

DEPARTMENT OF PUBLIC SERVICE REGULATION
BEFORE THE PUBLIC SERVICE COMMISSION OF
THE STATE OF MONTANA

IN THE MATTER OF Joint Application
of Liberty Utilities Co., Liberty WWH,
Inc., Western Water Holdings, LLC, and
Mountain Water Company for
Approval of a Sale and Transfer of
Stock.

REGULATORY DIVISION
DOCKET NO. D2014.12.99

**CITY OF MISSOULA'S RESPONSES TO LIBERTY UTILITY CO. AND
LIBERTY WWH, INC.'S SECOND SET OF DATA REQUESTS TO THE CITY
OF MISSOULA
(LIBERTY-088 THROUGH LIBERTY-093)**

The City of Missoula provides the attached responses to Liberty Utility Co. and
Liberty WWH, Inc.'s Second Set of Data Requests to the City of Missoula.

Dated this 2nd day of December 2015.



Scott M. Stearns
Natasha Prinzing Jones
BOONE KARLBERG P.C

Jim Nugent
City of Missoula
CITY ATTORNEY'S OFFICE

Attorneys for the City of Missoula

GENERAL OBJECTIONS

The City of Missoula (“City”) continues to maintain that its condemnation has deprived the Public Service Commission (“PSC”) of jurisdiction over this joint application—especially in light of the condemnation commissioner’s recent determination of fair market value. At a minimum, this proceeding should be stayed in light of the condemnation act.

The merits of the condemnation action are not before the PSC. Therefore, questions regarding the condemnation action, the City’s actions during and after, and the City’s future plans are not relevant to this proceeding. Only Algonquin’s purchase is before the PSC and, thus, the only relevant information is that related Algonquin’s proposed purchase. As Mountain Water Company (“Mountain Water”), Western Water LLC (“Western Water”), Liberty Utilities Company (“Liberty”), and Algonquin Power and Utilities Corporation (“APUC”) have repeatedly stated, the merits of the City’s condemnation action are not before the PSC:

Issues regarding the City’s condemnation litigation must not be injected into this docket.

Response of Liberty Utilities Co. and Liberty WWH, Inc. to Petitions to Intervene of the City of Missoula and the Clark Fork Coalition, D2014.12.99 (Jan. 23, 2015) (emphasis added).

Reviewing and approving the sale and transfer in no way changes the current use or ownership of Mountain Water’s utility property, and **therefore the issues in this proceeding are independent from those in the condemnation action.**

Western Water Holdings and Mountain Water Company’s Response to the City of Missoula’s Motion to Stay, D2014.12.99 (Feb. 23, 2015) (emphasis added).

The number and volume of these data requests is overly broad and unduly burdensome. Liberty has now served over 100 requests on the City, many of which are not relevant nor do they request information that will aid the PSC in determining whether or not the proposed Algonquin merger should be approved.

These data requests are designed to harass the City and increase the costs and burden associated with its continued participation in this docket. Many of Liberty's requests on the City are not relevant to the instant proceeding and seek information that will not aid the PSC in its determination of whether or not to approve the Liberty/Algonquin purchase.

The City has no burden of proof in this proceeding. The burden to prove this transaction should be approved rests solely on the Joint Applicants. Any questions seeking information regarding the City actions, past or present, or how the City would operate Mountain Water are not relevant and seek to inappropriately shift the burden to the City.

The PSC lacks jurisdiction to consider the benefits of public ownership versus private ownership. The District Court has already ruled on this matter and it has been determined that it is "more necessary" that the City own Mountain Water.

Many of Liberty's data requests seek information protected by attorney-client privilege and/or work product protection.

All responses provided below are provided without waiving these objections or waiving further, specific objections asserted along with the responses.

Liberty-088 Re: Hayward's Work for Apple Valley
Witness: David Hayward

- a. Describe Mr. Hayward's work for the Town of Apple Valley regarding the potential acquisition of the Apple Valley Ranchos water system.
- b. Provide copies of all reports Mr. Hayward has prepared for the Town of Apple Valley, with all supporting work papers in native format with links and formulae intact.

OBJECTION:

The City objects to this request. The request is directed at the valuation work prepared for an ongoing condemnation proceeding in California, which is not relevant to this proceeding. The PSC does not have jurisdiction to consider the benefits of private ownership compared to public ownership, especially in California. This request, along with others, is vague, overly broad, unduly burdensome, not calculated to lead to the discovery of relevant information, and designed to harass the City and increase its costs. Moreover, the City has no burden of proof in this proceeding.

This request seeks information that is not within the City's custody or control. This request seeks confidential client information Mr. Hayward cannot provide.

Liberty-089 Re: Work for City

Witnesses: Craig Close and David Hayward

- a. Please provide copies of all engagement letters or contracts between the City of Missoula or its attorneys and Messrs.' Close or Hayward
- b. Please provide the total amount Messrs.' Close and Hayward have billed the City of Missoula for work in the condemnation case.
- c. Please provide the total amount Messrs.' Close and Hayward have billed the City of Missoula for work in this matter.

OBJECTION

The City objects to this request. The request is directed at the merits and actions of the condemnation proceeding, which are not relevant to this proceeding. The PSC does not have jurisdiction to consider the benefits of private ownership compared to public ownership. This request, along with others, is vague, overly broad, unduly burdensome, not calculated to lead to the discovery of relevant information, and designed to harass the City and increase its costs. Moreover, the City has no burden of proof in this proceeding.

This request seeks attorney/client privileged and work product information.

RESPONSE TO LIBERTY-089:

- a. See objection regarding the contracts for the condemnation action. For the contracts relevant to this proceeding, see the copy of the engagement letter for Mr. Close and HDR provided in response to MW/WWH-013. The City does not have a specific contract with Mr. Hayward for the PSC proceeding.
- b. See objection.
- c. See a copy of Mr. Hayward's only bill regarding the PSC proceeding provided in response to MW/WWH-095(b). Mr. Close has not yet billed the City for his work in the PSC proceeding.

Liberty-090 Re: Reports and Prior Testimony

Witnesses: Craig Close and David Hayward

- a. Please provide copies of all reports, including drafts, Messrs.' Hayward and Close have prepared for the City of Missoula regarding the Mountain Water system, the condemnation case, or this matter.
- b. Please provide copies of all testimony, including depositions, hearings and trials, Messrs.' Hayward and Close have offered in the condemnation case.

OBJECTION:

The City objects to this request. The request is directed at the merits of the condemnation proceeding, which are not relevant to this proceeding. The PSC does not have jurisdiction to consider the benefits of private ownership compared to public ownership. This request, along with others, is vague, overly broad, unduly burdensome, not calculated to lead to the discovery of relevant information, and designed to harass the City and increase its costs. Moreover, the City has no burden of proof in this proceeding.

RESPONSE TO LIBERTY-090:

- a. See objection. Please see Mr. Close's report provided in response MW/WWH-013 and HDR's rate analysis provided in Mr. Close's original testimony.
- b. See objection. Please see Mr. Close's Mr. Close's deposition (CITY-PSC 000623), the system condition testimony from the necessary trial (already provided in Mr. Close's original testimony), and the system condition testimony from the valuation trial (CITY-PSC 000668).

RESPONSE TO LIBERTY-090

ATTACHMENTS

CITY-PSC 000623 - 000667

CITY-PSC 000668 - 000693

MONTANA FOURTH JUDICIAL DISTRICT COURT
MISSOULA COUNTY

THE CITY OF MISSOULA, a)
Montana municipal)
corporation,)

Plaintiff,)

vs.)

MOUNTAIN WATER COMPANY, a)
Montana corporation; and)
CARLYLE INFRASTRUCTURE)
PARTNERS, LP, a Delaware)
limited partnership,)

No. DV-14-352

Defendants.)

and)

THE EMPLOYEES OF MOUNTAIN)
WATER COMPANY, et al.,)

Intervenors.)

VIDEOTAPED DEPOSITION OF CRAIG CLOSE
San Diego, California
Wednesday, November 12, 2014

Reported by:
CLAIRE DILORETTA, CSR No. 13722

1 MONTANA FOURTH JUDICIAL DISTRICT COURT
2 MISSOULA COUNTY
3
4 THE CITY OF MISSOULA, a)
5 Montana municipal)
6 corporation,)
7)
8 Plaintiff,)
9)
10 vs.)
11)
12 MOUNTAIN WATER COMPANY, a)
13 Montana corporation; and)
14 CARLYLE INFRASTRUCTURE) No. DV-14-352
15 PARTNERS, LP, a Delaware)
16 limited partnership,)
17)
18 Defendants.)
19)
20 and)
21)
22 THE EMPLOYEES OF MOUNTAIN)
23 WATER COMPANY, et al.)
24)
25 Intervenor.)

Videotaped Deposition of CRAIG CLOSE, taken on behalf of Defendants, at 11988 El Camino Real, Suite 350, San Diego, California, beginning at 9:33 a.m. and ending at 3:20 p.m. on Wednesday, November 12, 2014, before CLAIRE DILORETTA, Certified Shorthand Reporter No. 13722.

2

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2
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3

1 INDEX
2 WITNESS EXAMINATION
3 CRAIG CLOSE
4
5 BY MR. CONNER 7
6
7
8 EXHIBITS
9 DEPOSITION PAGE
10 Exhibit 73 Agreement for Expert Witness Services 8
11
12 Exhibit 74 Graph Analysis of GIS charts 72
13
14 Exhibit 75 Email from David Spencer to Craig Close, 10-31-14 74
15
16 Exhibit 76 Mountain Water Company System Report in Support of Distribution System Improvements 76
17
18 Exhibit 77 Financial Analysis and Proposed Action Plan for Water Loss Mitigation 77
19
20 Exhibit 78 Maintenance of Wastewater Collection Systems for the City of Missoula 79
21
22 Exhibit 79 Questions for Mountain Water Company, Deposition for Logan McGinnis 80
23
24 Exhibit 80 Mountain Water Company, Missoula Division Wells 82
25
26 Exhibit 81 Data Tables 83
27
28 Exhibit 82 South Tour Information 84

4

1 INDEX (Continued)
2 DEPOSITION PAGE
3 Exhibit 83 Proposed Schedule for City of Missoula Storm Water Asset Tour 85
4
5 Exhibit 84 Maintenance Data 87
6
7 Exhibit 85 Operations and Maintenance Plan Summary 89
8
9 Exhibit 86 Map of Mountain Water System 89
10 Exhibit 87 Summary of Capital Investment Program for Mountain Water Company 90
11
12 Exhibit 88 Email Chain between Sara Streeter and Shanna Adams, October 2011 90
13
14 Exhibit 89 Mountain Water Company Capital Expenditures for 2014 93
15
16 Exhibit 90 Mountain Water Company Facility Inspection Form 94
17
18 Exhibit 91 CV of Craig Close 39
19
20 Exhibit 92 Mountain Water Company Water System Condition Assessment 99
21
22 Exhibit 93 Budgetary Costs for Maintenance Repairs of Mountain Water Dams, Scott Brand 108
23
24 Exhibit 94 Facility Inspection Forms 109
25 Exhibit 95 HDR Asset Class Worksheet 139
26 Exhibit 96 Summary of Costs 167
27 Exhibit 97 Analysis of Data 170

5

<p>1 San Diego, California, Wednesday, November 12, 2014 2 9:33 a.m. - 3:20 p.m. 3 4 THE VIDEOGRAPHER: Here begins the videotaped 5 deposition of Craig Close in the matter of the City of 6 Missoula versus Mountain Water Company. Today's date is 7 November 12th, 2014, and the time is 9:33. My name is 8 Terry Weiss; I represent Hahn & Bowersock Court 9 Reporters. Our court reporter today is Claire DiLoretta 10 reporting on behalf of Hahn & Bowersock Court Reporters. 11 Today's deposition is taking place at 11988 12 El Camino Real in San Diego, California. 13 At this time could all parties please introduce 14 themselves, starting with the witness. 15 THE WITNESS: Yes. My name is Craig Close from 16 HDR Engineering. 17 MR. McCREEDY: Phil McCreedy, Datsopoulos, 18 MacDonald & Lind, on behalf of the City of Missoula. 19 MR. SCHNEIDER: Harry Schneider on behalf of 20 the City. 21 MR. CONNER: Joe Conner on behalf of Mountain 22 Water Company. 23 MS. MILLER: Adrian Miller on behalf of Carlyle 24 Infrastructure Partners. 25 THE VIDEOGRAPHER: Will the court reporter</p> <p style="text-align: right;">6</p>	<p>1 other so the court reporter can get this down correctly 2 and have a good record. And if I ask a question today 3 that you don't understand, then please stop me and I'll 4 try to rephrase it so that we're on the same page. Is 5 that fair enough? 6 A That would be fine. 7 Q When were you retained by -- and when I say 8 "you," I'm referring to HDR -- 9 A It was -- 10 Q -- retained by the City of Missoula? 11 A It was in August of 2014. 12 (Deposition Exhibit 73 was marked for 13 identification by the Certified Shorthand 14 Reporter and is attached hereto.) 15 MR. CONNER: I think I've got this. Adrian, I 16 don't have -- is that all right? 17 Q I've handed you a document, sir, that's marked 18 Exhibit -- 19 THE REPORTER: 73. 20 BY MR. CONNER: 21 Q -- 73 and ask if you can identify that document 22 for me, please? 23 A This is the agreement between HDR and the 24 attorney, Perkins Coie. 25 Q Okay. Who is Gregory Stonehouse?</p> <p style="text-align: right;">8</p>
<p>1 please swear in the witness. 2 3 CRAIG CLOSE, 4 having been first duly sworn, was examined and testified 5 as follows: 6 7 EXAMINATION 8 BY MR. CONNER: 9 Q Good morning, Mr. Close. Do you mind if I call 10 you Craig? 11 A That would be fine. 12 Q Okay. Craig, as we just indicated in 13 introducing ourselves, and I think as you know, I 14 represent Mountain Water Company, Baker Donelson does, 15 and I'm the lead counsel with Baker Donelson 16 representing the company. I'm going to ask you a number 17 of questions today relating to your report and other 18 issues that may arise. Has your deposition been taken 19 before? 20 A Yes, it has. 21 Q How many times? 22 A Approximately three or four times. If you 23 count PUC testimony, it would be a number of times. 24 Q I understand. Well, you know the routine, 25 then, I suspect. But we'll try not to talk over each</p> <p style="text-align: right;">7</p>	<p>1 A Greg Stonehouse is our -- HDR's north central 2 marketing manager. 3 Q Do you know why -- when this case was filed 4 initially? 5 A No, I do not. 6 Q You are aware that this is a condemnation 7 action? 8 A Yes, I am. 9 Q Have you had an opportunity to review either 10 the first filed complaint or the amended complaint? 11 A The first filed complaint I did. 12 Q Was the first filed complaint that you reviewed 13 the April 2014 complaint? 14 A I don't know which one this is. 15 Q What -- you brought documents with you today? 16 A Yes. 17 Q What do those documents consist of? 18 A These are basically the report that I prepared. 19 Q May I see the file please, sir, the whole file? 20 Thank you. 21 Let's go off the record, please, and take a 22 break. 23 THE VIDEOGRAPHER: We're now going off the 24 record. The time is 9:37. 25 (Recess taken.)</p> <p style="text-align: right;">9</p>

1 THE VIDEOGRAPHER: We're now back on the
2 record. The time is 9:53.
3 BY MR. CONNER:
4 **Q Craig, if you would take a look at Exhibit**
5 **Number 73, please, sir. You can -- we're not going to**
6 **get into those just quite yet. Oh, it's there. I'm**
7 **sorry.**
8 MR. McCREEDY: She's going to need that, so
9 let's make sure we don't mix it up with our stuff.
10 BY MR. CONNER:
11 **Q Well, you need to look at it, or you may not.**
12 **So this is your engagement agreement between HDR and**
13 **Perkins Coie, correct?**
14 A That's correct.
15 **Q All right. I believe that you do have the**
16 **first complaint that was filed in this case in your**
17 **file. Are you aware that that was filed, I believe, on**
18 **April the 2nd, 2014?**
19 A I wasn't aware of the exact date, no.
20 **Q Prior to August 2014 when you were retained or**
21 **engaged, August 27, 2014, had you or anyone at HDR been**
22 **contacted by the City in regard to serving as an expert**
23 **witness or providing some type of consulting services**
24 **related to the acquisition of the Mountain Water Company**
25 **assets?**

