:18,25	10:17 11:14	rational 244:24
136:16 141:9	117:3 123:19	135:3 139:25	13:13 14:1,15	reached 29:18
142:7 144:22	131:7,14 134:2	140:3,10 145:1	16:3 18:5 48:7	read 43:7 111:5
145:20,24	134:4 138:23	145:7 147:2	118:11 248:7	123:1 134:12
146:23 164:17	140:9 149:20	150:1 151:22	raised 8:1 10:10	158:8 186:22
185:10 196:8	151:14 155:25	152:1,12	10:12,18 11:3	187:12 188:9
199:10 203:5	157:4 160:23	154:12 155:2	11:7 12:5,25	193:4 204:13
231:2 232:8	160:24 161:10	155:23,24	15:17 38:19	222:23 238:13
236:25 244:9	161:24 162:19	159:4 162:6	46:24 48:12	readily 139:4
putting 27:14,15	162:22 163:5	170:1,4 171:7	175:7 210:24	reading 13:20
27:15,18 28:1	164:11 165:4	171:9,10,11	226:13 227:8	123:8
33:3,7 94:6	165:22 167:2	173:12 176:19	raising 12:20,20	reads 158:6
95:4,22 101:23	167:14 169:10	177:18 179:12	17:19	ready 53:15
101:25 102:1	171:17 173:13	182:16 196:14	ran 173:15	98:21 108:17
124:11,13	173:21 174:21	196:16 198:16	rate 11:18 12:15	real 27:7 42:9
148:18 227:19	175:24 176:6	201:5,10 206:8	45:22 51:2	42:10,11
230:22	178:17 188:10	211:4,14	61:4 89:20,25	245:13
<hr/>	188:21 192:13	217:23 225:11	90:15,20,25	Reality 95:20
Q	192:21 194:1	229:6,8 233:21	91:3 96:2,5	reallocation
qualifies 49:16	201:19 202:1,2	233:25 234:22	103:23,25	249:12
219:6	202:25 204:8	235:22 239:2	104:13 106:4	really 6:10 19:1
qualify 182:5	208:21 213:6	242:9,15,21,23	106:23 111:16	39:9 46:14

MIDWEST LITIGATION SERVICES

EVIDENTIARY HEARING - Vol. I 1/3/2017

60:21 68:16	240:8,11,18	33:6 39:7	reduction 35:1	161:3
69:19 92:15	243:4 247:3	51:14,24 52:1	103:11,18	regular 161:8,12
96:17 100:5,14	recalls 240:13	52:10 105:1,19	104:4,13	161:18 163:1,7
101:4,12	240:20	106:7,12 107:7	refer 4:14 59:19	180:3,13
102:17,18	receive 6:21	115:17,19	69:17 82:12,25	regularly 186:7
105:14 115:8	12:8 59:2	229:14,22	120:14 122:6	regulation
141:12 147:15	104:18	232:18 237:2	160:9 164:24	130:16 180:8
190:4 202:7	received 16:19	238:8	165:1 188:13	regulations
205:9 232:6	54:21 58:1,19	recoverable	195:3 203:11	129:7,16 130:4
rearrangements	64:20 92:6	231:1	214:14 247:5	130:5 146:7
187:16	120:1 153:16	recovered 45:7	reference 61:20	189:19 208:17
reason 100:15	155:17 159:18	52:18 229:21	62:19 70:21	208:25
182:9 204:22	178:6 186:13	recovering 46:6	86:16 124:4	regulator 29:25
237:12,17	192:8 206:21	52:13,14 90:15	referenced	37:17 44:15
238:25 241:16	239:9 253:2	95:19 103:13	199:8,25	regulatory 1:20
reasonable	recognize 107:1	105:7,15 106:1	references 61:13	3:11 36:10
30:13 100:3	226:6	232:15,17	61:18	183:3 204:16
191:2 232:4	recommend	recovery 32:14	referencing	214:10 247:16
244:23 245:3	230:12	32:17 33:6,20	48:24 65:5	rehabilitating
reasonableness	recommendat...	40:10 60:7	referred 95:18	209:12
111:10 248:3,5	10:6,14 13:1	61:21 104:19	95:19 128:15	rehabilitation
reasonably	14:4,7,9,22,24	106:6 126:11	194:15 195:2	122:3 238:17
12:18	15:1,4,13 17:4	134:11 168:5	237:24	reject 171:21
reasoned 181:4	recommended	183:12 247:16	referring 43:11	rejected 43:6
reasoning 37:5	13:2	recross 98:10,21	59:19 120:15	175:24 176:2
reasons 24:9	record 3:5 6:16	171:10	130:4 164:25	related 99:16
241:14 242:18	6:18 20:18	Recross-Exa...	203:14 247:22	100:20,20
reattach 25:4	21:16 23:13	98:25 143:8	refers 77:13	104:25 109:18
rebuttal 54:3,24	58:10 85:7	171:16 198:20	123:11,23	137:19 210:12
55:8,25 56:3,4	92:5 118:20	201:11 234:5	124:15 130:15	214:10 217:12
57:25 82:8,24	146:17 152:24	251:6,10,17,21	174:4,7	217:15 219:10
109:6 115:10	153:14,25	251:21 252:5	reflect 179:21	229:14 231:7
119:2 133:24	196:1 205:13	redesigning	reflected 181:14	232:12 247:6
157:23 158:5	205:16 241:23	139:23	181:25	relating 208:11
177:12 182:15	241:25 242:6	redirect 108:3,5	refresh 48:25	208:18,25
253:6,8 254:5	250:1	108:21 145:2,4	240:21	relation 249:11
254:7	recording	173:8,11	refund 111:20	relative 204:16
rec 15:6 17:13	103:13,19	188:16 203:18	regard 17:19	relatively 56:8
recall 85:20 99:5	104:6 161:7,11	203:22 205:2	72:18 85:21	129:20 216:12
114:24 116:13	162:25 180:2	234:17,20	112:21 141:18	release 189:8,24
143:25 145:9	199:22	251:7,11,18,22	141:19 152:5	195:5 199:7
147:5,13 150:2	records 20:1	252:6	167:11 190:11	200:1,2
150:14 175:24	23:20 84:25	reduce 91:14	249:15	relevance
189:16 202:8	85:19 150:5	106:22	regarding 13:16	131:22
221:23,24	199:18 201:24	reduced 34:23	43:5 131:18	relevant 131:24
222:22 223:7	202:23	reduces 34:17	226:13	132:5 212:11
237:25 239:24	recover 22:8	93:15	regardless 70:10	reline 147:12