10

1 A No.
2 **Q So your first -- the first contact was probably**
3 **before August the 27th, correct?**
4 A Briefly before. Not -- probably only a few
5 days to a week beforehand.
6 **Q Craig, did they contact you -- did someone**
7 **contact you directly from Perkins Coie or was the**
8 **contact made at another point at HDR?**
9 A It was made at another point within HDR.
10 **Q Do you remember who the first contact was with?**
11 A Greg Stonehouse.
12 **Q Greg who?**
13 A Stonehouse.
14 **Q Okay. The gentleman that signed the engagement**
15 **letter?**
16 A Yes.
17 **Q Did Greg Stonehouse have any type of prior**
18 **contact or relationship with the City of Missoula or**
19 **Perkins Coie?**
20 A Not that I'm aware of.
21 **Q It's my understanding that HDR has provided**
22 **services for the City of Missoula in the past, though,**
23 **correct?**
24 A I believe some minor engineering services, yes.
25 **Q You have not been associated with any services**

11

1 **provided by HDR to the City of Missoula prior to this**
2 **engagement; is that correct?**
3 A That is correct.
4 **Q When Mr. -- did Mr. Stonehouse contact you and**
5 **ask if you would be interested in working on this**
6 **assignment?**
7 A Yes, he did.
8 **Q Do you recall when that contact was made?**
9 A It would have been probably the last week of
10 August sometime. I don't know the exact day.
11 **Q Was it before or after HDR was engaged?**
12 A Obviously when he first contacted me, it was
13 probably a day or two before we were engaged.
14 **Q When he contacted you, what did he tell you in**
15 **regard to the assignment?**
16 A He informed me that essentially we were looking
17 for a -- the City was looking for an assessment of the
18 Mountain Water Company facilities.
19 **Q Did he explain to you that there was a**
20 **condemnation that had been filed by the City of**
21 **Missoula?**
22 A Yes, he did.
23 **Q What did he explain about that?**
24 A Essentially that's about all he said.
25 **Q Did he give you any kind of idea of the time**

12

1 **line you'd be operating on?**
2 A No.
3 **Q Funny how that happens when you're asked to do**
4 **something, isn't it?**
5 A Yes.
6 **Q When did you learn -- or what was your response**
7 **to Mr. Stonehouse?**
8 A That I would be willing to help in the
9 assignment.
10 **Q You felt that you were competent to perform the**
11 **assigned task?**
12 A Yes.
13 **Q Did -- at that point in time, did you realize**
14 **who else would be assisting you on the assignment?**
15 A Not at that moment, no.
16 **Q Did you think you would essentially be doing it**
17 **on your own?**
18 A No. I knew we'd have to add some additional
19 support to do that, but at that time I did not know who
20 that was.
21 **Q What was the -- what was your next step in**
22 **regard to the assignment?**
23 A Was to -- we had a brief discussion between
24 Greg Stonehouse and myself; we talked about what the
25 outline of the scope would be; and then we went forward

13

<p>1 and I reviewed the scope that's in the agreement and 2 waited for the approval.</p> <p>3 Q Did you develop the scope that's in the exhibit 4 on Exhibit A?</p> <p>5 A No. I only reviewed it.</p> <p>6 Q Is this the entire scope of work that's related 7 to your engagement by Perkins Coie associated with the 8 condemnation of the Mountain Water system?</p> <p>9 A I'm looking for the attached scope. It doesn't 10 appear to be attached to this.</p> <p>11 Q Is it not the third page?</p> <p>12 A I apologize. There it is. I apologize. This 13 was the current -- the scope at the time. We have since 14 been asked to do two additional tasks.</p> <p>15 Q Are those -- is the additional -- or are the 16 additional tasks that you just identified reflected in 17 writing?</p> <p>18 A Not as of yet, no.</p> <p>19 Q When were you advised and by whom of those two 20 additional tasks?</p> <p>21 A I was asked by Natasha Jones -- I have to 22 remember the exact date; it was approximately two weeks 23 ago -- to do a rate analysis.</p> <p>24 Q A rate analysis --</p> <p>25 A A rate analysis of the purchase of Mountain</p> <p style="text-align: right;">14</p>	<p>1 initial analysis looking at Algonquin at \$100 million 2 purchase price. We've developed four options; one with 3 the full purchase price to be added in the rate base; 4 the second option to be looked at, that the \$62 million 5 premium over rate base will be approved in rates 6 through -- in acquisition adjustment amortized over 7 30 years; the third option was to look at none of the 8 premium being approved by the commission in that 9 acquisition; and a fourth option was the purchase of 10 Mountain Water Company by the City of Missoula at a 11 purchase price at \$50 million.</p> <p>12 The -- all four options, we included annual 13 capital improvements of \$6 million and also at 14 \$9 million per year, and we looked at a ten-year 15 forecast, which is consistent with the \$60 to 16 \$90 million of total capital that we had in my report.</p> <p>17 Q Anything else?</p> <p>18 A We have generally the results, the preliminary 19 results of that. We're still going through a QC and 20 review. Preliminary results show that roughly under the 21 option one of the purchase, that it would be roughly a 22 35 percent rate increase at first. The -- I don't 23 remember the exact numbers for the other options, but 24 there was annual rate increases in the range of 5 to 25 7 percent over the ten years.</p> <p style="text-align: right;">16</p>
<p>1 Water Company by Algonquin as compared to public 2 ownership.</p> <p>3 Q Is there any email or other written 4 communication reflecting Ms. Jones' request in that 5 regard?</p> <p>6 A I'd have to look. I don't know offhand. It 7 was done verbally when we were discussing on the phone.</p> <p>8 Q You guys have -- I'll commend you, you've done 9 a good job producing your file to us. But my question 10 is have any of the documents that are in your file of 11 communications with Ms. Jones or anyone else concerning 12 the additional assignment been produced in the case to 13 us?</p> <p>14 A I'm not -- I'm not aware of that. I don't 15 know.</p> <p>16 Q Have you been requested to gather and produce 17 any documents related to the new assignment?</p> <p>18 A No, I have not.</p> <p>19 Q Are there documents in your file related to the 20 new assignment?</p> <p>21 A I'd have to look. I don't know.</p> <p>22 Q Have you started work on the assignment?</p> <p>23 A Yes, we have.</p> <p>24 Q How -- what have you done?</p> <p>25 A We set up the rate model. We've done the</p> <p style="text-align: right;">15</p>	<p>1 Q In all four -- in all three options?</p> <p>2 A All three. All three. Under option four we 3 were able to show that it would not have to have a rate 4 increase through 2021, and then a roughly 2 percent rate 5 increase in 2022, stepping up to about 4 percent in 2024 6 to be able to afford -- that was based on a \$9 million 7 per year capital investment. At \$6 million per year the 8 city would not have to raise rates for the entire 9 ten-year forecast period.</p> <p>10 Q Why didn't you bring that document with you 11 today in your folder, or is it?</p> <p>12 A It's still being actually worked on at this 13 point in time.</p> <p>14 Q But you have a complete draft of the entire 15 model under those four scenarios, correct?</p> <p>16 A We have a model that represents those four 17 scenarios, yes.</p> <p>18 Q And has that model been printed, the pages 19 printed and --</p> <p>20 A No.</p> <p>21 Q It has not?</p> <p>22 A No. No. It's still on the computer.</p> <p>23 Q Has it been forwarded to counsel or to your 24 client, Perkins Coie, or Ms. Jones in draft form?</p> <p>25 A Yes, it has.</p> <p style="text-align: right;">17</p>

1 **Q When was it forwarded?**
 2 A Friday.
 3 **Q This past Friday?**
 4 A This past Friday.
 5 **Q My days are all running together now. Is**
 6 **that -- help me out -- November the 7th?**
 7 A Yes.
 8 **Q Who did you -- who did you email it to?**
 9 A Natasha Jones and Bill Van Canon -- is that his
 10 last name?
 11 MR. McCREEDY: Van Canagan.
 12 THE WITNESS: Van Canagan. I say that wrong
 13 all the time.
 14 BY MR. CONNER:
 15 **Q Anyone else?**
 16 A No.
 17 **Q Have you had any direct communications with the**
 18 **mayor at any point in time, Mayor Engen, at any point in**
 19 **time?**
 20 A Yes, I did.
 21 **Q When were you in direct contact with**
 22 **Mayor Engen?**
 23 A At the end of the tours that Black & Veatch was
 24 doing of the City's wastewater system, came back to the
 25 Boone Karlsberg office, that was on -- was it -- I'm

18

1 trying to remember the exact date. My days are running
 2 together as well. That would have been on Thursday, the
 3 2nd, I believe.
 4 **Q Well, let's just get the calendar out and make**
 5 **sure so we'll get the record straight, anyway.**
 6 MR. McCREEDY: The 2nd of November was a
 7 Sunday.
 8 THE WITNESS: That's a Sunday? Oh, I know. It
 9 was October 30th, Thursday.
 10 BY MR. CONNER:
 11 **Q October 30th?**
 12 A Yes.
 13 **Q At that point in time, had Ms. Jones asked to**
 14 **you prepare the rate analysis that you've just**
 15 **discussed?**
 16 A No. It was actually the day after that.
 17 **Q So on Friday?**
 18 A Friday the 31st.
 19 **Q Were you still in Missoula on Friday**
 20 **October 31st?**
 21 A I returned, 7:00 a.m. flight out of Missoula on
 22 Friday morning.
 23 **Q Did she get up and take you to the airport?**
 24 A No.
 25 **Q She communicated over the phone?**

19

1 A Over the phone, yeah.
 2 **Q Did she say why she needed this additional**
 3 **work?**
 4 A I think the reason, she just wanted a
 5 comparison between the different rate structures that
 6 would be under the different options.
 7 **Q Now, the model that you have prepared, is it a**
 8 **model that HDR already had in its system, a rate model?**
 9 A Yes.
 10 **Q So it's a standard rate model that you've used**
 11 **before?**
 12 A Yes.
 13 **Q Is it easy enough to plug other purchase price**
 14 **numbers in your model to generate a result?**
 15 A Yes.
 16 **Q With respect to the purchase, I think the**
 17 **fourth model or the fourth run, let's call it --**
 18 **A Option four?**
 19 **Q Option four, which is the city acquiring the**
 20 **system at \$50 million, did -- is the purchase price the**
 21 **only factor that you modified in the model?**
 22 A No. We went through and updated the O&M
 23 expenditures.
 24 **Q Is option four the only model you ran with**
 25 **those O&M expenditures?**

20

1 A No. We ran all of the options with O&M
 2 expenditures. We received the O&M expenditures from the
 3 Springstead report.
 4 **Q That's what I was going to ask you. Did you**
 5 **talk with anyone at Springstead?**
 6 A No, I did not.
 7 **Q With respect to option one, two, and three, are**
 8 **the O&M expenditures in those options different from the**
 9 **O&M expenditures that are in option four?**
 10 A Yes, they are.
 11 **Q Why are they different?**
 12 A There were several things that the City would
 13 not have to pay, like taxes.
 14 **Q What kind of taxes?**
 15 A Income tax, property tax.
 16 **Q Did Ms. Jones advise you that the City had no**
 17 **intention of paying real estate property taxes if it**
 18 **acquired the system?**
 19 A I don't know where the direction came from, but
 20 yes, we were given -- I think it was from Bill.
 21 **Q Bill?**
 22 A Van --
 23 **Q Canagan?**
 24 A -- Canagan.
 25 **Q Van Canagan.**

21

1 A Van Canagan, I'll get it yet.
 2 **Q Just kind of like a song, Van Canagan,**
 3 **Van Canagan.**
 4 A I'll let it roll off my tongue next time.
 5 **Q And what amount of CAPEX did you include in**
 6 **options one, two, and three?**
 7 A We ran two options; one at 6 million per year
 8 and another one at 9 million per year.
 9 **Q So you ran the same CAPEX on all four**
 10 **options --**
 11 A On all four models.
 12 **Q Let's not talk over each other.**
 13 A I'm sorry. I apologize.
 14 **Q Phil may want to object here too and we need to**
 15 **give him a chance to do that. Eventually.**
 16 MR. McCREEDY: We'll see.
 17 BY MR. CONNER:
 18 **Q When are you supposed to finalize this**
 19 **assignment? When I say "this assignment," the rate**
 20 **analysis assignment?**
 21 A Within the next two weeks.
 22 **Q What else do you need in order to finalize your**
 23 **assignment?**
 24 A There were several questions of clarification
 25 that we needed to get from Springstead on the O&M

22

1 expenditures.
 2 **Q Did you send Springstead a list of questions?**
 3 A Again, we're working -- our direction has all
 4 been through Bill; he's the one who is interfacing with
 5 Springstead.
 6 **Q What clarifications on the O&M expenses did you**
 7 **advise Mr. Van Canagan that you needed from Springstead?**
 8 A I don't know offhand. I have one of my rate
 9 analysts doing the work and provided that. I would have
 10 to check with her.
 11 **Q Who is the rate analyst that is doing the work?**
 12 A Angelina Flores.
 13 **Q Did Ms. Flores also work for American Water at**
 14 **some point in time?**
 15 A No.
 16 **Q Is Ms. Flores the individual that has actually**
 17 **done the work in order to prepare the model?**
 18 A Yes.
 19 **Q Have you been -- or what has been your**
 20 **responsibility and involvement in regard to that**
 21 **assignment?**
 22 A I've been overseeing the effort, provided the
 23 development of the options and some of the assumptions,
 24 and then provided a review of the model and raised
 25 questions during -- during this process.

23

1 **Q What questions did you raise?**
 2 A I was raising questions about rate base and how
 3 the purchase price was put in, and looked at how the
 4 CAPEX was put in. For instance there was no CPI index;
 5 we included a CPI index, then, for CAPEX going forward
 6 in all four options.
 7 **Q So what it results in actually is more than**
 8 **6 million -- it's just adjusted by CPI per year?**
 9 A Yes. Because our costs, when we did our
 10 estimate, were in today's costs, so we ramped them
 11 up -- that is correct.
 12 **Q Did you adjust all O&M expenses by the CPI in**
 13 **your model?**
 14 A Yes, we did.
 15 **Q Did you adjust any revenue projections?**
 16 A I'd have to -- I'd have to ask Angie about
 17 that.
 18 **Q So you're not aware of -- or did you simply --**
 19 **did she simply use the revenue projections in the**
 20 **Springstead report?**
 21 A I believe that is correct, but I'd have to
 22 confirm with her.
 23 **Q So your project completion date for the rate**
 24 **analysis assignment is two weeks from today?**
 25 A Yes.

24

1 **Q Are you going to work Thanksgiving?**
 2 A Well, I think it's due right after
 3 Thanksgiving, so --
 4 **Q Okay?**
 5 A -- that first week of December. Sorry.
 6 **Q First week of December?**
 7 A Yeah.
 8 **Q Did Ms. Jones talk to you about you presenting**
 9 **this analysis on the rate -- or the rate analysis as**
 10 **part of your expert testimony at trial?**
 11 A Yes.
 12 **Q What did she say about that?**
 13 A Well, she hadn't made a final decision on that,
 14 but, yes, the idea was I would be able to review that
 15 and provide an overview of the conclusions and findings
 16 of the report.
 17 **Q So Ms. Flores is not going to be identified as**
 18 **a testifying witness?**
 19 A I don't know.
 20 **Q Did you review any other of the plaintiff's**
 21 **expert reports or information in preparing your rate**
 22 **analysis?**
 23 A No.
 24 **Q Have you reviewed any of the other expert**
 25 **reports that were submitted by the plaintiff in their**

25

1 **disclosures on October the 15th?**
 2 A Yes.
 3 **Q Which ones?**
 4 A Mr. Hayward's, the Springstead report. I can't
 5 remember all the others. There was probably three or
 6 four that I looked at.
 7 **Q So did Ms. Jones or Mr. Van Canagan send you**
 8 **all the reports?**
 9 A Yes, Ms. Jones.
 10 **Q Ms. Jones did. By email?**
 11 A No. I received those on a thumb drive.
 12 **Q Why did she send them to you?**
 13 A As just background for preparation of the
 14 deposition.
 15 **Q Which reports did you review in preparation for**
 16 **your deposition?**
 17 A I'd have to look at the list again. Do you
 18 want me -- I don't have it here.
 19 **Q I'll tell you what, this is mine, but let's see**
 20 **if I have any secret notes on it. I'll hand you that**
 21 **document. We won't introduce it, but you can look at it**
 22 **to refresh your recollection. And just as you go**
 23 **through it, if you can identify which ones that you have**
 24 **reviewed in preparation for your deposition or**
 25 **otherwise.**

26

1 A Uh-huh. The -- the Nick Drag- -- I can't say
 2 his name.
 3 **Q Why don't you spell it for the court reporter.**
 4 A D-r-a-g-i-s-i-c-h, Springstead report.
 5 **Q Okay.**
 6 A The Sean Keatts, Barclays Capital report.
 7 Scott Brand, HDR's report.
 8 **Q Well, that's part of your --**
 9 A That's part of mine, yes, but you have broken
 10 that out as a separate report here. David Hayward,
 11 Hayward Consulting. Peter Nealson's report from the
 12 City of Missoula.
 13 **Q Did you review any other reports?**
 14 A None that I recognize from this list.
 15 **Q Okay. Thank you. Did you make any notes as**
 16 **you reviewed these reports?**
 17 A No. I just reviewed those on my computer.
 18 **Q So you didn't print them out or anything?**
 19 A I didn't print them out at all, no.
 20 **Q I'm not sure if your program does this, but**
 21 **mine allows you to put comments in the text as you're**
 22 **reading through it; did you do -- make any kind of**
 23 **electronic notations or comments?**
 24 A No, I did not. I just really just read them
 25 for background information.

27

1 **Q Did you send an email to Ms. Jones or anyone**
 2 **else representing the City in regard to your thoughts,**
 3 **questions, or concerns related to any of the reports**
 4 **that you reviewed?**
 5 A No, I did not.
 6 **Q Do you know what an RCNLD is?**
 7 A No, I do not.
 8 **Q When you were at American Water, did you ever**
 9 **participate in a replacement cost new less depreciation**
 10 **study?**
 11 A Yes, I have.
 12 **Q That's the acronym that generally goes with it?**
 13 A Yeah.
 14 **Q What about have you also participated in a**
 15 **reproduction cost new less depreciation study?**
 16 A Not that I'm aware of, no.
 17 **Q Typically you've worked on replacement cost new**
 18 **less depreciation?**
 19 A Yes.
 20 **Q How many -- or have you actually performed one**
 21 **of -- such an analysis in the past?**
 22 A Yes, I have.
 23 **Q How many times have you done an RCNLD, do you**
 24 **think?**
 25 A Two or three times.

28

1 **Q Did you -- who were you working for when you**
 2 **did the RCNLD analyses?**
 3 A It's been a while since I've done it. The most
 4 recent one probably was for Hampton Roads.
 5 **Q Hampton Roads --**
 6 A Sanitation district.
 7 **Q What type of depreciation did you utilize or**
 8 **was it an observed depreciation analysis?**
 9 A What it was, we just looked at a straight line
 10 depreciation based upon what was -- what they had on the
 11 books. This was part of a consolidation study of --
 12 **Q The one reflected in your CV?**
 13 A Yes.
 14 **Q Okay. On the RCN component of that study did**
 15 **you simply do a trended original cost?**
 16 A Because of records, we had to actually do
 17 current replacement cost, and then we looked at the
 18 comparison to original cost, original cost less
 19 depreciation as compared to replacement cost and
 20 replacement cost depreciation. The one method that we
 21 did not do, which was because of time and ability of
 22 data, was replacement cost less condition based
 23 depreciation.
 24 **Q And what's a condition based depreciation?**
 25 A Condition based depreciation is going out and

29

1 doing a condition assessment of the actual assets,
 2 determining the remaining service -- remaining service
 3 life and adjusting the non-remaining depreciated value
 4 over that remaining life rather than just a state based
 5 on years.

6 **Q And so it's my understanding, then, on a**
 7 **condition-based assessment -- or depreciation you're not**
 8 **following the industry useful lives that are promulgated**
 9 **by various organizations or materials?**

10 A No. You start with that as the standard in
 11 which you compare the remaining life against that, and
 12 then you adjust based upon the actual physical
 13 condition.

14 **Q Right. And now, on a condition-based**
 15 **depreciation analysis of a water system what would --**
 16 **what would you like to try to see and the method that**
 17 **you would follow to do it?**

18 A Well, what we're trying to see is to take a
 19 look at assets that have -- either in worse condition
 20 than the remaining, you know, non-depreciated value and
 21 to adjust those near. If there's greater life than
 22 what's remaining in the non-depreciated value, we take
 23 it out based upon condition. We look at based on asset
 24 class. There's a number of different tests and guides
 25 to be able to assess that condition.

30

1 **Q I understand. Would you also recommend to a**
 2 **client, if there was enough time and funds, to do random**
 3 **sampling of pipe material or pipe mains that you think**
 4 **might be at issue concerning -- due to their age?**

5 A Yes, we would.

6 **Q Would it be fair, Chris -- or, Craig, if you**
 7 **were setting up a proposed sampling program for a**
 8 **condition-based depreciation analysis, to consider the**
 9 **pipe material first that's in the system?**

10 A Yes.

11 **Q I believe you would agree with me -- and I**
 12 **think your own report shows this -- that if you have,**
 13 **let's say, 60 percent ductile iron pipe in the system**
 14 **that's anywhere from any -- say, even 10 to 30 years**
 15 **old, if the soil conditions and the water is not**
 16 **corrosive and things of that nature, it really wouldn't**
 17 **be necessary, or shouldn't be necessary, to sample much,**
 18 **if any, of that pipe?**

19 A There's other circumstances, again, on -- I
 20 think before we would make a determination on that, we
 21 would look at break history --

22 **Q Sure.**

23 A -- leak history, other data that would be
 24 available. We would take some soil analysis to
 25 determine if there's things. So before I can typically

31

1 say that, there would be other factors that we would
 2 look at first.

3 **Q Absolutely. And I didn't mean to limit the**
 4 **factors. But it's an expensive process to dig and do**
 5 **destructive testing, isn't it?**

6 A Oh, yeah.

7 **Q Okay. And I take it you would want to attempt**
 8 **to do more of a random sampling, if possible, of the**
 9 **specific pipe materials that you do recommend to your**
 10 **client to test for condition; is that correct?**

11 A That's correct. Typically we do a desktop
 12 analysis based upon break data, other data that we have
 13 that we make requests for and do that analysis, the
 14 prior ties, where we think the best sampling would be
 15 most beneficial.

16 **Q Sure. And then you make a recommendation to**
 17 **your client, correct?**

18 A Correct.

19 **Q And then the client looks to see if there's**
 20 **enough money in the pocketbook to pay for it?**

21 A That is correct.

22 **Q Okay. Have you ever performed a**
 23 **condition-based depreciation analysis that included**
 24 **sampling of transmission and distribution mains?**

25 A No, we have not.

32

1 **Q You would agree, though, wouldn't you, Craig,**
 2 **that a water system on a condition-based view does not**
 3 **depreciate on a straight line basis?**

4 A Correct.

5 **Q Isn't it true that if you're looking at a**
 6 **condition depreciation, that it takes many years before**
 7 **you get to the point where the system or the pipe begins**
 8 **to fail dramatically?**

9 A That's not necessarily the case. We've done a
 10 number of water research foundation projects where we've
 11 determined that there is a significant number of leaks
 12 and breaks within the first ten years of materials and
 13 then it obviously drops off, and then you get the
 14 typical bell curve in terms of breaks.

15 **Q Right.**

16 A But there is an initial first ten years where
 17 we've seen now a spike in those type of leaks and
 18 failures.

19 **Q Would you think that that spike might be at**
 20 **least somewhat attributable to installation?**

21 A Some of it is installation; some of it is just
 22 manufacturer problems.

23 **Q If a -- a pipe may not have, you know -- I**
 24 **haven't heard -- I had one ductile iron case where we**
 25 **had some issues with the pipe; that's about the only**

33

1 **time I've heard of an issue with ductile iron. Are you**
 2 **aware of any manufacturing issues in particular with**
 3 **that product?**
 4 A Not specifically, no. I'd have to go talk to
 5 our corrosion experts and our material experts about
 6 that.
 7 **Q In performing the condition-based assessment,**
 8 **or depreciation -- I keep calling it assessment, I'm**
 9 **sorry -- the condition-based depreciation, would you**
 10 **also want to take soil samples in the pit or trench**
 11 **as -- around the pipe?**
 12 A Yes.
 13 **Q And then what type of physical inspection would**
 14 **you recommend doing of the material itself?**
 15 A Well, the material -- again, this isn't my
 16 direct expertise. We have our own corrosion staff and
 17 material experts in a lab to be able to do that. But
 18 they would take a look at the loss of the wall thickness
 19 of material; they look at how the -- the type of
 20 corrosion and where it's located in the pipe; they do
 21 some destructive testing of that pipe; determine the
 22 remaining hoop strength of the pipe. But there's a
 23 number of other tests that they -- chemical tests and
 24 things they do on material that I'm not -- that's not my
 25 expertise.

34

1 **Q Okay. Who would have that expertise at HDR?**
 2 A Dr. Graham Bell.
 3 **Q Grant or Graham?**
 4 A Graham.
 5 **Q Where is Dr. Bell located?**
 6 A In Claremont, California.
 7 **Q Really?**
 8 A Uh-huh.
 9 **Q Looks like that may be my next stop. Has**
 10 **Dr. Bell been involved in any aspect of your assignment**
 11 **in this case?**
 12 A Not as of yet. We have been asked for an
 13 additional task.
 14 **Q That's the second task?**
 15 A That's the second task.
 16 **Q Well, let's finish this one and then we'll --**
 17 A Okay.
 18 **Q -- go to that one, if we can. Did your work on**
 19 **the Hampton Roads sanitary project where you prepared an**
 20 **RCNLD using a straight line depreciation result in a**
 21 **report?**
 22 A It did not. After we presented preliminary
 23 results to the committee, it was determined that --
 24 ultimately that there would be no purchase, if you
 25 recall, of the satellite systems assets by the regional

35

1 entity.
 2 **Q So it was a -- as I recall from your CV, there**
 3 **was an attempt to consolidate a number of sewer systems?**
 4 A Yeah. 17 satellite agencies that provide sewer
 5 flows to Hampton Roads Sanitation District.
 6 **Q And these are all -- or those were all publicly**
 7 **owned, governmental-owned systems?**
 8 A Those are all publicly owned.
 9 **Q When we say public, I guess we should say**
 10 **government.**
 11 A Yes. Municipal systems.
 12 **Q And were all those municipal under consent**
 13 **orders?**
 14 A They were under not federal consent orders;
 15 they were under state orders, state consent order -- or
 16 admin orders, excuse me.
 17 **Q How many municipalities or government entities**
 18 **do -- or does HDR work for in the wastewater area that**
 19 **are under either state or federal administrative or**
 20 **consent orders, do you know?**
 21 A No. It would be a large number.
 22 **Q Over 100?**
 23 A I can't even guess what that number would be.
 24 **Q It's safe to say that there are a lot of**
 25 **government-owned systems that have a lot of money to**

36

1 **spend on CAPEX, correct?**
 2 A Correct.
 3 **Q And what's the cause generally of the backlog,**
 4 **I'll call it, of the CAPEX that's necessary in the**
 5 **wastewater area with respect to government-owned**
 6 **systems; do you have any ideas?**
 7 A Well, let me answer that question in two parts.
 8 **Q Sure.**
 9 A Primarily the cause for admin orders or consent
 10 decrees are the result of sanitary sewer overflows from
 11 their system. Obviously under the Clean Water Act, you
 12 know, the EPA is protecting the receiving water quality;
 13 that's the goal of doing that. What we've found -- and
 14 we do a lot of negotiation support of cities who
 15 negotiate with EPA; the most recent one is the
 16 San Antonio water system. We have found that most of
 17 the -- the majority of the spills are due to O&M-related
 18 practices, that capacity and capital is not -- probably
 19 only represents probably 10 to 15 percent, on average,
 20 of the cause of these.
 21 What it really comes down to, to answer your
 22 question, about why the CAPEX was deferred is really to
 23 get -- for them to get an understanding as to the
 24 prioritization of what CAPEX has the greatest benefit
 25 for reducing -- to have the direct impact of reducing

37

1 expense.

2 **Q And when you say the main reason for these**

3 **consent decrees -- or administrative consent orders is**

4 **due to O&M-related issues, what do you mean by that?**

5 A Well, the blockages that occur in pipes that

6 are caused from debris, FOG -- which is fat oils and

7 grease -- roots, just potentially structural failures

8 from the pipe itself, those are typically the O&M from

9 cleaning -- from not having enough, or at least

10 targeted, cleaning programs to be able to keep the pipes

11 clear. What we find is pure capacity issues are the

12 minor causes of spills from collection systems.

13 **Q Okay. Now, it's my understanding that HDR has**

14 **a program called Bid to Goal?**

15 A Yes.

16 **Q Have you been involved in developing that**

17 **program?**

18 A Not developing it, but implementing

19 particularly the City of San Diego.

20 **Q That's what's in your resume, it looks like, or**

21 **your CV?**

22 A Uh-huh.

23 **Q Let's go ahead and just put that as an exhibit**

24 **or mark it as an exhibit.**

25 **Here you go, Phil, if you want it.**

38

1 **It appears on the second page of your CV, which**

2 **is Exhibit Number --**

3 **What are we on?**

4 **THE REPORTER: 91.**

5 **MR. CONNER: 91.**

6 **(Deposition Exhibit 91 was marked for**

7 **identification by the Certified Shorthand**

8 **Reporter and is attached hereto.)**

9 MR. CONNER: And just so the record is clear,

10 we have a number of exhibits that we have marked from

11 Craig's file that we have not gone to yet, so we're

12 skipping over those and we'll come back to them.

13 MR. McCREEDY: Joe, I'll trade you here because

14 this has got, you know -- oh, you've got marks on every

15 one.

16 MR. CONNER: Yeah. It's okay. It's all right.

17 **Q And explain to me the Bid to Goal process?**

18 A Uh-huh. Essentially what we go in and do is we

19 sit down with the operations departments of a

20 municipality. Can be investor-owned, but we typically

21 have done with this municipal systems.

22 **Q Why is that?**

23 A That they seem to be want to be progressive in

24 terms of saving dollars.

25 **Q And private systems don't, Craig?**

39

1 A Well, they haven't at least wanted to go and do

2 a program like this.

3 **Q You're not saying that American Water Works, at**

4 **least while you were there, was not incentivized to try**

5 **to control costs, are you?**

6 A No, I'm not saying that. I'm just saying the

7 work that we've done on Bid to Goal has been for

8 municipal systems.

9 **Q In fact, at American Water efficiency O&M**

10 **operations are a top priority, correct?**

11 A The top priority is providing water -- credible

12 water service at the lowest possible cost to the

13 customers.

14 **Q And to do that, American Water, at least while**

15 **you were there, was very much incentivized and**

16 **incentivized its people to have efficient O&M**

17 **operations, correct?**

18 A Correct.

19 **Q Thank you. Now explain the process, if you**

20 **don't mind?**

21 A The process is to sit down with the operations

22 group first to find what their work is in terms of

23 actually developing a work plan, detailed work plan, by

24 each individual work group, by each even field crew, and

25 to develop that work plan of everything that they're

40

1 doing.

2 The very first planning effort -- I did skip

3 over a step -- was to determine what the goals and the

4 levels of service and requirements would be for each of

5 the different departments, divisions, field crews, all

6 the way down to the individual, you know, staff level.