MIDWEST LITIGATION SERVICES

EVIDENTIARY HEARING - Vol. I 1/3/2017

<p>relining 37:20 123:2,5,10,11 134:25 147:8 148:6,12 remain 118:7 remaining 76:15 remains 161:2 193:16 remember 41:6 49:1 144:3 166:20 176:4,6 210:10 240:13 249:5 remove 17:10 25:14,16 33:11 33:12 99:4 101:1,20 110:11 113:8 172:8 179:4 220:11 removed 45:3 45:21 50:5 69:10 94:21,21 95:6 117:10 158:8,10 178:19 202:4 216:12 218:16 219:2 231:8,9 244:13 removing 71:14 112:14 repair 44:6 122:2 189:1 233:10,10 235:7 repaired 69:9 233:11 repairs 36:21 187:15,17,22 193:9,25 repeat 72:5 110:20 134:3 161:10 162:21 164:11 165:4 165:21 167:13 169:10 181:20 188:20 207:24</p>	<p>208:21 repeatedly 8:14 rephrase 67:4 67:15 219:18 repipe 142:25 replace 20:25 24:5 26:7,18 30:5 36:20 39:6 45:16 49:20 50:15,23 65:1,9,13,20 66:3 67:12,21 68:9 70:11,15 75:15 77:5 78:9 80:12 102:8,15 107:13 108:8 108:12 111:23 127:20 128:16 128:23 130:1 130:21 131:8 141:10,13 149:12 165:17 165:25 168:5,7 168:12,15,17 176:16 198:9 219:8,19 220:10,20 231:4,14 232:23 235:1 235:11 241:9 replaced 24:18 26:10 30:25,25 35:3,5 36:12 39:15 40:11,18 41:18 42:12 43:16 44:4 47:5 48:17,19 51:23 52:4 67:19 69:9,14 73:21 76:4,9 76:11 78:21 81:4,9,17,21 85:25 87:13,20 87:23 93:2 117:11 141:24 150:12,17</p>	<p>151:2 166:8,10 168:8 169:8,13 169:19 171:1 172:11,18 182:7 194:7 198:2 202:14 202:15,23 203:3,12 230:10,18,19 231:20,20 233:12 235:2,9 237:13,18 243:21 246:22 replacement 1:12,17 3:8 22:23 24:7 25:19,22 26:2 26:7,8 30:19 33:9,9,10 36:5 36:22 37:1 41:13 44:14,16 45:25 63:4 65:19 70:23 71:1,3,8,18 73:13 74:16 75:5,7,18,24 76:15,16 77:20 77:25 78:13 80:8 82:11 89:2 108:7,10 115:23 116:12 116:25 122:3 134:8,10 139:20 150:18 150:24 163:13 170:9 174:22 182:12 194:1 197:13,18,21 198:3 201:20 202:12 210:13 219:21,23 221:22 223:25 224:13 234:11 238:18 241:4 253:10,14,17 replacements 40:13 41:22</p>	<p>42:22 43:21 45:2 61:5 64:7 75:16 77:11 78:15,23 79:2 79:4,10 89:15 111:13 128:6 128:11 132:7 163:16 165:13 187:15 193:9 203:11 221:15 247:17 replaces 36:18 40:24 44:23 164:7,12 212:16 218:4,7 230:7 231:3 244:10 replacing 22:18 22:20 24:10,13 26:18 30:6 37:9 40:6 41:14 42:3,22 44:22 45:5,18 47:2 50:23 57:24 59:24 60:8,12 65:25 67:10,25 68:10 75:19 79:20 127:14,22,23 128:3 129:22 137:20 139:12 141:13 164:16 167:24 168:23 169:1 182:4,9 209:11 210:17 211:2,7,16 227:18 228:19 231:17,19 233:4 243:20 243:21 244:15 247:24 replicate 59:3 reply 13:9 18:17 18:18 report 8:8 13:14 13:16 16:8,22 18:24 46:20</p>	<p>193:8 REPORTED 1:24 reporter 3:21 27:5 53:11 62:7 63:16,19 87:3 92:16 154:7 157:17 177:2 184:1 191:8 223:14 255:5 reporter's 64:10 reporting 187:14 reports 126:1,5 143:16,20,23 143:23 144:1 representative 10:1 request 14:16,20 15:8,13,18 18:4 30:20 61:5 86:3,10 86:15,20 91:13 175:23 195:18 196:9 214:13 214:17,22 247:1,4,11 249:1 requested 15:22 17:13 118:2 143:25 156:22 156:23 requesting 15:5 requests 16:14 85:21 247:8 require 61:14 64:7,25 70:15 76:22 93:24 102:7 110:10 165:16,25 186:17 required 17:16 17:18 34:6 38:25 40:17 42:11 61:19 110:22 128:25</p>
--	---	---	--	---

MIDWEST LITIGATION SERVICES

EVIDENTIARY HEARING - Vol. I 1/3/2017

129:11,16 147:19 168:12 187:21 188:25 199:19 237:14 requirement 12:1 13:12,24 14:15 21:7 40:13,21,22 41:2,9 65:5 70:11 75:13 79:3 97:20 104:22 129:9 129:10 156:22 160:14,18,25 179:14,17 216:21 requirements 21:20 43:18 61:10 62:15,24 63:3,25 71:4 71:20 73:8 130:16 166:20 189:19 209:3 224:9,14 238:7 238:9 248:6 254:12 requires 37:1,11 65:9,13 69:13 70:11 77:5,10 78:8,23 117:15 237:16 requiring 75:15 189:19 research 238:12 reserve 90:8,9 106:8,9,10,19 106:21 resides 140:22 resources 17:23 respect 36:8,16 38:16 211:10 212:9 respond 10:8,10 14:8,12 15:21 16:15,20,25 17:1 46:23 112:23 188:15	responded 214:22 responding 10:5 16:12 response 10:9,9 10:11 14:10 17:12,24,25 18:14 54:18 57:22 92:3 113:13 119:23 149:19 153:12 178:3 202:2 214:13 225:8 responses 16:13 16:21 responsibility 121:7 rest 129:21 restate 133:15 result 121:21 176:10 resulted 143:21 retire 105:17,19 105:25 107:5 107:18 219:14 228:8 231:11 retired 34:15,22 34:25 52:1 80:17 83:11 85:6,10,23 89:20,24 98:3 103:12,18 104:5,25 105:1 106:6 107:2,9 107:10 115:24 116:17 160:19 161:1 179:18 179:22 180:1 197:22 220:2,3 retirement 84:20,25 85:14 90:5 91:12 95:10,16 97:24 101:17,18 103:11 105:14 109:9 113:16 115:15 116:2,9	219:10 retirements 56:12,20,24 84:18,19 87:7 89:3,17 91:14 97:15 100:25 103:10 113:22 113:24 114:12 161:8,12,18 163:1,8 180:3 180:9,13 246:1 246:4,8 254:13 retiring 52:20 88:22 228:12 228:13 return 91:1 95:23 105:10 105:12 200:17 215:6 returning 98:20 reusable 139:4 reuse 139:13 reused 39:2 reusing 139:7 revenue 12:1 21:7 97:19 104:22 156:22 160:14,18,25 179:14,17 revenues 156:6 review 9:24 10:2 111:10,11 158:7,8 166:6 184:23 223:5 reviewed 223:6 reviewing 13:22 125:19 223:7 Revised 55:8,25 57:25 94:11 245:15 revision 56:18 revisions 55:15 Rick 2:4 4:9 7:22 rid 11:5 right 5:16,20 7:1 7:3,17 15:9	16:23 19:7 23:16 25:14,16 29:23 34:20 35:22 44:21 48:23 52:14 56:15 57:13 74:13 81:24 86:11 96:19 98:13 99:14 106:14 108:2 109:10 118:7 118:12 121:5 122:13 130:14 141:21 142:23 147:22 151:17 152:4,11,21,22 155:15 156:8 157:6 162:4 166:21 171:4,8 172:22 173:1 176:1,20 182:17 183:22 192:6 194:24 197:17 198:12 198:15 203:3,8 203:17 205:7 215:14 221:7 225:2 226:25 227:17 228:14 228:17 233:24 234:16 240:1 244:6 245:11 risk 68:5 129:17 136:24 137:6 role 44:1 rolled 52:12 room 98:15 RPR 1:25 255:17 rudimentary 27:8 rule 15:20 18:23 69:13 75:14 77:20,25 89:1 95:14 109:22 139:16,17 163:16 189:3	rules 10:7 14:14 18:2 19:22,23 20:17 21:10,20 64:1,6 66:19 68:21 69:3 72:25 76:16,22 77:14 78:7 89:15 111:20 143:9,13 163:20 165:16 165:25 186:17 190:21 193:7 204:7 249:18 run 138:9,14 142:16 149:23 runs 138:24 140:16,19,23 142:25 149:20 Rupp 1:22 47:20 48:14,23 49:3 <hr/> <p align="center">S</p> <hr/> S 3:1 safe 44:2 65:6 65:15 76:23 121:8 143:10 165:18 166:2 safely 121:24 safer 42:4,7 135:11,19 136:13 237:4 safety 29:4,6,13 32:5 40:12,17 40:22 43:18 61:10,13,18 62:14,23 63:3 63:24 64:1,6 68:21 69:2 71:1,14 73:8 76:16,22,22,25 77:14 79:3 128:24 129:9 129:10,25 143:9,13 146:7 165:16,25 166:20 193:16 208:17,24
--	---	---	---	--