7 Then it would be to sit there and develop that work plan

8 for each of those groups as to what they're actually

9 doing, make the comparison. Then the idea was to then

10 identify certain goals that would -- you know, to try to

11 improve efficiency and go out and take a fair market

12 proposal what a private investor-owned utility would do

13 as well as other public utilities would do in those

14 particular work tasks.

15 **Q Well, your write-up here says competitive bid**

16 **versus the private sector, not the private and public**

17 **sector?**

18 A We would include both, to be honest with you.

19 We would include both.

20 **Q I'm sorry. Go ahead.**

21 A Okay. Then based upon that comparison, we

22 would establish, as I said, those goals, and then we

23 would work with the employee group to put together a bid

24 as to how they would achieve those goals and what they

25 could achieve, and we would then go through, and a lot

41

1 of that required restructuring the organization or you'd
 2 have to change to be able to do that. And then we would
 3 actually set a goal for them to meet with goal sharing
 4 estimates based upon them achieving those goals by a
 5 certain amount of time.

6 **Q And that's where the money might flow?**
 7 A Yes.

8 **Q So it's a financial incentive at the end of the**
 9 **day to encourage the employees to reach those goals?**
 10 A For the City of San Diego it was. Not all
 11 cities include the goals, gain sharing.

12 **Q So it appears what your -- this Bid to Goal**
 13 **process is to incentivize municipal organizations to act**
 14 **somewhat like the private sector in terms of efficiency**
 15 **and meeting expectations?**
 16 A Not just the private sector. Any well-run
 17 wastewater or water system that's out there.

18 **Q Okay.**
 19 A Public or private.

20 **Q After -- just so I have all the steps -- I**
 21 **think I may have missed one -- first you identify the**
 22 **goals of level of service?**
 23 A Uh-huh.

24 **Q And then you do a detailed work plan of what**
 25 **they're actually doing?**

42

1 A Actually doing, correct.

2 **Q And then do you prepare a detailed work plan to**
 3 **achieve the goals?**
 4 A What we do first is based upon that work plan,
 5 we then prepare, based on benchmarks and comparison of
 6 other private and public operations, what that proposal
 7 would be to do that work.

8 **Q Has the Bid to Goal process been copyrighted by**
 9 **HDR?**
 10 A Yes, it has.

11 **Q How many times has it been implemented, that**
 12 **you're aware of, by HDR with a client?**
 13 A I don't know. It was before my time when they
 14 created that program. The last one we've done was the
 15 one I was involved with which was the City of San Diego.
 16 We have not done any since then.

17 **Q Is it fair to say that -- or what has been your**
 18 **experience in terms of dollars saved with respect to an**
 19 **implementation of a Bid to Goal program?**
 20 A Well, there has been a fairly significant
 21 savings in that program. I believe in the five-year
 22 program with the wastewater department for City of
 23 San Diego they saved about \$60 million over that
 24 five-year period of time.

25 **Q Was the City of San Diego Water Department**

43

1 **viewed as a fairly efficient and well-run water**
 2 **department before you made your proposal and began the**
 3 **Bid to Goal?**
 4 MR. McCREEDY: Object. Calls for speculation.
 5 BY MR. CONNER:
 6 **Q If you know.**
 7 A Huh?
 8 **Q If you know.**
 9 A I really couldn't make a comparison at this
 10 point.

11 **Q Did you make the presentation to the City of**
 12 **San Diego Water Department in order to encourage them to**
 13 **implement the process?**
 14 A Yes.

15 **Q In the recommendation phase did you prepare any**
 16 **type of a report or an assessment of their operation?**
 17 A No, we did not. We -- it was obviously a
 18 competitive proposal that we then had to submit a
 19 proposal and interview.

20 **Q Has the City of Missoula ever utilized the HDR**
 21 **Bid to Goal process?**
 22 A Not that I'm aware of.

23 **Q Would you agree with me, Craig, that a system**
 24 **can have very good machinery, equipment, and processes,**
 25 **mechanical processes, but the operation and maintenance**

44

1 **may be at issue?**
 2 A It's possible, yes.

3 **Q And I take it that's what you've seen in this**
 4 **Bid to Goal process?**
 5 A In some municipalities, yes. In others it's
 6 very efficient operations.

7 **Q If they're very efficient, then you're not**
 8 **going to sell the Bid to Goal process, are you?**
 9 A No.

10 **Q How many times have you sold it?**
 11 A Like I said, it's probably a number of times
 12 before my time. It was another business unit within HDR
 13 that was doing that. I was involved with San Diego
 14 because of my work at the City of San Diego before.

15 **Q Sure.**
 16 A We are doing not a Bid to Goal right now, but a
 17 current optimization study for the City of Raleigh,
 18 which is the same similar process without any of the
 19 competitive bid or gain sharing portions. It's really
 20 just going through the same process for optimization.

21 **Q What is an optimization study?**
 22 A Where we compare again their work practices and
 23 their programs and what they're -- the different crews
 24 and operations people are expected to do, comparing them
 25 to different -- essentially a benchmarking study

45

1 comparing how they are performing for the same tasks as
 2 other -- as other utilities.

3 **Q And what's the -- how do you identify the other
 4 utilities in a benchmarking process?**

5 A Well, it's done a little differently for each
 6 one because we bring in geographic comparisons, size of
 7 the utility. We look at the types of operations, the
 8 type of -- if they have treatment plans or ground water
 9 wells. We try to compare similar type of systems
 10 than -- that we're comparing to.

11 **Q Okay. Have -- or has HDR performed an
 12 optimization study for the City of Missoula with respect
 13 to its wastewater system and/or its storm water system?**

14 A Not that I'm aware of.

15 **Q Getting back to your rate analysis assignment,
 16 what do you recall from your review of the Hayward
 17 report?**

18 A I think what I take -- took away from that
 19 report was the valuation, if I recall, was around
 20 \$45 million in terms of the value of the system.

21 **Q You're not a business valuation expert, are
 22 you, sir?**

23 A No, I am not.

24 **Q Did you take issue with any of the statements
 25 made in Mr. Hayward's report with respect to the cost**

46

1 **approach?**

2 A No, I did not.

3 **Q Do you recall what he said at all with respect
 4 to the cost approach?**

5 A No. I'd have to go back and review that report
 6 again.

7 **Q You wouldn't agree that an RCNLD study is
 8 impractical, would you?**

9 A What do you mean by "impractical"?

10 **Q I don't know. That's what he said.**

11 A I think there are too many variables and
 12 circumstances. I'd have to know more of a background to
 13 be able to answer that question.

14 **Q Sure. As an engineer, though, you have done
 15 them before, and they are -- if you have the data, they
 16 can be done and performed?**

17 A They can be performed.

18 **Q If Mr. Hayward's valuation was \$45 million, why
 19 did you use \$50 million in the option four?**

20 A That was the -- as to the direction I got from
 21 Natasha Jones. That was an input we were given.

22 **Q Gotcha. Now, have you provided me all of the
 23 information that you gathered or used from the
 24 Springstead report?**

25 A Yes.

47

1 **Q What information or what -- or did you -- or
 2 what -- strike that.**

3 **With respect to the Barclays report, do you
 4 recall any impressions that you have now in regard to
 5 your review of that report?**

6 A Well, the one thing that I wanted to get out
 7 from that report, which is what we used in the model,
 8 was the debt coverages for the -- for a triple-B bond;
 9 it was 1.2 debt coverages, which is what we used in our
 10 model.

11 **Q Did you use 1.2 debt coverage for all four
 12 options?**

13 A Obviously we wouldn't use that same methodology
 14 for the first three options, obviously a rate base and
 15 return and revenue and with the return in equity rather
 16 than, you know, the debt coverage and that. So we --
 17 and private investor-owned utilities, typically you have
 18 to have a 40-to-60 debt-equity ratio.

19 **Q Okay. Is there any profit factored in to
 20 option one, two, and three?**

21 A Yes.

22 **Q What profit?**

23 A Just the return on equity, which was stated at
 24 9.25 return, percent return equity.

25 **Q And you understand that that under rate making**

48

1 **analysis is an opportunity to earn an authorized rate
 2 return, correct?**

3 A That is correct.

4 **Q In your experience at American Water, and I'm
 5 sure at other utilities that you may have consulted
 6 with, isn't it true that regulated utilities sometimes
 7 struggle in collecting an authorized -- their authorized
 8 rate of return?**

9 A Sometimes depending on the state, but they also
 10 can earn more than that between rate filings.

11 **Q If they do, it's usually adjusted in the next
 12 rate case, correct?**

13 A Many times it is, yes.

14 **Q Okay. So there's a check and balance in the
 15 regulated area with respect to authorized rate return,
 16 correct?**

17 A Obviously it's how they perform under their
 18 current rate case and rate filing as compared to what's
 19 been authorized by the commission.

20 **Q Did you check to see what the actual rate of
 21 return has been for Mountain Water Company before you
 22 assumed it would be the authorized -- simply the
 23 authorized rate of return in preparing your models?**

24 A No, we did not. I don't think we had access to
 25 that information.

49

1 **Q That information is available in the annual**
2 **reports, isn't it, the PSC?**
3 A It might be. We did not see that in any of the
4 other work papers, but I'm sure --
5 **Q Any of the?**
6 A Any of the other work papers from the
7 discovery; that's what we were basing our information
8 for. So it's possible that we missed it. But we just
9 used what was authorized.
10 **Q In your experience, an annual report on a**
11 **regulated utility, would it include the actual rate of**
12 **return?**
13 A Yes, it would.
14 **Q So that would be something you could find in**
15 **the annual reports, and if you didn't get those in**
16 **discovery, those are available online at the Montana**
17 **PSC, aren't they?**
18 A Yes.
19 **Q What information do you recall reviewing or any**
20 **impressions that you may have from your review of the**
21 **Peter Neelson report?**
22 A I primarily focused on Peter's assessment of
23 the dams as it compared to our expert of Scott Brand,
24 and just made the comparison to see if there was
25 consistencies of that.

50

1 **Q Is Mr. Neelson a dam expert?**
2 A I wouldn't -- couldn't judge on his
3 qualifications.
4 **Q Okay. Well, what did you think of his report?**
5 A I thought it was actually fairly comprehensive
6 and fairly consistent with the findings that we came up
7 with.
8 **Q Is Mr. Brand's report better than Mr. Neelson's**
9 **in your view?**
10 MR. McCREEDY: Objection. Vague.
11 BY MR. CONNER:
12 **Q In your view.**
13 A I don't know what you define when you say
14 "better."
15 **Q Well, there's no need for two experts with**
16 **respect to inspection of a dam situation. So would you**
17 **think in your experience from your review of both**
18 **Mr. Brand's report and Mr. Neelson's report that you**
19 **only need one of those?**
20 MR. McCREEDY: Objection. Calls for
21 speculation. Outside the scope. Asks for a legal
22 conclusion.
23 You can answer.
24 THE WITNESS: Huh?
25 MR. McCREEDY: You can answer.

51

1 BY MR. CONNER:
2 **Q You can answer. That's all lawyer stuff.**
3 MR. McCREEDY: Yeah.
4 THE WITNESS: I guess the way I would answer
5 that is that they had different purposes for their
6 inspections, and I wouldn't necessarily compare one to
7 the other. Scott Brand's evaluation was really to look
8 at the dams from a standpoint of making sure from a
9 safety standpoint and to look at what improvements would
10 be necessary to bring them up to safety standards rather
11 than -- which I believe Peter Neelson looked at it more
12 from a perspective of how they would be used if they
13 were taken to full pool. We did not look at what the
14 costs or what the improvements necessary would be to
15 make them fully operational.
16 BY MR. CONNER:
17 **Q When you say "fully operational," what do you**
18 **mean?**
19 A That they would be operated at full pool behind
20 each of the dams.
21 **Q And Mr. Brand didn't make that assumption,**
22 **correct?**
23 A No. He looked at where they -- at the
24 operating levels of where they were in terms of the
25 safety concerns, in terms of slope stability, erosion

52

1 around the spillway, and other stability issues with the
2 embankment itself.
3 **Q And were you satisfied with the scope of his**
4 **review?**
5 A Yes, I was.
6 **Q And you were satisfied with the scope of his**
7 **review of the dams for purposes of the engagement in**
8 **this case, correct?**
9 A For the purposes of determining the safety
10 concerns and whether we would bring them up to -- safety
11 concerns, yes, I thought the scope of his analysis was
12 fine.
13 **Q Did you contact Mr. Neelson or Ms. Jones in**
14 **regard to your review of the Neelson report?**
15 A No, I did not.
16 **Q What is the second task that you -- additional**
17 **task that you've been assigned pursuant to this**
18 **engagement?**
19 A What we've been asked to do is during this
20 process, we became aware that Mountain Water Company was
21 replacing a pipeline on Hilda Avenue. We had asked for
22 a piece of pipe to be saved so we could actually do a
23 corrosion analysis and determine what the remaining, if
24 any, useful life of that material because of the type of
25 material, the Kalamein pipe that's -- I believe that

53

1 Mountain Water Company has around 15 miles of that
 2 Kalamein pipe in their system.

3 **Q How did you become aware of the Hilda -- or**
 4 **Hilda Avenue project?**

5 A I was informed by Natasha Jones.

6 **Q Did she email you or call you?**

7 A She called me.

8 **Q And what was the substance of your discussion?**

9 A She asked about that and would we be able to do
 10 a better -- a more refined analysis of the projection of
 11 the pipe, particularly that material, if we had a chance
 12 to inspect it and analyze it.

13 **Q What is Kalamein pipe?**

14 A Kalamein pipe is -- essentially it was
 15 developed back in the late 1800s. They stopped
 16 manufacturing it in the 1920s. It's a wrought-iron
 17 material that was made for boiler piping above ground;
 18 it wasn't intended for below-ground use.

19 **Q How long are the sections?**

20 A I would have to look into that. I don't know
 21 offhand.

22 **Q What type of coupling does it have?**

23 A Push-on joint.

24 **Q Can you give me a better description other than**
 25 **push-on joint? Is there a gasket or --**

54

1 A There's a gasket joint where the pipe gets
 2 pushed in, the straight end gets pushed into the bell
 3 end.

4 **Q What kind of gasket?**

5 A I would have to go back and look. I would
 6 think back then they were using wax gaskets.

7 **Q Have you ever seen any lead used?**

8 A At times, yes.

9 **Q Oakum?**

10 A I have not seen that used.

11 **Q And what did you tell Ms. Jones?**

12 A I indicated that we had a lab in our Claremont
 13 office that we could analyze that, and that we could
 14 certainly provide a better assessment of the condition
 15 of that type of pipe if we had a chance to inspect it.

16 **Q Okay. How big of a section do you need?**

17 A I believe we -- it asked for a piece that was
 18 at least 3 or 4 feet long. I believe they saved a
 19 7-foot piece of pipe.

20 **Q Did you give her an estimate of cost, how much**
 21 **that would cost the City?**

22 A Yes, I did.

23 **Q What was the estimate of cost?**

24 A To just do the analysis of the -- the soil
 25 analysis as well as going and doing the corrosion

55

1 inspection and evaluation of pipe was 10- to 15,000. If
 2 we would go ahead and do destructive testing, which we
 3 wouldn't decide until after we had a chance to look at
 4 the pipe, that would be another \$10,000.

5 **Q What type of destructive testing would you do**
 6 **to the pipe?**

7 A I -- again, I would leave that to our lab as to
 8 what they're doing. That's not my specialty or area.

9 **Q Did you tell -- ask Mr. Graham Bell to -- or**
 10 **Dr. Graham Bell to give you a protocol or --**

11 A Yes.

12 **Q Has he given you one?**

13 A Yes, he has.

14 **Q Where is it?**

15 A I provided that to Natasha Jones, which I
 16 believe was presented to the court.

17 **Q Is that the latest motion that has been filed,**
 18 **do you think?**

19 A I believe so.

20 **Q Do you recall what that protocol says?**

21 A No. I'd have to look at the write-up again.

22 **Q Is that for the destructive testing itself?**

23 A No. It was for both phases of that work.

24 **Q Now, what type of soil analysis can you do from**
 25 **the pipe if there's no soil on the pipe?**

56

1 A We had asked for soil, soil analysis, soil to
 2 be taken, samples, so I don't know if they had actually
 3 taken it or not or saved that out of the trench when
 4 they took the pipe out.

5 **Q Do you recall a conversation that you and I**
 6 **had? I believe one of your other HDR folks was on the**
 7 **line. This was, I think, our initial call with**
 8 **Ms. Jones in regard to scheduling testing -- or**
 9 **scheduling the inspection of the water system?**

10 A Yes.

11 **Q I think you were on the call?**

12 A Yes, I was on the call.

13 **Q Who was the other gentleman on the call?**

14 A Greg Stonehouse.

15 **Q Okay. And the purpose of that call was for us**
 16 **to discuss and find out what you wanted to review or**
 17 **inspect; is that correct?**

18 A It was -- the purpose was to be able to
 19 schedule and coordinate what we wanted to see in terms
 20 of the vertical assets, yes.

21 **Q Right. And isn't it true during that call that**
 22 **I specifically asked you if you wanted to do any**
 23 **destructive testing or any below ground testing,**
 24 **correct?**

25 A I don't recall that, but that may have been the

57

1 case. I don't recall that offhand.

2 **Q Did you make any notes of that conversation?**

3 A No, I did not.

4 **Q Do you know if Mr. Stonehouse did?**

5 A Not to my knowledge do I know of.

6 **Q Do you recall receiving an email that I sent to**

7 **Ms. Jones where I verified there would be no or you had**

8 **not asked for any type of underground inspection or**

9 **testing?**

10 A I wasn't -- I'm not sure I was privy to that

11 email.

12 **Q Isn't it true that prior to and during the**

13 **inspection of the water system -- I believe it began on**

14 **September the 29th -- that you -- neither you, nor**

15 **anyone else on your team, requested underground sampling**

16 **of pipe?**

17 A That is correct.

18 **Q Isn't it true to this date, other than**

19 **requesting that pipe from the Hilda Avenue main**

20 **replacement project be retained, have not asked for any**

21 **type of random underground sampling of the water**

22 **distribution system owned by Mountain Water Company?**

23 A No, we have not asked for any additional

24 sampling. The idea was this was a piece of pipe that

25 was already being removed for a project and available

58

1 rather than digging something up.

2 **Q Because it's much cheaper for the City to do**

3 **that than to actually go in and do a sampling project of**

4 **its own with respect to the system, correct?**

5 A Yes.

6 **Q Have you signed a new engagement letter with**

7 **respect to either task one or task two?**

8 A No, not as of yet.

9 **Q Is that the extent of what you have done, what**

10 **you just told us anyway, with respect to task number**

11 **two?**

12 A Yes.

13 **Q Craig, I have a -- I asked my worthy assistants**

14 **to put this notebook together and I wanted three things;**

15 **I wanted the engagement letter, your report -- or at**

16 **least the written copy of the summary -- and invoices.**

17 **She didn't have any invoices in my notebook. So have**

18 **you presented the City with invoices or presented**

19 **Perkins Coie with invoices?**

20 A To be honest with you, I don't know. Our

21 project manager is handling that. The business manager

22 would know that. That would be Kathryn Jones. I'd have

23 to ask if we submitted any invoices to date.

24 **Q Do you know -- so you don't know how much has**

25 **been billed to the City?**

59

1 A No, I don't.

2 **Q What is your --**

3 MR. MCCREEDY: When it's -- I'm sorry. When

4 it's convenient, can we take a short break?

5 MR. CONNER: Oh, sure. Let me just finish this

6 real quick.

7 MR. MCCREEDY: Sure.

8 BY MR. CONNER:

9 **Q What is your hourly rate?**

10 A I'd have to look at what was in there, but it's

11 roughly \$300 an hour.

12 **Q You need to look at the engagement letter?**

13 A Yeah. I'd have to look at this, what was

14 actually put in there. It depends on the -- well --

15 **Q What page are you on?**

16 A Exhibit B, page 4.

17 **Q There's a range; that's why I was asking.**

18 A Yeah. My rates are roughly around \$300.

19 **Q Are you the project principal or manager?**

20 A Principal.

21 **Q What is your testimony rate and deposition**

22 **rate?**

23 A I would have to go and look what we have for

24 that. I don't know offhand.

25 MR. CONNER: Take a short break.

60

1 THE VIDEOGRAPHER: We're now going off the

2 record. The time is 11:08.

3 (Recess taken.)

4 (Mr. Schneider left the proceedings.)

5 THE VIDEOGRAPHER: We're now back on the

6 record. The time is 11:26.

7 BY MR. CONNER:

8 **Q Craig, when did you talk to John Young?**

9 A Monday.

10 **Q Monday of this week?**

11 A Yes.

12 **Q What was the purpose of your call with**

13 **Mr. Young?**

14 A My purpose of the call was to ask him a

15 particular rate question and, in particular, similar to

16 what we had been working on at the Etowah water supply

17 project. I was really kind of asking about how. And it

18 was also a case in Scranton that American was -- had

19 worked on in terms of taking property out of rate base

20 into the -- from the non-regulated to the regulated

21 side. That's how that went because I recall that that

22 was one of the options in that case of American

23 acquiring that system.

24 **Q Okay. Was that it? Is that what you talked to**

25 **him about?**

61

1 A Well, you did come up, so we did chat about you
 2 and the work that you did for him in Jefferson County.
 3 **Q What did he say?**
 4 A Oh, he -- well, he had a couple of good jokes
 5 to tell, so it was good.
 6 **Q Anything I'm going to hear from Ms. Jones?**
 7 A No. No. I was catching up with him. I hadn't
 8 talked to him for a little while.
 9 **Q Okay. So you really didn't share with him**
 10 **anything related to this litigation, did you?**
 11 A No.
 12 **Q How did my name come up?**
 13 A I remember him talking about you when --
 14 because I was working with him down at Jefferson
 15 County --
 16 **Q How?**
 17 A -- and your name, so -- and also at American.
 18 And then I just indicated that I was going to be working
 19 with you so, you know, I just kind of want to refresh my
 20 memory, and he said, "Such a small world."
 21 **Q It is a small world, especially in this**
 22 **industry. You know, I had forgotten about that. Were**
 23 **you working on the -- well, Black & Veatch was working**
 24 **on the rate impact for us in that case, but were you**
 25 **working on the -- there was an O&M, basically an O&M**

62

1 **study or -- that he had commissioned, I think, American**
 2 **to do. Maybe not O&M, but it was on workforce**
 3 **maximization?**
 4 A Yeah. That was what American did. What they
 5 were going to have us do -- we were retained, but it
 6 never went forward because of the things of the court --
 7 was we were doing the engineer's report to verify, to go
 8 through all of the consumptions and everything else, and
 9 that was what we were going to do.
 10 **Q That's what it was. Okay. Well, sorry I**
 11 **didn't remember that. We all kind of got a quick plug**
 12 **pulled on that one.**
 13 A Yeah, we did.
 14 **Q And for the record, that was a bankruptcy that**
 15 **was filed causing the receivership to end at that point**
 16 **in time?**
 17 A Uh-huh.
 18 **Q Okay. Very good. Were you -- when did you**
 19 **leave American Water?**
 20 A In 2000, August 2000.
 21 **Q Okay. So he had contacted you at HDR, then?**
 22 A Yes.
 23 **Q I see.**
 24 A We had worked -- we had contacted and I was
 25 working with him to try to go forward with the Etowah

63

1 water supply project there in Georgia.
 2 **Q Right. I think that -- from what I understand,**
 3 **that project is probably dead in the water too?**
 4 A I think so too.
 5 **Q Politics is not a good thing sometimes, is it?**
 6 A No. John was the one person who hired me at
 7 American and he was my mentor at American.
 8 **Q How about that.**
 9 A So I still keep pretty good close contact with
 10 John.
 11 **Q He's a good man.**
 12 A Yes, he is.
 13 (Mr. Schneider reentered the proceedings.)
 14 BY MR. CONNER:
 15 **Q Okay. Let's get back to this case. Other than**
 16 **the rate analysis that you're in the process of**
 17 **performing for Ms. Jones and potentially the testing of**
 18 **the pipe that was removed from the Hilda Avenue project,**
 19 **are there any other assignments that you have been given**
 20 **in this case?**
 21 A No, I have not been given anything
 22 additionally.
 23 **Q Why were you at the wastewater inspection that**
 24 **was performed by experts retained by my firm?**
 25 A I was asked to be there by Natasha Jones.

64

1 **Q I don't see that in your engagement scope of**
 2 **work. Is that another additional assignment?**
 3 A I guess you would say that she associated that
 4 with the inspections that we had done that would be tied
 5 with that similar work. We would just be going along
 6 for the inspections on the wastewater side.
 7 **Q What inspections you had done?**
 8 A Well, the inspections of the water -- the
 9 Mountain Water Company facilities --
 10 **Q I was --**
 11 A Assessments. Huh?
 12 **Q All right. I was just curious --**
 13 A Yeah.
 14 **Q -- because we don't have any wastewater?**
 15 A No. I meant the water, so I misspoke.
 16 **Q Okay.**
 17 A Of the water facilities.
 18 **Q Are there any emails or documents reflecting**
 19 **her request for you to participate in the inspection of**
 20 **the wastewater system and storm water system performed**
 21 **by experts from Black & Veatch and HydroMetrics?**
 22 A I'd have to go back and look. It was mostly
 23 done on the phone call. There may have been one email
 24 regarding that, but it was mostly done over the phone.
 25 **Q Did you produce any documents to Ms. Jones for**

65

1 **production to our firm in relation to your work for her**
2 **on that?**
3 A No. I did not produce any notes or any
4 document.
5 **Q Do you have notes and documents relating to**
6 **that inspection?**
7 A No, I do not.
8 **Q So you took no notes during the inspection of**
9 **the wastewater system by Black & Veatch and**
10 **HydroMetrics?**
11 A No, I did not.
12 **Q Did you send any email communications regarding**
13 **that inspection or notes in that -- in email form?**
14 A No.
15 **Q Why were you there?**
16 A I was there to listen to the type of questions
17 and things that they were looking at and the approach
18 that they had taken. And I gave Natasha a debriefing at
19 the end of the week, and that was all the extent that I
20 had done.
21 **Q What did you tell her in the debriefing?**
22 A That it appeared that there was a lot of good
23 comments that the Black & Veatch people were making
24 about the facilities. It didn't appear that there was
25 really much in terms of issues or problems that they

66

1 were at least discussing at that time, and I didn't see
2 that there were any significant or major issues that
3 they were discovering. Black & Veatch was very
4 complimentary about the facilities throughout the tour.
5 **Q Did Black & Veatch or Jim Lloyd with**
6 **HydroMetrics sit down with you at any point or during**
7 **that and tell you what their thoughts were in regard to**
8 **their findings?**
9 A No.
10 **Q So what you witnessed was their inspection and**
11 **interaction with employees of the water system -- or**
12 **wastewater system?**
13 A That is correct.
14 **Q You would agree with me, sir, that oftentimes**
15 **when you're doing an inspection with someone and going**
16 **through their system, that you may not go ahead and give**
17 **them all of your opinions as you're proceeding through**
18 **the inspection?**
19 A I would agree that not all of the opinions.
20 But you do get a sense of what they're feeling based on
21 what they're saying and how they're looking at things.
22 So yes, it seemed to be very positive.
23 **Q It seemed to be very positive, but, you know,**
24 **obviously this is a hotly contested litigation?**
25 A Uh-huh.

67

1 **Q Okay.**
2 MR. McCREEDY: As opposed to all the other
3 kinds of litigation that we get involved in.
4 MR. CONNER: Well, let's just say that this one
5 is sometimes a little more so than others. Not with you
6 or Harry, of course.
7 MR. McCREEDY: Of course not.
8 BY MR. CONNER:
9 **Q Okay. Do you recall any other statements that**
10 **you made to Natasha Jones in regard to the debriefing?**
11 A No. Other than I think that I said they were
12 very thorough in their evaluation, that they had looked
13 at each and every one of the facilities in detail. I
14 think that's about all I remember -- recall saying.
15 **Q Did you -- did you know any of the experts**
16 **from -- for Mountain Water that were participating in**
17 **that inspection?**
18 A From Mountain Water?
19 **Q Well, their Mountain Water's experts.**
20 A Oh, okay. No, I did not.
21 **Q Did you look up the resumes of any of them or**
22 **the CVs online after you met them?**
23 A No, I did not.
24 **Q Did they appear to know what they were talking**
25 **about or appear to be knowledgeable of wastewater**

68

1 **systems?**
2 A To the best of what I can assess when I was
3 there, they seemed reasonably knowledgeable, yes.
4 **Q Have you had any follow-up with Ms. Jones or**
5 **anyone else representing the City concerning the**
6 **inspection that you witnessed of the wastewater system**
7 **and storm water system by Mountain Water's experts?**
8 A No. I just gave Ms. Jones a debriefing after
9 the end of the week.
10 **Q How did -- have you already charged her for**
11 **that time?**
12 A I don't know if we billed it yet, but I have
13 charged, you know, our job number for doing that, yes.
14 **Q Sure. Did you -- do you remember how many**
15 **hours you charged to that job number?**
16 A No. I'd have to go back and look at my time
17 sheet.
18 **Q Do you charge for travel time?**
19 A Sometimes. I don't believe in this case that I
20 traveled any travel time.
21 **Q You didn't travel any -- I'm sorry --**
22 A No. I didn't charge any travel time in this
23 case that I'm aware of. It was just the time that I was
24 there on the ground.
25 **Q Are you aware if you're going to be asked to do**

69

1 anything else in regard to your engagement in this case?
2 A I'm not aware of anything else at this time.
3 **Q Has Ms. Jones or anyone -- any other lawyers**
4 **representing the City advised you that they're going to**
5 **ask you to review expert reports from Mountain Water**
6 **Company?**
7 A Not at this point.
8 **Q Has that been discussed as a possibility?**
9 A Not -- it may have been said in passing, but
10 not in any detail that I know of that it's a
11 possibility, but no, I have not been asked to do
12 anything along those lines.
13 **Q With respect to the Kalamein pipe, if the**
14 **Kalamein pipe is still -- it is still being used in the**
15 **system, you're aware of that?**
16 A Yes.
17 **Q And as long as it's still being used, still**
18 **providing water to customers, it still has some**
19 **percentage of life, correct?**
20 A Not necessarily.
21 **Q Why not?**
22 A It could be an imminent failure; you have no
23 idea which pipe is going to break next and when that
24 occurs. You can't judge that this is going to have a
25 one year, three years, five years of a life or it could

70

1 all start failing tomorrow; you don't know that. It's
2 basically a 100-year-old pipe, a pipe that was not made
3 for this type of use; you don't know what the conditions
4 are going to be. So I can't say that it has any
5 remaining life.
6 **Q Well, let's talk about the date of inspection.**
7 **Let's say you're inspecting a pipe on X date or a system**
8 **on X date and there are no failures?**
9 A Uh-huh.
10 **Q As of that date, that pipe is still providing**
11 **water to customers, correct?**
12 A But you can look at the pipe and determine the
13 condition and that it's very much an imminent failure or
14 very close to that based on its condition. It may not
15 have failed up to that day, but the condition can be
16 that it can fail tomorrow.
17 **Q You would agree with me that depreciating a**
18 **pipe to 95 percent is a pretty heavy depreciation**
19 **percentage, wouldn't you?**
20 A Depreciating a pipe at, I'm sorry?
21 **Q 95 percent.**
22 A Yes. That's almost fully depreciated, yes.
23 **Q Do you know how thick Kalamein pipe is?**
24 A No, I don't. Not off the top of my head.
25 **Q What I'd like to do, Craig, before we get into**

71

1 your report, is go through each of the documents that
2 I've put -- that I've labeled with a -- that's right,
3 with an exhibit and ask you to identify those documents
4 for me.
5 A Uh-huh.
6 **Q First, why did you bring these documents to**
7 **your deposition today?**
8 A I brought those just to try to -- if there was
9 questions about my report, the information that I used
10 as a basis, that I would have that to refer to to answer
11 your questions.
12 **Q Okay. Fair enough. And if you would, give us**
13 **the exhibit number as you go through.**
14 A Yeah. Exhibit Number 74.
15 (Deposition Exhibit 74 was marked for
16 identification by the Certified Shorthand
17 Reporter and is attached hereto.)
18 BY MR. CONNER:
19 **Q Thank you. What is Exhibit Number 74?**
20 A This is the analysis of -- we received GIS data
21 from Mountain Water Company as to their pipes and the
22 information. This was a -- this is a graphical
23 representation of the data that was taken out of the GIS
24 and compiled to look at the pipe by installation by
25 year, by the type of material, and by diameter within