MIDWEST LITIGATION SERVICES

EVIDENTIARY HEARING - Vol. I 1/3/2017

<p>209:3 224:9,14 237:1 238:7 241:14 254:11 salvage 39:1 same-length 116:23 San 19:20,24 satisfy 41:2 save 113:2 saying 9:15 10:8 22:2 30:14 32:16 45:19 48:1 51:12,14 78:22 85:13,14 110:2 132:25 133:4 136:21 150:14 162:3 172:1 180:19 188:12 194:7 194:24 211:13 212:17 216:2 216:14,24 231:13 239:9 243:8 says 13:15 15:10 17:22 21:24 37:17 44:13 61:13,18 69:8 69:10 70:9 71:20 72:7 74:4,20 89:1 89:15 100:19 111:3 117:10 122:22 123:1 125:10 127:2 156:4,21 163:16 172:2 215:25 238:5 238:15 239:15 239:17 240:11 244:10 scale 35:9 scales 114:7 scenario 101:14 199:25 200:2 202:9 230:14 231:23 233:17</p>	<p>234:24 244:14 scenarios 244:4 schedule 15:15 55:9,12,25 56:3 57:25 62:11,13,20 63:8 90:4 94:11 103:16 109:6,19 115:11 scope 248:2 SCOTT 1:22 scratch 244:13 se 71:15 seal 136:17 sealant 124:13 seals 149:6 seat 8:20 second 10:19 19:17 31:25 32:20 33:18 38:18 40:17 47:14 56:10 61:15 68:18,20 71:19 87:18 123:22 150:16 156:11 158:18 163:5 186:21 192:11 193:12 section 22:22 25:11 47:1 48:9 56:9,14 65:2 67:19 68:21 69:1 71:5,17,21 73:4 76:21,24 76:25 77:13,16 111:5,6,8,14 125:1 130:6,7 130:10,12,15 131:9 147:3 148:3 204:14 204:24 232:22 sections 48:6,13 50:22,23 168:8 168:17 see 3:12 4:22</p>	<p>17:22 27:12 28:7 33:3 37:8 48:9 49:6 56:15,24 65:4 68:24 69:1 71:18,19,22 73:3 74:3,9,10 77:15 83:22 86:14 87:19 94:12,18 97:23 109:21 122:19 160:10 186:20 192:12,14,18 192:19,25 193:2 204:11 242:10 245:23 seeing 48:5 54:19 57:23 58:16 64:18 92:4 119:24 144:3 153:13 159:16 178:4 229:19 243:20 249:24 seek 111:20 seeks 15:14 seen 3:12 42:17 55:20 60:20 166:15 226:10 235:16 239:19 243:12 246:18 246:20 segment 36:18 36:19,25 38:24 39:4,6,8 68:9 69:8,12,14,15 69:16,20,21,22 70:2,3,4,9,10 70:12,16 79:23 79:25 80:3 85:23,24,25 121:13 125:17 126:15 128:17 132:16 134:10 163:23,24,25 164:4,18 165:17 166:1</p>	<p>166:22 167:18 169:8,13,19 173:16,18 193:18 203:2 230:11 232:25 233:13,16,19 234:25 235:2,3 235:13 249:13 segments 59:24 60:8 79:13,19 79:20 80:9 117:16 124:6 128:3 167:24 168:19,20 173:13 174:22 174:23 234:23 self-reconciling 105:24 107:4 107:10 sense 42:5 138:23 sent 16:17 17:2 85:21 222:23 222:24 223:1 225:20 sentence 71:20 74:3 156:20 212:14 221:1 221:10 sentences 182:20 193:12 separate 19:1 46:18 70:3 110:5 171:19 172:7 201:16 213:9 232:19 separately 120:16 separates 46:21 series 83:5 180:9 service 1:2,12 1:17 2:14,17 4:1 20:6,21,24 20:25 21:15 23:18 24:1 25:5 36:12 37:17,20 39:3</p>	<p>40:11 44:23,24 52:1 57:9 59:25 63:5 65:1,16 67:13 69:10,23 73:14 73:18,22 76:24 77:6,21 78:1,9 79:10 80:9,13 80:14,19 81:3 81:18,23 85:23 87:13 88:18 90:6,9,10 95:6 99:18 103:22 103:23,24 104:8,11,17 123:5,22 126:14,15,24 127:3,4,6,15 135:1 139:2 140:12,15,23 141:12,13,19 141:22,25 142:8,13,15,17 144:21 146:12 146:20,23 148:16 149:23 150:11,17 157:21 161:9 161:13,19 163:2,8 164:8 164:9,13,14 168:24 169:2 177:9 180:4,14 181:12,17,21 181:24 182:4 189:21 194:2 194:12,13 199:10 204:16 210:12 211:7 221:22 223:25 224:23 238:17 241:9 253:11 253:15 services 1:25 56:9 126:21 245:23 255:6 set 23:15,23</p>
--	---	--	--	---