72

1 the system.
2 **Q And how was the GIS data provided to you?**
3 A In electronic form.
4 **Q Did it give you the ability to manipulate --**
5 **when I say manipulate, I'm just saying you changed it --**
6 **but to run different reports and such?**
7 A Well, it has allowed for us to take the actual
8 raw data out and analyze that outside of the GIS, yes.
9 **Q And you had a computer program at HDR that**
10 **allowed you to utilize that data --**
11 A Yes.
12 **Q -- in order to run reports like you have here?**
13 A Yes.
14 **Q And when did you have that information?**
15 A I'd have to go back and look at the exact
16 dates, but this was done during the time -- let me go
17 back to this. We received access to the discovery data
18 on September 12th. It was done sometime between
19 September 12th and prior to the week of September 29th
20 when we did the field inspections, field service
21 assessment.
22 **Q When did you first learn that your report was**
23 **going to be due on October the 15th?**
24 A During the week of September 29th.
25 **Q That's when you were first told when your**

73

1 **report was due?**
 2 A Yes.
 3 **Q What was your reaction?**
 4 A That it would be a challenge.
 5 **Q All right. Is that all that was said?**
 6 A Yeah, that's all that was said.
 7 **Q I'm sorry. Proceed.**
 8 A Okay. Anything more on that exhibit?
 9 **Q We may come back to it. Is that document in**
 10 **your report?**
 11 A Yes, it is.
 12 **Q It's on various pages of your report --**
 13 A It's in the attachments. It's in the
 14 attachment. This was an attachment --
 15 **Q That's right.**
 16 A -- of the report.
 17 **Q That's correct.**
 18 **(Deposition Exhibit 75 was marked for**
 19 **identification by the Certified Shorthand**
 20 **Reporter and is attached hereto.)**
 21 THE WITNESS: Exhibit 75. Okay. This was an
 22 email that I had sent and received from Dave Spencer.
 23 Dave Spencer was the person who did this analysis we
 24 just spoke about in Exhibit 74. He did the analysis of
 25 the pipeline work that I used as a basis for the cost

74

1 estimate of replacement pipe as well as in my report.
 2 BY MR. CONNER:
 3 **Q What does Mr. Spencer do?**
 4 A Mr. Spencer is a utility management consultant.
 5 He does a lot of asset management and condition
 6 assessment for water and sewer pipes.
 7 **Q Does he work for HDR?**
 8 A Yes, he does.
 9 **Q What office?**
 10 A San Diego.
 11 **Q Okay.**
 12 A What I had asked was that we -- he's been doing
 13 a lot of work on research -- Water Research Foundation
 14 projects projecting the remaining service life of
 15 different pipelines, materials, and so I -- and he's
 16 collected a lot of data from agencies around, and I
 17 wanted to know, as a comparison, what we were finding
 18 out from these research projects. So in this email we
 19 referenced the three research projects that HDR is -- we
 20 currently finished one, and then the other two are in
 21 progress right now.
 22 **Q Okay.**
 23 A So that's what, I was just trying to get some
 24 background on that. Attached is the first couple pages
 25 to the one we just recently finished, which is the

75

1 Answers to Challenging Infrastructure Management
 2 Questions, which really lays out the approach of doing a
 3 data analysis projection based on data analysis of
 4 pressure pipe, metallic pressure pipe, and using data
 5 analysis to be able to project the results of that. So
 6 this was recently published.
 7 **Q Okay. Thank you.**
 8 **(Deposition Exhibit 76 was marked for**
 9 **identification by the Certified Shorthand**
 10 **Reporter and is attached hereto.)**
 11 BY MR. CONNER:
 12 **Q What is the next exhibit?**
 13 A Exhibit 76. This is the Mountain Water Company
 14 System Report in Support of Distribution System
 15 Improvements. This we obtained from the discovery that
 16 was provided to us. We had used this report for
 17 information about leaks and other materials that we used
 18 in the data analysis as well as materials, and we also
 19 used in terms of the amount of waters produced, because
 20 we didn't really have any other production or
 21 consumption data, was able to use this data out of here
 22 to determine what actual consumption and water --
 23 projected water loss so that -- you know, that Mountain
 24 Water Company is considering in their system.
 25 **Q Okay. And that's how you used that document?**

76

1 A Yes.
 2 **Q Any other information you've gleaned from that**
 3 **document that supports your report, if you recall?**
 4 A I don't recall. There may have been some other
 5 things that we had gotten out of it. I'd have to go
 6 back and review that again.
 7 **Q Okay. Next exhibit?**
 8 A Exhibit 77 is also a Mountain Water Company
 9 report. It's called a --
 10 **Q I'll tell you what, if you don't -- I'm sorry.**
 11 **I didn't mean to interrupt you. Tell me what it is, and**
 12 **then there's a number at the bottom or there should be.**
 13 A Exhibit 77?
 14 **Q Is that -- there's no Bates number on that?**
 15 A There's no Bates number on this.
 16 **Q Okay. That's fine.**
 17 MR. McCREEDY: Maybe a PSC.
 18 MR. CONNER: Could be.
 19 (Deposition Exhibit 77 was marked for
 20 identification by the Certified Shorthand
 21 Reporter and is attached hereto.)
 22 BY MR. CONNER:
 23 **Q Exhibit 77 is labeled what?**
 24 A "Financial Analysis and Proposed Action Plan
 25 for Water Loss Mitigation."

77

1 **Q Where did you obtain that document?**
 2 A Through the discovery.
 3 **Q And who is the drafter of that document, if you**
 4 **know, or company?**
 5 A Mountain Water Company.
 6 **Q How was that document utilized in your**
 7 **analysis?**
 8 A We were able to really take a look at, again,
 9 from water loss and condition of pipe and really looking
 10 at leakage and the cost of the replacement and providing
 11 pipes to resolve or reduce their leakage. There was a
 12 lot of information about the type of pipe and pipe
 13 material, the number of miles -- well, miles, but feet
 14 of main. There was also -- particularly in Exhibit 3 it
 15 was broken down by size, material, and length, and I was
 16 able to use that for developing our cost estimates for
 17 replacement based upon size and material in our estimate
 18 for capital investment cost.
 19 **Q Was that information also available in the GIS**
 20 **data that was provided to you?**
 21 A No. Not -- it wasn't as specific as broken
 22 down by the types of materials. For instance, steel
 23 it's just in the GIS; so steel, it wasn't broken out as
 24 maybe galvanized or others. It was more specific here.
 25 **Q Okay.**

78

1 A We got certain information out of here about
 2 the services and the materials of service lines and the
 3 number of services out of this and the type of other
 4 materials that were out there and really looking at
 5 their cost estimates to be able to -- in terms of main
 6 replacements.
 7 **Q Is it your understanding that the company owns**
 8 **the service line from the main to the edge of the**
 9 **property?**
 10 A Yes. From the mains on the property line.
 11 **Q Who told you that?**
 12 A I believe I read it in one of the documents
 13 somewhere, yeah. I don't remember exactly where. But
 14 yeah, I think it might have been in this report.
 15 **Q Okay. In Exhibit 77?**
 16 A Yes.
 17 **Q Okay. Can you find it?**
 18 A Find it around services. I don't see it here.
 19 But I do remember reading it somewhere.
 20 **Q Okay. Let's go to the next document.**
 21 A Okay.
 22 (Deposition Exhibit 78 was marked for
 23 identification by the Certified Shorthand
 24 Reporter and is attached hereto.)
 25 BY MR. CONNER:

79

1 **Q Exhibit 78.**
 2 A Yeah. Exhibit 78 is titled "Maintenance of
 3 Wastewater Collection Systems for the City of Missoula,"
 4 and the author of this is Pat Brook, the collections
 5 operations and maintenance supervisor for the City of
 6 Missoula. This is the document that the City handed out
 7 to Black & Veatch at the initiation of their inspection
 8 of the wastewater facilities.
 9 **Q Okay. Why is it in your file?**
 10 A I was given a copy at the time with -- so that
 11 I could see what the Black & Veatch people were
 12 provided.
 13 **Q Okay. Why did you bring it today?**
 14 A It was just part of the file.
 15 **Q All right.**
 16 **(Deposition Exhibit 79 was marked for**
 17 **identification by the Certified Shorthand**
 18 **Reporter and is attached hereto.)**
 19 BY MR. CONNER:
 20 **Q The next document. Exhibit 79.**
 21 A Exhibit 79 is titled "Questions for Mountain
 22 Water Company, Deposition for Logan McGinnis." I was
 23 asked by Natasha Jones to come up with questions to ask
 24 during his deposition, and I was the author of these.
 25 **Q Did you print -- or type those or did you scan**

80

1 **that and sent it to her?**
 2 A I scanned it and sent it to her.
 3 **Q So there is an email that has that as an**
 4 **attachment?**
 5 A Yes.
 6 **Q Do you recall if she contacted you with any**
 7 **answers or down low with respect to the information that**
 8 **was gathered from Mr. McGinnis' deposition?**
 9 A No. I have not received any feedback or
 10 anything regarding the deposition.
 11 **Q Those questions and the answers to those**
 12 **questions, would they be something that you would want**
 13 **to review in order to potentially supplement your expert**
 14 **report?**
 15 A Yes.
 16 **Q Is that why -- well, did Ms. Jones say that you**
 17 **would have an opportunity to supplement your expert**
 18 **report?**
 19 A She did not bring that up. I presumed that,
 20 but she did not specifically say that.
 21 **Q On what did you base your presumption?**
 22 A That I was being asked to put questions
 23 together.
 24 **Q You haven't received a copy of his deposition?**
 25 A No, I have not.

81

1 **Q All right. Are those questions related or**
2 **strictly related to the water system?**
3 A Yes, they are.
4 (Deposition Exhibit 80 was marked for
5 identification by the Certified Shorthand
6 Reporter and is attached hereto.)
7 BY MR. CONNER:
8 **Q The next exhibit is Number 60?**
9 A Number 80.
10 **Q I'm sorry, Number 80.**
11 A This was information that was handed out by
12 Mountain Water Company at the time of our tour which was
13 a listing of all of the Mountain Water Company wells.
14 **Q Okay. And the notes on the back of that?**
15 A Yeah. What I did is I -- based upon that
16 financial report, and I looked at the -- we didn't have
17 any records of what the actual demands were; we asked
18 for that information, and we couldn't find anything in
19 the deposition as to actual production data. So I then
20 created it from a population, and in looking at a --
21 based on the report of 40 percent loss as to what the
22 actual average day and max day demands were.
23 Then I -- from the financial report, from the
24 water loss report, I was able to look at the 2012
25 production of 8,658 million gallons per year, and I was

82

1 able then to calculate the amount of average day and max
2 day demands, and I compared that to the actual available
3 production data. I've also estimated, based upon that
4 average day, that about nine and a half million gallons
5 a day of water loss at 40 percent is how much is lost on
6 each and every day for the Mountain Water system and
7 calculated based upon the horsepower and head
8 requirements, that it would roughly be a little over
9 \$600,000 a year to pump that nine and a half million
10 gallons of water that gets lost every day.
11 **Q So the \$600,000 figure that I see in your**
12 **report, is that worksheet or work paper where those**
13 **numbers were developed?**
14 A That is correct.
15 **Q Thank you.**
16 A Anything more?
17 **Q Unless there's anything else you need to**
18 **explain on that?**
19 A No, not at all.
20 (Deposition Exhibit 81 was marked for
21 identification by the Certified Shorthand
22 Reporter and is attached hereto.)
23 BY MR. CONNER:
24 **Q Okay.**
25 A This Exhibit 81. This is a blowup of the

83

1 tables that are on the Mountain Water Company map that
2 was provided during the tour because my eyesight is
3 getting to me and I had to blow them up so I can read
4 them.
5 **Q Okay. There's some handwriting on the back**
6 **page, I think; what does that reflect?**
7 A Oh, this was a summary that was taken off of
8 the report from Scott Brand. These were the condition
9 ratings and the cost range of each of the dams that I
10 took off of his report and put in to the overall cost
11 estimate summary.
12 **Q Craig, do you mind if I stand? My back is**
13 **hurting just a little bit. That's okay?**
14 A That's fine with me.
15 **Q All right. Thank you.**
16 MR. McCREEDY: And I have no objection. I know
17 some people object to that kind of thing, but, you know.
18 MR. CONNER: You know, some people. People.
19 People.
20 (Deposition Exhibit 82 was marked for
21 identification by the Certified Shorthand
22 Reporter and is attached hereto.)
23 BY MR. CONNER:
24 **Q Okay. The next exhibit, please, sir.**
25 A Exhibit 82. This was handed out by

84

1 Mountain Water Company during the tour. This was the
2 south tour itinerary listing of all the facilities that
3 we were going to see and broken down, and I put the
4 dates in which the dates we saw those, those facilities.
5 On the back, again, where I took -- off of our
6 inspection sheets I took the rating and the cost range
7 so I could put it into the spreadsheet.
8 **Q The rating and cost range?**
9 A The condition rating --
10 **Q Oh, I see what you're saying.**
11 A -- and the estimated cost range that we came up
12 with off of the individual inspection sheets that we
13 prepared.
14 **Q I'm going to get you to identify those in your**
15 **appendix when we get to that.**
16 A Okay.
17 **Q But I think I know what you're talking about.**
18 A Yeah.
19 **Q All right.**
20 A The big pile of sheets that we attached --
21 **Q There's a big pile of a lot of stuff.**
22 A We won't go there.
23 (Deposition Exhibit 83 was marked for
24 identification by the Certified Shorthand
25 Reporter and is attached hereto.)

85

1 THE WITNESS: Exhibit 83. This was handed out.
 2 And there's two things that are kind of connected that
 3 aren't related. This is -- this proposed schedule of
 4 the storm water system on the Black & Veatch tour, these
 5 were the facilities that we saw, that was the schedule
 6 that we saw there.
 7 BY MR. CONNER:
 8 **Q Okay.**
 9 A The other attachments to this were the same
 10 analysis, just unfortunately didn't print out properly,
 11 that we had in Exhibit 74. The same information.
 12 **Q All right. So what -- and I put those**
 13 **documents with the paper clip; so they do not go with --**
 14 A They do not go with this.
 15 **Q -- Exhibit 82?**
 16 A No. But they're the same pieces of paper as
 17 74.
 18 **Q Well, for the record, if you guys don't mind,**
 19 **let's take those off, then, and we won't include those**
 20 **as part of the exhibit; how about that.**
 21 **Is that okay with you?**
 22 MR. McCREEDY: Fine with me.
 23 BY MR. CONNER:
 24 **Q There is handwriting on the back of Exhibit 82;**
 25 **what is that?**

86

1 A Yes. This was notes of my debriefing from --
 2 from the end of the tour when I was talking for -- with
 3 Natasha Jones. She had asked me to develop questions
 4 for Logan McGinnis and also for the president, but I had
 5 not done questions for the president. She later said
 6 she didn't need those.
 7 **Q And that was John Kappes?**
 8 A Yes.
 9 (Deposition Exhibit 84 was marked for
 10 identification by the Certified Shorthand
 11 Reporter and is attached hereto.)
 12 BY MR. CONNER:
 13 **Q Okay.**
 14 A Exhibit 84. This came from -- do you want me
 15 to read the number at the bottom here?
 16 **Q You can. That might be helpful.**
 17 A Okay. This is from the discovery. This is
 18 MW 007561. This is maintenance data regarding the
 19 assets that we received. So we used this in determining
 20 and adjusting the condition rating of the assets for
 21 different facilities based upon what maintenance records
 22 we were able to find.
 23 **Q Were those the only maintenance records you**
 24 **could find?**
 25 A No. These just happened to be ones that I did

87

1 save. There were other ones that our team had used.
 2 **Q What were the extent of the maintenance records**
 3 **that were provided?**
 4 A Limited, very limited as to what we got in
 5 terms of the maintenance records.
 6 **Q Can you explain -- and some of this, it looks**
 7 **like those are marked confidential, so we'll just need**
 8 **to note on the record when we're dealing with a**
 9 **confidential document.**
 10 **And I think that Mr. Schneider and I can reach**
 11 **an agreement with respect to that later?**
 12 MR. SCHNEIDER: If you sit down. That's fine.
 13 MR. McCREEDY: And just for the record --
 14 MR. SCHNEIDER: I agree.
 15 MR. McCREEDY: And just for the record as well,
 16 this is a multi-page document. I don't want to
 17 misrepresent because he just read the first number --
 18 MR. CONNER: Oh, yeah. That's right.
 19 **Q What's the -- what are the other -- what's the**
 20 **end production number, last page?**
 21 **Thank you, Phil.**
 22 A MW 007564.
 23 **Q Okay. Thank you. What maintenance records**
 24 **were provided?**
 25 A There were some maintenance records regarding

88

1 some wells and pumps. There was limited data. Really
 2 we didn't get any maintenance data on the distribution
 3 mains or facilities main break data and those type of
 4 things, repairs. There was limited data in terms of any
 5 well maintenance; we didn't really see any well
 6 inspection reports. Or tank inspection reports, we
 7 didn't see any of those.
 8 (Deposition Exhibit 85 was marked for
 9 identification by the Certified Shorthand
 10 Reporter and is attached hereto.)
 11 BY MR. CONNER:
 12 **Q Okay.**
 13 A Exhibit 85. Operations and Maintenance Plan
 14 Summary. This was also found during the discovery. The
 15 number is MW 006994; the last page is MW 007009. Again,
 16 this was some additional operation and maintenance data
 17 that we used as part of our assessment.
 18 **Q Okay. Do you recall what portions of that**
 19 **report that you used as part of your assessment?**
 20 A I'd have to go back and take a look at it
 21 again. I don't recall.
 22 **Q That's okay.**
 23 (Deposition Exhibit 86 was marked for
 24 identification by the Certified Shorthand
 25 Reporter and is attached hereto.)

89

1 THE WITNESS: This is Exhibit 86. This is a
2 map of the Mountain Water system and wells location and
3 description of their service area. This was handed -- I
4 remember getting this -- I don't remember exactly from
5 where -- when we did the inspection tour.
6 BY MR. CONNER:
7 **Q Okay.**
8 **(Deposition Exhibit 87 was marked for**
9 **identification by the Certified Shorthand**
10 **Reporter and is attached hereto.)**
11 BY MR. CONNER:
12 **Q Next exhibit, please.**
13 A Exhibit 87, MW 007411. There were some things
14 attached to this that doesn't belong to it. That's one
15 of the forms that got attached.
16 **Q Oh, okay. You can take that off. Let me see**
17 **it. I may mark it. Go ahead.**
18 A Okay. This was -- okay. It goes through
19 MW 007413. This was a summary of the capital investment
20 program for Mountain Water Company.
21 **Q For what year?**
22 A This is dollars spent in 2012.
23 (Deposition Exhibit 88 was marked for
24 identification by the Certified Shorthand
25 Reporter and is attached hereto.)

90

1 BY MR. CONNER:
2 **Q The next exhibit, please.**
3 A Let's see here. This is an -- Exhibit 88.
4 This is an email from Sara Streeter to Shanna Adams, and
5 the subject is "Links to Leak Reports Submitted to PSC
6 and HDR Base-extra Capacity Study." Essentially --
7 **Q Why is that in your file?**
8 A This was one of the discovery items that was --
9 a copy was there. No other reason.
10 **Q What is the HDR extra capacity study?**
11 A I don't know anything about that study at all.
12 **Q Has HDR worked for Mountain Water?**
13 A Yes, they have.
14 **Q Now, is this the first time you recall seeing**
15 **HDR extra capacity study?**
16 A Yeah. I actually didn't recall that we had
17 done anything, so ...
18 **Q So you didn't go back into your files to see**
19 **what other work you may have done for Mountain Water**
20 **that might be relevant to your analysis in this**
21 **engagement?**
22 A Not in this engagement, no. I did not go back
23 and look at other work. I kept it focused on what our
24 assignment was.
25 **Q Did -- does HDR have any type of ethical walls**

91

1 **that it puts in place in regard to doing work for -- or**
2 **taking on a new project for another client that might be**
3 **adverse to a previous client of HDR?**
4 A Yes, we do. We put firewalls in that we don't
5 talk with anyone else within the organization. This was
6 under a non-disclosure agreement, and therefore, outside
7 of the actual team that was working on it, there were no
8 discussions, conference calls. All files and things are
9 locked away that only those people have access to hem.
10 **Q So you would not have access to the HDR extra**
11 **capacity study that was done, or may have been done, for**
12 **Mountain Water Company?**
13 A No, I would not have access to it.
14 **Q And if you had recalled seeing it before now,**
15 **you simply wouldn't have asked for it or --**
16 A No. It wasn't pertinent to the information
17 that we were doing at the time, and I wouldn't have
18 asked for it.
19 **Q Okay. Fair enough. Is there a memo or an**
20 **email that goes out to the entire company relating to a**
21 **firewall when its put in place?**
22 A Not out to the entire company. To the -- in
23 this case it was sent to the Missoula office, and -- but
24 what we do is from the standpoint of the people who sign
25 the non-disclosure agreement, we make it clear that only

92

1 the discussions can be amongst that team, and no other
2 information is asked beyond what is provided to each
3 part of the effort.
4 **Q Was anyone or is anyone on -- or in the**
5 **Missoula office of HDR on your project team?**
6 A Yes.
7 **Q Who is that?**
8 A Tom Hanou, H-a-n-o-u.
9 **Q Are you aware if Mr. Hanou has ever done any**
10 **work for Mountain Water Company before, specifically**
11 **himself?**
12 A I'm not aware directly, no. I would have to
13 ask him.
14 MR. McCREEDY: I'm sorry, could you spell the
15 last name, please?
16 THE WITNESS: H-a-n-o-u.
17 (Deposition Exhibit 89 was marked for
18 identification by the Certified Shorthand
19 Reporter and is attached hereto.)
20 BY MR. CONNER:
21 **Q Okay. What's the next exhibit?**
22 A Exhibit 89. And the number is MW 041195, and
23 it goes through MW 01 -- 041204. Did I get that right?
24 041204.
25 **Q What is that document?**

93

1 A This is Mountain Water Company capital
 2 expenditures for 2014.
 3 **Q Since we're not finished -- we have not**
 4 **finished with 2014, does it show what date that is**
 5 **through?**
 6 A No, it does not.
 7 **Q Did you utilize that document in preparing your**
 8 **report?**
 9 A Yes. We looked at the types of projects in
 10 comparison to some of the recommendations that we made
 11 **Q Did you draw any conclusions from whether or**
 12 **not -- from those types of projects in regard to your --**
 13 **the results of your report?**
 14 A That there was some consistency with some of
 15 the improvements, but that there's others that were not.
 16 **Q Which ones were not?**
 17 A Oh, I'd have to go facility by facility to
 18 determine what those are.
 19 **Q Okay. I'm not asking you to do that right now.**
 20 A Okay. Anything else about that?
 21 **Q No.**
 22 **(Deposition Exhibit 90 was marked for**
 23 **identification by the Certified Shorthand**
 24 **Reporter and is attached hereto.)**
 25 THE WITNESS: Exhibit 90 is one of our

94

1 inspection reports and improvement cost sheets for the
 2 W33 Gerald well. This was -- what's attached is our --
 3 when we got together, we got together as a group of our
 4 inspector -- we had two teams of inspectors. We got
 5 together as a group afterwards and we worked on these
 6 sheets together so we would actually have input from all
 7 the different expertise from -- offered from the
 8 different four people. We agreed upon the ratings based
 9 on adjustments and maintenance, you know, resources that
 10 we reviewed, and we then put together our rating as a
 11 team.
 12 BY MR. CONNER:
 13 **Q The document that we had attached to one of the**
 14 **other exhibits we pulled off, it says Gerald -- well 33,**
 15 **Gerald well, I believe.**
 16 A Yeah.
 17 **Q Is that the same well?**
 18 A It's the same well. That was just the
 19 handwritten sheet as we were doing it together as a team
 20 that was put into the computer.
 21 **Q Okay. Can you attach that to Exhibit**
 22 **Number 90, then, since that appears to go together,**
 23 **correct?**
 24 A Yes.
 25 **Q Now, as you were going through the inspection,**

95

1 **did you fill out in handwriting an inspection sheet on**
 2 **each facility?**
 3 A As we were doing it?
 4 **Q Yes, sir.**
 5 A No. We did that after the fact.
 6 **Q Like, how soon after the fact?**
 7 A The week after when -- we did our field tours
 8 and we got together the week after to prepare all the --
 9 as a team to prepare all those.
 10 **Q So you didn't fill those forms out like in the**
 11 **evening after the inspection?**
 12 A Well, we did some of them, but there were so
 13 many, that we finished the following week, yes.
 14 **Q Where did you keep your notes in regard to**
 15 **those inspections?**
 16 A Each of us had our own handwritten notes that
 17 we had taken during the inspection.
 18 **Q Where are those notes?**
 19 A Still with each individuals.
 20 **Q Were you not asked to provide your entire file?**
 21 A We were not asked to provide our field notes,
 22 no.
 23 **Q Were you -- what were you asked to provide?**
 24 A Our summary of our report.
 25 **Q And not the underlying work papers?**

96

1 A No.
 2 **Q Who asked you to provide the summary of your**
 3 **work?**
 4 A Natasha Jones.
 5 **Q Did you tell Ms. Jones that you had work papers**
 6 **in regard to each of those summaries that would be**
 7 **available?**
 8 A I don't recall if I told her or not. I believe
 9 she was aware of it.
 10 **Q So she was -- you think she was aware that you**
 11 **had work papers that supported the summary sheets, but**
 12 **she didn't ask you to produce them?**
 13 A Yes.
 14 **Q Is that correct?**
 15 A I think that's correct, yes.
 16 **Q Thank you. How easy would it be to produce**
 17 **those work papers?**
 18 A We certainly could get xerox copies of those
 19 and provide those, yes.
 20 **Q You keep those in the ordinary course of your**
 21 **business, correct?**
 22 A Yes.
 23 **Q Are there any other work papers, Craig, that**
 24 **you were not asked to produce?**
 25 MR. McCREEDY: Object. I'm going to -- that

97

1 misstates his prior testimony. I don't believe he was
2 ever asked not to produce things.
3 BY MR. CONNER:
4 **Q You may answer.**
5 A No, I'm not aware of anything else.
6 **Q Are there any other work papers that you did**
7 **not produce?**
8 A Not that I'm aware of.
9 **Q Are there any other documents that we've**
10 **identified --**
11 A No. That's the last -- that's the last of
12 the -- do you want to put a pink sticky on this?
13 There's no --
14 **Q Yes, let's do that. The accordion going here.**
15 **Thank you, sir. Can you put that on for me.**
16 **Do you guys want to take a lunch break?**
17 MR. SCHNEIDER: At your convenience.
18 MR. CONNER: Okay. This is a good stopping
19 point.
20 THE VIDEOGRAPHER: We're now going off the
21 record. The time is 12:14.
22 (Lunch recess taken.)
23 THE VIDEOGRAPHER: We're now back on the
24 record. The time is 1:32.
25 BY MR. CONNER:

98

1 **Q Craig --**
2 MR. SCHNEIDER: Joe, tags off?
3 MR. CONNER: Yeah, tags off. Thank you.
4 MR. SCHNEIDER: You don't need them replaced?
5 MR. CONNER: No.
6 (Mr. Schneider left the proceedings.)
7 BY MR. CONNER:
8 **Q Craig, when we broke, you had finished going**
9 **through your file that you brought with you today and**
10 **we're having those copied; that's what Mr. Schneider was**
11 **doing as we started this -- started back. I would like**
12 **to get back to -- get to your report now if we could,**
13 **and let me just go ahead and make that an exhibit.**
14 **Exhibit 92.**
15 **(Deposition Exhibit 92 was marked for**
16 **identification by the Certified Shorthand**
17 **Reporter and is attached hereto.)**
18 BY MR. CONNER:
19 **Q Craig, who is on your project team for this**
20 **assignment?**
21 A The project team is myself, Chris Sheridan.
22 **Q Okay.**
23 A Todd Jensen, Tom Hanou, Angelina Flores,
24 Dave Spencer. Now, for the additional pipe analysis
25 work, there would be members of Dr. Graham Bell's team

99

1 at the lab.
2 **Q If it is determined in Mountain Water's expert**
3 **disclosure on Friday that the Black & Veatch RCNLD**
4 **that's being prepared reflects that they have**
5 **depreciated the -- I was calling it canoe -- Kalamein**
6 **pipe by 95 percent, would you still encourage Ms. Jones**
7 **to have the section of Kalamein pipe tested?**
8 A Yes.
9 **Q Okay. Can I ask why?**
10 A Yeah. Determining if there is any remaining
11 service life at all in the pipe or if it should be
12 replaced immediately, determined by the condition of the
13 pipe itself.
14 **Q Okay. When you say "replaced immediately,"**
15 **what do you mean?**
16 A Within the next year.
17 **Q All 15 miles?**
18 A All 15 miles.
19 **Q Would you make that recommendation to the City**
20 **based on what you know today?**
21 A Not what I know today.
22 **Q How much would it cost to replace 15 miles'**
23 **pipe in a year?**
24 A I'd have to look. Whoops. That was in the
25 attachments that I gave him.