MIDWEST LITIGATION SERVICES

EVIDENTIARY HEARING - Vol. I 1/3/2017

33:2 69:23 77:1 96:15 132:6 139:14 140:20 143:1 243:15 255:8 setting 20:12 102:3 settled 11:21 seven 96:20 shared 226:1 shareholders 214:9 sheet 83:13 84:22 255:9 sheets 78:20 83:18 84:7 158:9 166:8 short 18:25 98:9 205:9 short- 161:17 short-lived 104:19 161:7 161:12 162:25 163:7 180:3 shortened 180:10 shorter 82:2 shorter-lived 180:12 Shorthand 255:5 shortly 17:5 show 34:19 40:19 41:21 43:8 44:3 45:4 47:4 49:25 83:6 84:17 166:8 216:23 226:3 240:4,25 showed 45:10 112:2,10 240:6 240:8 showing 49:23 57:6,11 241:23 shown 56:18 83:12 shows 9:1 33:18	33:23 43:19 87:19 97:15,18 97:20 98:15 216:10 241:1 side 27:20 28:6 28:6,24,24 31:16 45:11 96:7 142:9,11 169:1 249:12 sidewalk 27:16 138:12 significant 240:9,25 significantly 31:5 213:18 signs 43:22 similar 37:22,23 37:25 38:3,4,6 38:7,9,9,19 64:3 97:8 122:23 123:6 123:17 147:15 176:8 190:24 202:4 239:19 239:21 similarity 147:11 simple 11:4 45:21 82:7 102:7 124:24 179:6 218:15 simply 13:21 32:10 44:4 46:3 49:12,18 50:3 152:2 164:9,14 175:24 230:17 singing 16:9 single 203:1 235:16 sir 37:14 39:24 53:20 54:5,10 54:13 55:16 59:7,15 78:16 94:3 134:20 sit 83:25 84:2 90:3 94:5	95:20 96:2 105:3 106:22 110:4 site 165:12 209:24 210:7 210:15 sites 209:16 sitting 141:1,6 188:17 228:4 situation 29:17 30:9,12 220:7 246:11 247:24 situations 189:15,17 197:24 232:3 six 14:21 28:12 96:20 six-inch 47:23 size 164:6 sizes 137:12 slide 10:23 slightly 45:10 slipped 45:8 slowed 12:23 slowing 125:7 slows 125:2 small 47:7 48:6 163:24 164:19 164:22,22 165:11 188:3 221:15 232:15 smaller 114:5 137:12 164:4 smell 127:3 software 44:5 solely 23:23 solution 178:24 179:2 somewhat 179:8 190:21 Sommerer 151:23 152:13 153:4,6 253:24 254:2 sooner 16:14 sorry 19:10 25:1 41:5 60:22	72:4 94:14 96:22 103:15 108:19 109:1 128:21 130:14 131:15 133:7 150:4,16 152:10 185:11 192:12 199:23 207:24 211:20 227:6 228:10 235:19 236:5,9 239:25 242:21 sort 124:14 195:10 sound 37:3,8 39:2 200:23 225:9 sounds 111:1 113:18 222:3 source 203:14 space 142:10 spare 209:22 speak 61:24 78:18 120:24 235:18 240:5 speaking 193:13 speaks 117:20 192:3 special 174:14 specific 43:19 44:3 47:15 62:23 85:22 128:3 189:13 215:18 220:13 232:6 240:19 specifically 15:8 25:9 77:5 187:14 210:16 214:2 219:11 224:16 238:20 240:6 specifics 240:13 244:22 specifies 8:5 195:6 specify 59:20 189:9	speculate 133:17 180:8 180:16 speculates 133:25 speculating 88:10 180:19 180:20 speculation 133:21 181:7 243:25 speed 17:1 spell 53:11 118:19 154:6 157:16 177:2 205:19 206:2 spelled 247:13 spent 45:14 130:19 131:1 spoke 218:18 spot 27:19 96:19 142:5 spots 24:11 squarely 36:14 ss 255:2 St 2:5 4:12 140:25 142:5 209:16 Staff 2:13,17 3:23,25 8:6,7 9:25 10:10,13 11:20,23 12:17 13:3,15 14:4,6 15:6,12 16:8 16:15 17:13 18:13 35:25 36:3 38:8,15 38:17 39:11,22 41:7 52:17 58:15,22 98:11 98:22 120:6 143:4 151:18 153:2,3,5,10 153:10,11,15 153:25 154:2 154:20 155:10 155:13,16,17
---	--	--	---	---

MIDWEST LITIGATION SERVICES

EVIDENTIARY HEARING - Vol. I 1/3/2017

156:2 157:12	44:5 53:10	steel 19:18 36:6	109:18 211:10	82:15
157:24 159:12	61:10 62:14	36:24 37:7	211:11	substitution
159:14,17,18	63:24 79:3	46:2 56:19,23	strike 6:5,8	57:21
173:1,9 175:3	118:19 129:10	60:12 65:21	180:24	subtract 106:11
176:24 177:13	130:5,16	69:25 71:9	striking 6:14	sudden 141:23
177:24 178:2,5	158:11 183:2	73:14,22 75:20	strongly 213:13	228:7
178:6 200:6	205:19 206:2	75:24 76:5,7	struggling 94:3	sufficient 44:7
203:18 207:1	208:17,24	76:11,12 85:3	studies 161:9,14	suggest 18:3
209:25 210:1,1	224:9 238:6	85:5,8,10,12	161:22 162:1	81:17 175:9
212:25 214:13	254:11 255:2	85:18 86:1	163:2,4,11	suggested 198:6
217:2 222:15	255:15	95:1 124:22	180:5,7 204:14	202:9 204:19
222:25 224:25	stated 78:8	125:1,12	204:15	suggesting
225:25 226:2	statement	126:13,21	study 106:18	32:24 228:1
234:1 245:3	224:16 225:14	128:4,8 158:19	161:16 162:14	Suite 2:9
247:1,8 253:20	statements	158:23 168:19	162:16 182:1	summarize
Staff's 10:5 13:1	19:10,12 53:4	168:21 169:2	stuff 52:14,15	182:19
13:14 14:8,21	states 193:13	172:11 210:18	101:25 207:6	summary 18:1
14:23,25 15:3	station 44:15	Stenotype	sub 15:20	83:6 156:9
16:21 17:1,4	stations 29:25	255:10,12	Subchapter	223:24 245:15
36:14 38:11	37:18	step 151:10	184:19 254:15	summed 56:19
71:13 151:18	statues 18:1	157:7	subject 73:8,9	supervised
182:11,19	status 195:20	stole 46:13	141:6	209:10
196:6 251:12	statute 8:3,6	Stoll 3:17	subjects 127:12	supplement
stake 44:10	13:20 21:24	stood 29:24 30:1	submission 9:24	212:1
stand 53:8 88:14	22:17 24:12	30:15	submit 13:16	supplementing
152:3 181:1	36:15 37:11,16	stop 28:20 106:1	55:11	217:9 226:23
194:19 195:23	41:8 42:21	straight 227:21	submits 143:15	support 8:12
standard 22:15	46:11 49:15	227:25	submitted 19:8	50:4 72:15
22:18 42:15	61:20 63:25	strategic 42:6	56:11	188:11 238:24
138:13 166:14	65:8,12 78:7	44:25 128:16	Subpart 71:19	supporting 9:22
166:16,17	110:8,10,17,22	strategy 45:18	subsection	66:9,9,11
standards 22:17	110:25 111:3,6	45:22 65:20,23	73:12 74:16,20	122:15
50:2	112:3,5,12,14	128:25 129:11	75:19 122:14	supports 52:17
standing 42:8	112:17,21	131:12,18	subsequent	supposed 107:3
standpoint	117:9,9,14,20	132:25 134:8	209:4	156:7 220:15
69:22 132:4	123:8 132:6	241:18 243:9	substantial	Supreme 9:6,18
249:11	163:16 215:1	243:18,22	92:14 217:1	42:19,20 43:11
start 3:23 7:8,20	220:14 234:9	247:20	246:20	45:1 247:14,14
19:7,10,12,19	234:10,14	street 2:5,9,15	substantially	surcharge 1:12
26:21 99:1	249:14	4:11 27:15	35:12 114:5,16	1:17 3:9
108:18 160:5	statute's 133:2	28:5,6,8,21	206:9 216:19	229:23 232:19
starting 20:5	statutes 65:3	42:8 83:25	216:22	248:12 253:11
142:12	89:1,15 249:18	138:12,14	substantive 11:7	253:15
starts 122:18	statutorily 9:23	140:23 149:20	55:22	surcharges
141:25 158:16	10:2	203:2	substitute 21:18	213:22
state 1:1 40:12	statutory 8:19	stress 121:21	56:3 199:20	sure 13:10 20:9
40:22 43:18	staying 94:11	strictly 78:15	substituted	26:25 38:6,14

MIDWEST LITIGATION SERVICES

EVIDENTIARY HEARING - Vol. I 1/3/2017

41:6 56:8	132:14,21,21	196:9 205:14	24:18 25:12,17	147:19,22
60:21 62:1	137:20 139:6	215:20	25:22,25 26:3	148:1 150:21
67:17 69:19	140:17 141:5	takes 110:2	26:6 45:15	189:16,17,19
70:4 71:14	144:15 149:13	talk 5:3 42:3	164:10,15	193:8,25 194:3
75:12 77:1	183:15 184:21	114:7 130:23	ten 12:5 14:23	194:8 199:19
78:2,14 81:13	185:17 186:3	161:4 221:5	15:3,6,12,20	199:20
84:10,25 85:18	186:18 187:24	talked 25:11	36:20 49:11,14	tested 21:8,9
90:23 93:16,18	188:13 190:23	202:3 241:20	98:16 105:5	150:6,8
94:4 95:7,13	190:25 204:2	talking 23:21	205:12 230:9	testified 53:17
97:11 100:16	237:9 253:10	32:22 47:4,16	236:6	59:1 91:20
100:17 101:3	253:14	93:3 109:5	ten-day 10:6	112:20 113:1
110:6 111:7	systematic	112:19,24	ten-minute	113:13 116:11
115:8 120:24	24:21	114:14 131:1	98:14 205:9	118:15 154:17
127:16 130:19	systems 129:18	137:19 141:16	ten-year 105:6	157:14 177:4
133:10 135:3	129:20,23	145:23 147:7	tend 113:25	195:16 197:11
136:17 140:14	139:3 140:21	156:14 179:19	tender 155:19	205:25
160:22 161:16	141:10 207:22	179:24 200:17	159:21 178:9	testify 110:17
164:5 185:25	208:4	213:9 246:25	206:23	151:19 198:23
187:13 194:9		talks 167:5	term 67:23	testifying
196:22 197:4	T	238:3	69:19 78:2	167:11
198:11 202:6	T 1:22 255:1,1	targeting 146:3	194:10 197:14	testimony 6:3,5
214:21 229:25	table 84:14	tariff 14:3	249:13	6:6 7:2 9:2
234:23	take 18:23 20:3	tariffs 13:2	terminate 142:4	17:17 48:15
survey 126:6,10	20:20,24 23:25	tax 11:21,23	terminates	53:5,24 54:3,3
204:18	25:2 26:16	taxes 183:11	140:19 141:1	54:7,9,24 56:4
surveys 126:3	30:23 41:7	212:21 215:7	terminating	56:11,17 57:15
126:17	46:4 50:22	technical 194:10	142:21	82:9,24 83:1,7
suspect 179:8	92:19 94:23	207:6	termination	86:17 88:21
197:14,15	95:5,22 96:6	technically	141:22	91:11 112:22
suspending 14:3	98:9,14 100:16	76:24 216:9	terms 10:20	119:2,5,8,13
sustain 66:12	100:17 104:12	technician 127:3	20:2 32:19,22	119:17 122:15
117:19 166:3	106:7 109:21	telemetry 29:17	186:5 197:2	125:10 127:18
225:13 242:17	132:9 138:3	29:24 30:14	200:12 208:16	130:20 131:17
242:22 244:1	146:12 152:18	38:21 39:18	208:23 235:15	133:24,24
sustained 66:16	152:23 153:20	43:6,16 44:1	Territory 1:13	140:13 151:10
67:1	172:12 183:19	44:14 45:1	1:17 253:11,15	152:2,23 153:3
swear 205:21	190:16 195:11	48:24	test 20:7,8,14,19	153:4,6,7
sworn 53:9	196:3 198:7	telephone	20:20,20,23	154:15,20,24
118:13 154:4	203:25 204:9	199:22	21:14,19,20	155:5,10 156:2
157:13 176:25	205:9 215:11	tell 46:3 53:21	22:3,4 23:16	157:23 158:6
205:23	228:6 237:20	188:6 197:4	23:21,25 36:11	158:16 159:8
system 1:11,16	taken 7:10 34:9	203:25 223:16	36:13 49:11	160:7 161:6
3:8 22:1 33:9	36:12 47:24	telling 9:13,16	121:18,23	163:12 164:25
37:18 42:4	48:3 68:14	66:17	125:15,24	167:5 169:6,11
43:17 46:19,21	71:10 94:3	tells 49:19	126:4,13,23,24	175:3 176:21
111:12 128:20	98:17 105:25	121:23	127:10 146:13	177:12 180:24
128:23 129:21	153:23 194:2	temporary	146:15,19	182:15 183:14

MIDWEST LITIGATION SERVICES

EVIDENTIARY HEARING - Vol. I 1/3/2017

188:1 206:12	7:16,21 13:3,4	234:16 235:20	117:22 136:5,8	154:2,18 155:9
209:20 212:5	13:6,8 18:9,10	243:2 248:17	136:15 150:10	155:19 157:11
212:10 215:17	18:11,15,16	248:18 249:7	163:19 164:3	157:15 159:1
216:1,24	19:3,14 24:2	theoretical	168:20 169:21	159:11,20
238:24 242:20	32:2 35:18,24	106:9,10,21	171:4 176:13	162:12 165:19
245:16 246:14	37:11 39:23,24	thereof 255:9	179:6 183:22	166:25 173:10
247:10 248:20	39:25 40:2	thereto 229:14	188:4 189:8,25	173:11 176:18
253:5,6,8,21	47:19 50:6,7	thereunder	190:18,21,25	176:23 177:5
253:23,24	50:13 51:17	187:9	194:3 195:4,21	177:24 178:8
254:2,5,7,10	52:24 53:3,14	they'd 169:15	200:18 202:9	180:18,23
testing 5:10,14	53:16 58:3,4	213:19	202:10,22	181:6 185:24
19:16,20 21:3	58:20 59:8,10	thing 25:4 58:6	210:8,8 212:1	186:1,9 187:23
21:12 22:8,13	59:12 62:2,9	83:17 126:18	212:2 213:20	188:8 191:24
23:5,7,9,15	82:22 86:7	129:4 140:9	214:4 215:10	195:19 196:10
36:5,9 37:16	91:24 98:5,6	174:1,3 185:10	215:20,24	203:19,22
37:23 38:17	98:19,24 103:5	185:13 215:25	217:2 218:6	205:1,4,5
47:11 49:4,5	107:23,25	242:10 248:15	219:16,18	207:2,6,7,8,13
49:18,23,24	108:25 109:2	things 10:4	220:19 221:2	234:2 240:10
50:3 121:12	111:15 112:25	12:20 83:16	221:23 224:19	251:5,14,16,18
122:16 123:15	113:5 117:23	112:2 121:16	226:19 228:11	251:19,22
123:18,20	117:24,25	123:17 125:18	231:25 233:24	252:4
124:2,16	118:6,14 120:3	181:25 242:9	234:14 235:12	thorough
125:11,22	120:7,9 130:17	249:21,22	235:14 236:7	226:21
145:8,11,22,24	134:15,16	think 6:13,19	236:23 237:8	thoroughly
146:11 147:11	137:22,23	7:5 18:20,22	238:7,25	211:5
150:2,4 182:16	139:25 140:1,5	29:10,14 30:24	239:21 240:2	thought 103:17
183:4,16	140:7 143:3,5	35:7,9 36:17	240:25 242:19	247:6
187:13,17,21	143:7 144:24	36:17 37:3,9	243:9 247:13	thousand 218:8
188:2,25 189:7	151:7,8,9,12	37:11 38:25	247:18 249:23	218:11
189:10 190:11	153:1,17 154:5	39:3,5,21 40:9	249:24	thousands
190:12,12,15	155:21 157:3,6	46:25 48:10,21	thinking 38:23	216:11,23
193:22 195:7	157:8,11,19	51:1 65:15	152:18 170:17	223:5
196:19,23,25	159:2,20 160:1	67:18 68:4,5	third 33:23	threat 129:17,21
197:8 198:24	169:24,25	68:11 70:17	56:25 158:21	threats 136:25
199:2,9,13,14	170:3 171:7,14	73:4 74:13	third-party	three 17:2 28:11
200:3,21	173:6,10	76:6 78:11	42:25 138:10	35:22 47:25
204:20,24	176:18 177:1	84:11,23 85:8	Thompson 2:13	70:1 78:7
211:20,20,21	178:8 186:11	85:9 86:13	3:24,24 18:15	122:19,23
224:8,17,21	196:10,12,15	88:10 89:23	36:1 37:14,25	135:4 153:7,13
225:1 226:14	198:14,18	93:4,25 94:25	38:8,14,23	182:20 185:9
227:3,8 229:12	201:6,7 203:19	100:1,14 101:8	39:13,16,21,24	190:6 222:14
229:18 238:3,6	205:1,3,18,24	101:22,23	40:1,2 58:14	226:20
238:8,11,15,21	207:5,7,13,14	102:4 103:2	58:23,25 59:8	thumb 109:23
239:5,10,13	207:16 211:17	104:10 105:3	88:9 98:11	139:16,17
tests 127:4	212:19 227:11	111:19 112:1,2	120:7 143:5	tie 241:20
150:11 239:16	229:5 233:21	112:13 113:7	151:21,25	tie-in 144:9,17
thank 4:3 6:24	233:23 234:2,4	114:6,18 116:7	152:7 153:1,17	tie-over 144:6,7

MIDWEST LITIGATION SERVICES

EVIDENTIARY HEARING - Vol. I 1/3/2017

144:9,16	50:4 54:8 55:3	125:11 130:9	192:17 205:16	187:10 193:1,5
tied 72:15	57:15 114:10	146:20 224:4	224:1	204:10,15
till 106:4	114:18 119:13	224:13	turns 35:11	underneath
time 3:13 4:15	155:2 159:4	treat 103:10	154:11 196:1	27:24 28:1
7:9,13,13 8:18	177:19 194:21	187:21 188:25	208:1	understand 38:8
9:15 10:19,25	197:25 204:5	treated 200:13	twice 11:11	64:25 67:14,16
12:5,6,19 14:8	204:21 228:5	treatise 249:16	42:18	103:6 104:20
18:24 19:3	228:25 240:7	treatment	two 4:13 5:22	127:17 135:4
21:14 27:9	told 46:18,18,19	182:24 200:8	8:1 10:14 11:5	185:12 201:18
30:25 36:19	65:18 131:11	201:22 219:7	16:20 19:1,15	220:18 227:16
43:3,21 44:15	tomorrow 249:2	219:10 220:11	21:4 40:16,25	understanding
44:18,23 50:23	249:2	trench 83:25	43:20 56:8	29:20 52:21
68:1 77:22	top 27:11,13	trenches 35:11	59:23 64:3	59:22 60:14
80:24 99:16	28:8 52:15	tribunals 9:14	80:1 116:25	72:20 93:23
104:2 106:2	63:23 64:10	tried 11:5	124:6 137:20	127:11,19,25
112:5 126:23	84:14 94:15	208:20 218:17	152:1,23	128:5,9 129:12
131:1 134:7	141:18,22	tries 213:7	184:12 185:6,8	129:25 133:20
136:22 146:19	160:10 165:3	true 30:7 60:21	213:7,9 226:19	134:13 136:21
146:21,22	total 21:6 31:2	91:5,9 155:6	234:13 243:10	151:21 154:11
153:8,19 155:9	31:10 56:20	156:24 159:8	two-page 26:22	162:17 163:6
159:11 169:16	57:7 83:12	174:2 177:22	tying 144:10,14	166:17 167:7,7
176:23 181:13	93:1 97:19	189:2 202:10	type 44:10 50:18	167:8 175:2
181:14 189:20	99:8 100:13	211:19 222:11	74:15 75:18	194:10 202:24
196:5 209:21	101:19,21	224:17 255:11	76:9 84:12	214:2 217:11
209:22,25	109:10 114:1	truth 9:16	85:11 87:8	230:9 237:12
210:4,5,15	158:20,22,23	try 6:5 17:23	125:21 126:10	237:19
211:23 218:8	158:24 170:22	31:4 59:21	215:11 238:20	understands
226:24 232:9	179:4 188:4	67:15 96:18	245:1	8:13
244:11 255:8	230:20 231:21	99:4 100:2	types 22:24 23:9	understating
255:13	232:9	104:1 139:11	37:24 59:23	52:16
timely 12:3	totally 197:2	141:9,11 168:2	60:5,25 61:21	understood 7:15
32:14,17	tour 65:19	172:5 212:7	69:17 93:19	113:4 120:17
times 84:10	toured 209:15	221:5 234:21	101:18 122:19	160:23 229:25
103:23 104:12	209:23	240:21	135:4 137:2	undertake 74:9
105:13	town 169:1	trying 46:13	201:16	unfair 15:11
timing 13:14	track 247:9	62:1 102:6	typical 21:12	Unfortunately
18:25 44:16	trade 103:3	132:9 136:15	typically 21:14	96:17
title 185:6	trailing 99:18	174:12,13	124:12 140:21	Uniform 183:15
191:16 195:5	transcript 1:4	187:25 195:9	141:8 149:22	184:21 185:17
223:18	255:12	237:1 238:8		186:3,18
titled 62:14	transcripts	Ts 35:11 139:2	U	187:24 188:13
77:16 84:15	249:1	Tucker 236:13	Uh-huh 233:2	190:23 204:2
130:8 224:3	transfer 9:18	tune 16:9	ultimate 191:1	unimpaired
today 3:19 5:19	translates 21:6	turn 62:10 65:3	ultrasonic	41:1
7:12,25 27:12	transmission	70:20 73:12	125:21	unit 76:1,18
42:3 44:21	19:25 21:22	77:14 87:18	underlined	97:13 253:13
45:23 49:13,22	74:17 75:20	94:10 192:11	186:22,23	units 43:19

EVIDENTIARY HEARING - Vol. I 1/3/2017

<p>unlawful 15:11 48:10,11 68:2 68:3,9,15,17 unopposed 13:1 unprotected 60:12 73:14,22 75:20,24 76:5 unquestionably 219:6 unreasonable 48:10 201:23 unsafe 69:9 70:12,16 165:17 166:1 168:13,15 unusualness 246:10 upcoming 61:4 222:6 update 5:11 9:19 10:18 156:19 213:7 217:11,13,15 updated 156:14 156:15,16,24 204:7 212:21 updates 8:15,17 updating 213:6 upgrades 44:15 use 15:16 20:13 23:24 28:17,23 29:8 31:7 76:6 83:1,4 87:16 89:8 113:9 124:10 126:19 127:6 133:8,12 138:17 142:15 164:2 165:7 170:19 188:3 197:23 useful 21:21,24 21:25 22:3,5 25:15 38:3,12 39:5 124:19 125:8 146:2 147:4,17 148:9 148:12,22</p>	<p>149:2,8 193:19 193:22 194:4 224:12 usually 23:16 28:5 146:18 utilities 186:18 204:3 207:23 208:4 221:19 utility 20:5 43:13 44:12 123:3 187:7,20 188:24 199:18 214:9 218:3</p> <hr/> <p align="center">V</p> <hr/> <p>validity 212:5 Valley 21:3 value 90:7 95:16 105:14 107:1,7 107:19 114:11 116:10 197:17 valves 37:17 varies 84:11 various 71:12 93:19 158:17 174:15 187:3 209:15 vast 45:25 62:22 vaults 37:18 verifiable 150:5 verification 224:4 239:15 Verified 253:9 253:13 verify 185:15 versus 32:23 50:23 102:2 106:9 136:14 view 33:6 34:6 viewed 194:4 viewpoint 181:4 vintage 85:24 87:7,20 88:6 violated 12:9 violation 66:2 67:12 visited 210:6</p>	<p>visits 165:12 visual 47:10 vital 44:1 voir 185:24 186:1 Volume 1:8 vote 48:25 49:2 vulnerability 135:17 138:1,6 138:9</p> <hr/> <p align="center">W</p> <hr/> <p>W 53:8,23 54:2 253:5,6 wait 9:21 150:16 waited 15:11 16:14,19 17:17 walk 121:22 walked 244:4 want 6:8,18 8:10 16:24 33:16 41:6 122:8 127:16 135:3 140:14 153:25 154:14 175:17 179:11 185:9 194:18 196:3 217:20 218:19 226:22,25 wanted 4:22 34:3 37:19 136:18 211:18 wanting 195:16 wants 26:13 32:9 33:15 66:7 warn 7:9 wasn't 20:16 30:7,8 110:17 190:2 242:7 water 20:8 49:6 121:13 141:8 211:22 way 17:16 20:22 26:12 27:21 29:15 30:22 32:23 35:13,14</p>	<p>35:15,16 36:17 38:4 51:11,16 68:12 84:4 95:8 100:9,22 100:24 101:2,6 102:4,7,9,12 111:9 113:10 115:6 116:15 124:25 125:4 126:16 136:17 144:20 147:12 172:14,16,21 198:11 201:24 228:22 229:13 232:10 234:8 236:21 238:7 240:20 ways 16:10 101:4 230:15 we'll 3:22 7:12 7:20 10:23 19:11,11 35:24 53:6 142:24 152:24 205:10 we're 7:7,11 19:2 22:2,7 23:21 24:20,20 24:24 27:14,15 27:17 28:1 32:10,16,16,19 33:3,3,11,11 35:14 45:19 46:2 47:4 51:10,12,13,15 60:11 68:11 92:15 94:2 98:2,18 108:20 108:21 113:10 126:4 132:25 137:19 142:4 153:24 195:19 205:15 211:13 213:9 230:22 243:19 246:21 248:4 we've 32:22 34:11 50:25</p>	<p>64:5 71:12 76:11 79:1 109:5 112:18 114:18 146:4 170:16 204:20 243:12 246:18 246:19 wear 49:11,13 167:3 173:23 174:15 wears 69:13 weather 141:6 week 17:7 144:2 weight 114:7 weighted 105:13 welcome 7:23 120:4 went 4:18 43:25 57:7 112:9 146:20 202:17 202:17 235:2 weren't 189:20 Western 9:5 whatsoever 135:10 whichever 167:16 width 28:16 William 1:21 53:13 wish 213:16,17 withdraw 195:18 withdrawal 5:22 15:15 withdrawing 5:24 withdrawn 4:24 5:6,13 6:15 196:8 witness 31:13,25 53:1,6,9,12 55:18 58:4 62:1 66:11 68:6 72:12 82:19,22 86:7 88:10 89:11</p>
--	--	---	---	---

MIDWEST LITIGATION SERVICES

EVIDENTIARY HEARING - Vol. I 1/3/2017

92:10,15 97:12 117:25 118:5,8 118:13 120:4 121:1 129:6 130:12 132:3 133:25 134:3 136:10,19,22 137:10,14,18 151:8,12 152:6 154:1,4,8,13 155:20 157:8 157:10,13 158:13,15 159:21 167:1 167:13 176:22 176:25 177:3 178:9 181:11 184:3 188:20 194:19 195:4 195:23 196:6,6 199:24 205:23 207:4 217:24 221:6 223:9,11 235:19 240:15 240:24 witnesses 19:9 93:25 151:15 151:18,19 152:1,12 205:4 205:6,16 248:21 wonder 203:24 word 38:9 56:13 163:19 164:24 202:6 wording 204:15 words 23:9 24:23 27:19 29:2 34:14 38:24 116:18 174:12 176:4 227:23 work 30:24 32:5 32:14 33:20,24 34:1 35:6 43:19,20 45:25 49:20 56:15	57:9 59:2,23 61:14,19 62:22 63:4 65:19 78:20 79:8 80:7 82:25 83:6,12,17 84:3,6,7,12,21 85:9,22 86:16 86:21 87:7 93:11,12,14 94:12,17 99:10 99:12,13,20,21 100:1,11,12,13 100:24 101:1 101:16,19,21 109:5 110:5,23 111:17,23 112:9 115:17 115:20 117:15 127:20 158:7,9 158:17,18,19 161:16 166:6,7 168:23 172:10 172:12 179:3,4 186:6 187:6,6 199:17 202:11 202:16 203:8 207:11 209:17 210:7,15 215:13,25 216:3,10,25 217:6 227:9 230:20 232:9 234:21 242:13 244:25 245:1 245:10,15,23 246:3,18,19 worked 232:9 working 41:1 153:19 209:3 245:2 works 142:23 176:12 worn 22:14,19 22:21 29:21 30:7 36:25 40:7,14,18	41:2,10,13,14 41:16,21 42:12 42:23 43:3 44:8 46:2 49:13 60:8,12 65:10,14 66:1 67:11 79:5,11 79:14,16,20 80:10 81:18 87:14 88:3,8 89:2,16 117:11 125:17 126:15 128:17 130:22 131:9 149:16 149:17 163:17 166:18,23 169:8,13,20 173:25 174:4 234:12 worn-out 220:12 worth 96:6 178:25 wouldn't 25:24 26:3 38:15 48:6,12 68:3 85:2 102:12 107:13,16 116:2,6 168:18 228:11 write 218:17 writing 139:15 written 71:3 wrong 198:12 wrote 149:1 <hr/> X X 100:20 106:19 251:1 <hr/> Y Y 1:21 100:21 yard 73:15,22 yeah 93:21 116:7 122:1 128:19 130:14 131:16 133:16	136:22 137:16 138:24 139:21 144:8 145:13 148:14 168:2 192:5 211:25 213:13 220:18 224:15 228:16 234:7 237:11 year 7:24 11:11 59:16 85:24 105:8 200:11 200:23 226:4,5 years 12:16 24:14 45:15 49:11,14 81:24 82:5 103:2 105:5 106:16 114:7 128:14 166:23 167:19 209:2,3 210:8 222:14 236:6 243:10 yesterday 5:22 239:22 240:6 <hr/> Z Zucker 2:4 4:9,9 4:25 5:4,5,11 5:17 6:11,13 6:23 7:15,21 7:22 8:23 9:1 12:11,13 17:19 18:17,18 19:14 22:16 23:1,7 24:3 26:20,25 27:6 28:4 29:5 29:10,23 30:11 30:23 31:11,16 31:18,24 32:3 35:19,19 36:9 38:20 45:10 46:8,24 53:7 53:15,16,18 54:14,23 55:17 55:21,23 57:17 58:3,5,20 64:17 66:4	72:2,11 89:5,8 89:10 108:4,5 109:2,3 110:19 110:21 111:4 113:4,6 117:22 118:9,16 119:19 120:3 129:1 131:20 133:3,6,7,12 133:16 141:15 145:3,4 151:4 151:7,15,16 155:14 157:5 159:15,24 171:13 178:12 191:25 192:5 198:18,20 200:5 201:5 206:18 207:16 207:17 217:25 220:25 221:2,6 221:13 223:8 223:11,15 225:7,9,18 229:3 230:2 234:4,5,16 235:22,24,25 236:1,2,2,3,4,4 236:7,11,12,12 236:13,14,16 240:16 241:19 242:5,12,18 243:25 251:4,7 251:8,11,21 252:4,5 Zucker's 42:2 <hr/> 0 0197 15:2 0332 153:5 0333 153:6 <hr/> 1 1 5:18 14:9 27:11 54:8,15 54:17,17,20,21 86:12 153:2,10
---	--	--	--	--

MIDWEST LITIGATION SERVICES

EVIDENTIARY HEARING - Vol. I 1/3/2017

153:15 156:3 156:11,13,17 158:13 206:5,8 206:15,17,20 206:21 253:4 253:21 254:9 1,000 47:5,21 95:21 96:1 105:6,8 218:24 244:11 1,000-foot 164:7 164:8,12,13 244:16 1,320,163 97:22 1,500 220:3 1.1 113:17 1.3 113:16 1.8 21:6 200:21 201:3 1:15 153:22 10 82:25 86:15 86:20 96:6,9 100:25 101:1 101:16,19,20 111:5,7 172:10 172:12 198:6 200:15,18 230:4 231:3,5 231:7,8 10:43 98:15 100 47:5 48:18 67:20 85:10 105:8 106:16 114:7 116:23 230:3,8 231:4 231:5,11 232:21,23 233:5,13 246:5 100-foot 48:9 232:25 234:25 235:1,3 10600 99:23 108 251:7 10th 156:15 11 96:19 97:1,18 97:20 224:1 237:25	118 251:8 12 45:15 200:19 12:09 153:19 120 8:8 246:6 251:9 253:8 13 15:20 68:21 69:1 70:22 239:16 134 251:9 13B2 69:6 14 83:3 140 251:10 143 251:10 145 251:11 15 70:23 71:17 72:8 76:21 116:20 239:16 15,624 56:18 153 253:21,25 254:3 154 251:14 155 251:14 253:23 157 251:16 159 254:5 15th 71:22,25 73:2,23 16 130:6,7 239:16 246:22 160 251:16 16th 53:25 17 9:23 77:13 130:10,14,15 239:17 170 251:17 171 251:17 173 251:18 177 251:19 178 251:20 254:7 180,000 21:7 183.2 204:17 186 254:15 192 254:17 196 251:20 1970 20:1,5,14 146:5,18	1970s 81:4 1972 82:4 198 251:21 1980s 81:4 1989 71:22 72:1 72:8 73:2,7,9 73:23 1990 71:11 74:7 1990s 81:4 1992 71:11 1997 87:24 112:10 1st 15:13,17 74:7 204:3 226:17 <hr/> 2 2 14:11 55:1 57:18,20,24 58:1 63:14,15 63:20,22 64:14 64:16,19,20 68:20,24 82:18 82:20 90:4 92:8 96:2,5 154:20 155:10 155:13,16,17 186:24 187:2 187:10,13 245:15 253:6 253:22 254:11 2,000 218:3,22 244:9 2,000-foot 244:15 2,125 94:25 2:20ish 205:11 2:24 205:11 2:34 205:13 20 9:22 16:14,18 16:19,24 24:14 94:25 96:3,8 109:10 136:8 200 2:9,15 47:5 48:18 93:11 200,000 113:21 200:22	2000 112:11 2000s 81:5 2003 112:12 221:24 2004 24:12 95:15 190:9 194:14 195:2 204:3 2005 191:15 201 251:21 2010 19:21 81:10 107:6 2010s 81:6 2011 19:21 65:19,22,25 67:10 87:24 128:15 132:13 164:19 2012 114:15 239:16 2013 222:2 246:22 2014 81:12 222:14 223:21 224:25 225:23 226:15 2015 43:5 222:14 223:18 226:4,17 246:22 2015-2017 237:24 253:19 2016 53:25 54:4 119:3 222:15 226:6 2017 1:6 223:19 239:19,20 203 251:22 206 252:3 254:10 207 252:4,4 21 193:1 22 204:14 22-year 209:5 221,919 97:25 2230 2:9 229 252:5	234 252:5,6 23rd 54:4 119:3 24 17:6 240-2.080 15:20 240.40-30.15 70:22 25 103:2 137:9 28,000 216:24 28th 17:3 29 223:21 29th 14:5 <hr/> 3 3 1:6 62:11 87:1 87:2,6 91:23 92:2,6 96:19 97:1,18,20 99:9 119:9,20 119:22,25 120:1 153:4,11 153:15 253:7 253:24 254:13 3,000 218:7,23 244:10 3,000-foot 244:15 3:42 250:3 30 24:14 136:8 137:9 30th 191:15 209:14 31 86:12 314)342-0533 2:6 31st 156:14,16 360 2:14 4:1 386.390 111:14 393.095B 122:12 393.1009 111:8 122:6 134:22 393.1015 111:8 393.1015.10 111:6 393.130 65:2 393.130.1 254:12 3rd 14:2 16:18
---	--	--	---	---

MIDWEST LITIGATION SERVICES

EVIDENTIARY HEARING - Vol. I 1/3/2017

<p align="center">4</p> <p>4 14:3 15:20 58:6,12,17,18 62:8,20 63:8 70:22 96:24 130:6 153:5,11 153:15 156:8 156:15,20 161:6 165:3 183:22,24,25 184:7 185:16 185:21,23 186:12,13,21 192:12 253:9 254:1,14 4,000 220:2 4.5 156:22 40-foot 137:15 40.030 130:6 400 47:5 43,833 115:23 44 81:24 82:5 44,598 115:24 44,678 158:24 44,868 57:9 46 69:2</p> <hr/> <p align="center">5</p> <p>5 17:5 40:5 58:8 58:13,17,18 123:4 157:24 158:5,13 159:12,14,17 159:18 160:10 168:1,3 191:6 191:7,11,21,23 192:7,8 253:12 254:4,16 5,000 220:1 5,168 216:3 500 95:22 96:4,6 137:11 500-feet 48:9 500-foot 132:12 164:18 166:22 167:18 500947 112:9</p>	<p>52 70:24 52,680 57:12 53 251:4 53,415 158:25 54 253:5 547 112:10 57 253:6 573)751-3234 2:16 573)751-4857 2:10 58 251:5 253:11 253:15 59 251:5 5A 22:18,18 25:11,19 26:2 26:7,8 37:16 41:9,12,23,23 41:24 61:11 5B 22:22,22 25:11,11 26:3 26:6 37:19 41:9,9,15,24 49:16 134:24 147:3 148:3 5th 17:7</p> <hr/> <p align="center">6</p> <p>6 27:3,4 177:13 177:25 178:2,5 178:6 192:17 192:23 193:11 253:16 254:6 6,000 100:18 6,300 95:4 6,306 94:13,20 6,896 94:24 60 8:8 13:13,13 13:18 14:1 16:3,7 18:6 60-day 8:2,4,19 9:6,9,10,14,23 10:17,20 11:15 63101 2:5 4:12 632 185:18 186:20 633 185:18</p>	<p>64 254:12 650 2:9 65102 2:15 4:2 65102-2230 2:10 6th 2:5 17:8</p> <hr/> <p align="center">7</p> <p>7 158:15,16 192:25 215:16 223:12,13 246:13 253:18 7,262 158:20 7,788 158:21 7,812 56:16,24 70 8:2 700 2:5 4:11 700,000 11:25 12:23 70s 81:7 72 231:11 7th 17:8</p> <hr/> <p align="center">8</p> <p>8,000 100:17 8:32 3:3 80 93:12 230:8 230:22,22 231:2,4 80-year 106:14 800 115:24 838 1:25 85 116:20 8th 17:3,10</p> <hr/> <p align="center">9</p> <p>90 101:17 172:11 230:3 231:6 900546 158:19 900547 82:25 86:17,21 87:7 94:12,18 99:9 99:10 100:24 101:16 245:23 254:13 900836 216:3 900882 56:15</p>	<p>92 251:6 254:13 98 251:6 9th 14:10,12 17:13</p>
--	--	---	---

MIDWEST LITIGATION SERVICES