100

1 **Q Okay. We can come back to that.**
2 A We can come back to that, yeah.
3 **Q Well, how much were you estimating to be**
4 **replaced in your recommendation for either 6 or 8**
5 **million -- or \$9 million a year in CAPEX?**
6 A Well, we were recommending all 15 miles to be
7 replaced over the ten-year period. And I do have it. I
8 apologize. I'm stuck together. The cost of that would
9 be somewhere in the range of 5.5 to a little over
10 9 million.
11 **Q Just for the 15 miles?**
12 A Just for the 15 miles.
13 **Q Okay. So you don't think the information that**
14 **you received from Mountain Water in the document**
15 **production -- I believe there was an August 2013 draft**
16 **report that you -- it has been marked; do you recall the**
17 **document I'm thinking of?**
18 A Uh-huh, yes.
19 **Q That document would not give you any comfort in**
20 **regard to the ability to replace the Kalamein pipe over**
21 **time?**
22 A No. No. We would need to know some more
23 specifics about how the deterioration rate would be as
24 to the type of corrosion that's occurring and the
25 location on the pipe and know more about how the actual

101

1 condition as it comes out of the ground than just from
2 that material.
3 (Mr. Schneider reentered the proceedings.)
4 BY MR. CONNER:
5 **Q Okay. You would agree that testing pipe that**
6 **was -- that's underground was beyond the original scope**
7 **of your assignment?**
8 A According to the agreement, yes, that was an
9 additional test that was asked.
10 **Q The first paragraph on page -- on Exhibit 92 at**
11 **the end you state, "We have made several requests for**
12 **additional information but haven't received all of the**
13 **information we need to provide a more detailed**
14 **assessment of the MWC assets." What additional**
15 **information is needed?**
16 A I'd have to go look at the actual data request,
17 but we actually submitted a formal data request back on
18 September 9th.
19 **Q Who did you submit it to?**
20 A Natasha Jones.
21 **Q And do you know what Ms. Jones did with it?**
22 A No, I don't.
23 **Q Do you know if Ms. Jones supplemented her**
24 **request to Mountain Water with those items?**
25 A I don't have a specific knowledge that she has

102

1 or hasn't, so ...
2 **Q Did you -- did she give you any explanation as**
3 **to why the documents weren't produced?**
4 A No, she did not.
5 **Q Did you ask her?**
6 A Yes, I did. She just said that we haven't seen
7 any additional information that's been provided.
8 **Q Is that data request -- I didn't see that in**
9 **your file?**
10 A No. I didn't have a copy in the file here,
11 but --
12 **Q I didn't see it in your production either, so**
13 **was it produced?**
14 A Yes, it was. I'm fairly sure it was. We made
15 copies and provided it.
16 **Q Okay. I may have overlooked it.**
17 A Yeah. That was.
18 **Q In the second paragraph you state at the very**
19 **end, two paragraphs, "HDR broke into two inspection**
20 **teams to inspect the vertical above ground water assets**
21 **and one team to inspect the remote dam facilities." And**
22 **then, "Assessment of the lateral or buried assets like**
23 **distribution piping, valves, services, meters, and other**
24 **appurtenances was performed from what limited data was**
25 **provided." Is it fair to say, sir, that your assessment**

103

1 **of the condition of the assets that -- at Mountain Water**
2 **Company is incomplete due to the fact that you did not**
3 **have the data that you deemed necessary to complete your**
4 **analysis?**
5 A Which set of assets, the vertical or the buried
6 assets?
7 **Q The vertical.**
8 A The vertical assets, I think, that we've done
9 had enough information to provide an adequate assessment
10 of the condition. From visual inspection and what
11 maintenance did, it was their -- I think, that the --
12 our assessment of the individual facilities was adequate
13 for the purposes of what we were asked to do.
14 **Q Okay. And when you say adequate -- because**
15 **there's a number of notations in here, even on the**
16 **aboveground facilities, where you indicate you did not**
17 **have information that you would have liked to have had**
18 **with respect to knowledge from or discussions with**
19 **employees of Mountain Water that had institutional**
20 **knowledge, let's say, of those assets?**
21 A That's correct. We would have liked to have
22 known a little bit more about their day-to-day
23 activities with the maintenance and operations of the
24 facilities.
25 **Q And you understood that when you took this**

104

1 **assignment, it's a lawsuit, and that there would be**
2 **limitations with respect to inspections and that sort of**
3 **thing?**
4 A We thought we would have access with another
5 such type of, you know, technical support of litigation
6 and we've had access to talking to people.
7 **Q Have you ever worked on a condemnation case?**
8 A On the other side of the fence at
9 American Water, yes.
10 **Q Which one? Any of mine?**
11 A No, not any of yours. No. The one that I
12 worked on was obviously for the California American when
13 they were originally acquired by the league of --
14 National City.
15 **Q When was that?**
16 A That was back in the mid-'80s.
17 **Q Which system was that?**
18 A That was -- so that was the Coronado system.
19 **Q Oh, okay.**
20 A And that was what became Otay Water District.
21 **Q Yeah.**
22 A And also the American system was split at that
23 point under National City.
24 **Q What was your role in that assignment?**
25 A It was just I was an engineer, so providing

105

1 technical support at that point.
2 **Q So your testimony is, then -- well, before I**
3 **say that and get an objection. You feel that your**
4 **analysis of the condition of the Mountain Water system**
5 **was sufficient based on the visual inspection that you**
6 **performed, correct?**
7 A That is correct.
8 **Q Isn't it true, sir, then, that you could have**
9 **if Ms. Jones had -- or Perkins Coie had retained you**
10 **months earlier also done an inspection months earlier in**
11 **order to reach this same conclusion?**
12 A Given that we had the same time frame in the
13 field?
14 **Q Yes, sir.**
15 A Yes. We would have probably drawn a similar --
16 similar conclusions for what we found.
17 **Q Did you ever ask any of the Perkins Coie**
18 **attorneys or any of the other lawyers that you dealt**
19 **with on behalf of -- on this assignment as to why there**
20 **was any -- why there was a delay until August 27, 2014,**
21 **to engage your services?**
22 A No. I never asked that question. Again, most
23 of that early discussions were with -- was with
24 Greg Stonehouse, and so I really only got involved once
25 this thing moved forward.

106

1 **Q Gotcha. Okay. Since your deposition is being**
2 **taken today, you're aware that the City had full**
3 **opportunity to proceed before today in regard to**
4 **deposing any witnesses at Mountain Water with respect to**
5 **system information that would be necessary for or would**
6 **be helpful in your assessment of the condition of the**
7 **system?**
8 MR. McCREEDY: Object. Calls for speculation.
9 BY MR. CONNER:
10 **Q If you know.**
11 A I don't know.
12 **Q What is Attachment A to your report?**
13 A That is the report from Scott Brand for the
14 inspection of the dams.
15 **Q I think I have that. Well, what did I do with**
16 **it. Bear with me just a moment. Do you have a copy of**
17 **that report with you, Appendix A. May I see it? Is**
18 **that his full report?**
19 A I believe I'd have to check to make sure there
20 weren't any supplemental pieces, but I believe that is.
21 **Q Let's take just a second, if you don't mind.**
22 THE VIDEOGRAPHER: We're now going off the
23 record. The time is 1:46.
24 (Recess taken.)
25 THE VIDEOGRAPHER: We're now back on the

107

1 record. The time is 1:48.
2 BY MR. CONNER:
3 **Q Did you have any input with respect to the**
4 **preparation of Scott Brand's Appendix A?**
5 A No, I did not. I did review it and discuss his
6 findings with him.
7 **Q Thank you. I found it. It was right under my**
8 **nose. Sorry about that.**
9 **I don't have an extra one, Phil.**
10 MR. McCREEDY: That's okay.
11 MR. CONNER: What exhibit are we on?
12 THE REPORTER: 93.
13 MR. CONNER: 93.
14 (Deposition Exhibit 93 was marked for
15 identification by the Certified Shorthand
16 Reporter and is attached hereto.)
17 BY MR. CONNER:
18 **Q This is Appendix A. This looks slightly**
19 **different from in what was in your file. What is --**
20 A I didn't have the pictures attached.
21 **Q Oh, okay. So this is his report?**
22 A Yes, it is.
23 **Q And it's your position, I believe in your**
24 **report, that the -- there's sufficient water supply in**
25 **the ground water system, and actually there's excess**

108

1 **water supply in the ground water system, for what is**
2 **necessary for the operation of Mountain Water system,**
3 **correct?**
4 A That is correct.
5 **Q So it is not necessary for the operation of the**
6 **Mountain Water system for them to utilize the**
7 **Rattlesnake Watershed lake system; is that correct?**
8 A That is correct.
9 **Q Thank you. You can put that one away.**
10 **And what is HDR, Appendix B?**
11 A Appendix B is the inspection forms, the big ...
12 MR. CONNER: We'll go ahead and mark it
13 Exhibit 94.
14 (Deposition Exhibit 94 was marked for
15 identification by the Certified Shorthand
16 Reporter and is attached hereto.)
17 BY MR. CONNER:
18 **Q And this document is numbered City 81474**
19 **through 81666, correct?**
20 A That is correct.
21 **Q What are these documents?**
22 A These are the inspection forms that we had
23 completed based upon our visual inspection of each of
24 the aboveground facilities. Based on comments of the
25 findings, we broke it down by asset type. We provided a

109

<p>1 rating of 1 to 5, 1 being unserviceable and 5 being 2 basically excellent or new condition. And we identified 3 deficiencies here.</p> <p>4 Attached for each of these facilities is an 5 improvements sheet which identifies what improvements 6 are necessary to resolve those deficiencies and an 7 estimated cost range cost opinion, to make those 8 improvements.</p> <p>9 Q Okay. Let's take the very first one just as an 10 example. It's B01-Gharrett Street.</p> <p>11 A Uh-huh.</p> <p>12 Q G-h-a-r-r-e-t-t. This is a booster station 13 installed in 1992. And what did you find on this 14 station?</p> <p>15 A Let me review quickly. In this particular 16 facility, this particular one is a pitless adapter, 17 which it was below grade. We could not inspect the pump 18 or motor or piping because it was all below grade, which 19 is why the zeros are in there indicating its condition 20 rating of zero, not inspected.</p> <p>21 We then did inspect the aboveground facilities, 22 which would be the site, the buildings and structures, 23 security, power distribution of incoming power, and the 24 power panel and the SCADA equipment because all that was 25 aboveground.</p> <p style="text-align: right;">110</p>	<p>1 A Well, that's a definition. You have to decide 2 what failure mean.</p> <p>3 Q What does it mean to you, sir?</p> <p>4 A Well, it depends on the level of service and 5 what you want to define it as, a level of service in 6 terms of efficiency or is it just that you run the 7 system. So the question is, is Mountain Water Company 8 going to run all assets to failure or are they going 9 replace assets at a time when efficiency and when the 10 reliability of that equipment has reached a standpoint 11 when it's reasonable to be replaced.</p> <p>12 Q What level of service did you assume in your 13 analysis, sir?</p> <p>14 A We assumed -- what we assumed in our analysis 15 was that it would reach a certain level inefficiency and 16 loss of efficiency in operating condition where 17 maintenance would be considerably higher than currently 18 within the ten years. That would be a fair rating.</p> <p>19 Q Is that for just the power distribution or is 20 that for all assets?</p> <p>21 A That's pretty much for all assets we used that. 22 We based upon -- our rating based upon age first. 23 Secondly, we adjusted that rating up and down for what 24 we could find out of the maintenance records. If there 25 was maintenance done in the records and what was</p> <p style="text-align: right;">112</p>
<p>1 Q Okay. Now, on power distribution, it received 2 a 3 score, "Fair, shows moderate signs of 3 deterioration." But there was a portable standby power 4 quick connection?</p> <p>5 A Yes.</p> <p>6 Q But on -- when you go to "Potential 7 Improvements," you have "Power distribution, install new 8 switch gear," low of 20,000, high of 30,000. Now, if it 9 was fair, why are you suggesting it be replaced?</p> <p>10 A It's reaching the end of its useful life and 11 that there was definitely signs of age, which was noted 12 in the condition, and that it would need to be upgraded 13 within that ten-year, you know, forecast period.</p> <p>14 Q So when you say you -- how did you create the 15 ten-year forecast period?</p> <p>16 A The ten years was really based on the request 17 of the city to know what capital expenditures would be 18 needed in the first ten years of the system -- the next 19 ten years of the system.</p> <p>20 Q So you're saying your assumption is, then, that 21 the current switch gear will fail within the next ten 22 years.</p> <p>23 A Will need to be replaced, yes.</p> <p>24 Q Well, will need to be replaced or will fail 25 within the next ten years?</p> <p style="text-align: right;">111</p>	<p>1 reported on it, we would then move that rating up and 2 down.</p> <p>3 If we took in our physical observations and 4 what we found in our inspection, we then used that as 5 another way to adjust the number, adjust the rating.</p> <p>6 Q Let's go to page, let's see, 81477. This is a 7 facility named B2-Lower Elk Ridge. It's a booster 8 station installed 8 of 1966. Do you recall this one or 9 is this not one that you were on?</p> <p>10 A This is not one that I was on.</p> <p>11 Q Okay. Who was in charge of this inspection?</p> <p>12 A Chris Sheridan.</p> <p>13 Q The very first comment on site, it says, "Site 14 is close to 100-year floodplain of Rattlesnake Creek." 15 And other than that, it appeared to be in fairly good 16 shape. Would you agree?</p> <p>17 A Yes. It has an overall rating of 3.5.</p> <p>18 Q All right. And actually the only rating below 19 3 was on the site category, correct?</p> <p>20 A Correct.</p> <p>21 Q Now, on this one on improvements that is 22 calculated into your cost under site -- and this is on 23 page 81479 -- on the site category, it says, "Concern 24 with site being close to 100-year floodplain. Possible 25 relocation," then a question mark, and there's a low of</p> <p style="text-align: right;">113</p>

1 zero, which, I assume, is no relocation.
 2 A Uh-huh.
 3 **Q And the high of \$100,000.**
 4 A Right. If that -- if the site either had to
 5 make significant improvements to protect it or to
 6 relocate it.
 7 **Q Had you asked anyone if since 1966 that site of**
 8 **ever flooded?**
 9 A No. We had not asked anyone. It was based
 10 upon where the floodplain was in direction -- you know,
 11 in proximity to the station itself.
 12 **Q So you're recommending to the city, in your**
 13 **cost estimate, that they spend \$113,000 on the high**
 14 **range on this location within the next ten years?**
 15 A Yeah. If it's determined that the risk and
 16 reliability -- additional analysis would be needed. We
 17 gave the higher range of if it was necessary due to the
 18 concerns about flooding and the reliability of that
 19 station, we put that cost in there.
 20 **Q Okay. So there has to be further study done,**
 21 **apparently, in regard to at least this line item before**
 22 **it should really be considered into a long-term budget**
 23 **correct?**
 24 A From a standpoint of additional work, certainly
 25 all of these would have to be refined to be able to

114

1 **Q Okay. Well, see if you can find another one.**
 2 **And if you can't quickly, we can move on.**
 3 A In going through, nothing is -- there's no one
 4 that's really jumping out at me as that range. There
 5 are a few of those out there, I understand, that we had
 6 to look at a worst-case cost, but generally they were
 7 for specific improvements that we identify.
 8 **Q Sure. I understand. If you had more time --**
 9 **or let me ask it this way, Craig. What would be**
 10 **necessary for you to prepare a capital improvement plan**
 11 **for Mountain Water system assets for the city that would**
 12 **be more reliable than the document that's reflected here**
 13 **in this Exhibit 94?**
 14 A Well, we'd have to do an evaluation site by
 15 site of both -- look into some additional testing. A
 16 number of the facilities -- most of the facilities were
 17 not running when we were there. Well, the ones that we
 18 did test that were running, we did find mechanical
 19 issues and other temperature issues in the motor. So
 20 we'd want to be able to inspect those under operating
 21 conditions.
 22 We'd want to go and do additional pump testing.
 23 We'd want to do some testing on electrical gear to
 24 verify the load and see how well it fits into
 25 specifications. We would actually go out and develop

116

1 narrow our assessment. With the limited time we had to
 2 look at it --
 3 **Q I understand.**
 4 A -- to be able to do that, we had to bracket
 5 those costs for the purposes of providing some estimate
 6 over there.
 7 **Q And really when you take -- use this line item**
 8 **as an example, that \$100,000 over the next ten years**
 9 **would really be a worst-case scenario, wouldn't it?**
 10 A Yes.
 11 **Q And doesn't that apply to a number of your**
 12 **entries in your budgeting, that these are worst-case**
 13 **scenarios within this ten-year period?**
 14 A I would say that there are some in there. I
 15 wouldn't say that that would be the majority of the
 16 case.
 17 **Q Can you give me some other examples that --**
 18 **where it is reflective of a worst-case scenario?**
 19 A I'd have to -- do you mind if I look through?
 20 **Q Not a bit, sir.**
 21 A There's a number of these facilities. They all
 22 run -- start to run together.
 23 **Q And I'm sure you can't catalog each one of**
 24 **them; is that correct?**
 25 A Yeah. That's correct.

115

1 much more, you know, analysis of the sites and -- to be
 2 able to look at those, rather than the 20 to 40 minutes
 3 we spent on each of these sites to get through them.
 4 We would come up with more specific drainage
 5 and other types of improvements necessary. We tried to
 6 bracket those within our estimate.
 7 **Q How long would that take for you to complete**
 8 **a -- what you would view as a competent assessment of**
 9 **the condition and a plan for improvement and a pricing**
 10 **of that plan?**
 11 A Particularly in asset management, which is what
 12 this would be, a detailed, comprehensive asset
 13 management program, to develop the full inventory and
 14 break it down and do the condition assessment, and all
 15 the ratings, to do that would take probably around
 16 12 months. It would probably cost in the range of about
 17 a million dollars.
 18 **Q Okay. Is that something that you suggest the**
 19 **city do if and when it requires -- acquires this system?**
 20 A We would certainly recommend that the -- I
 21 wouldn't say do it all, but I think based on this, we
 22 could prioritize which facilities we should do a
 23 detailed analysis on first and do it on those.
 24 **Q Okay. Do you know when the city first became**
 25 **interested in acquiring the water system?**

117

1 A No, I'm not aware of that.

2 **Q With respect to the SCADA system, what does**

3 **SCADA stand for?**

4 A Supervisory control and data acquisition.

5 **Q Do you know what USPAP stands for?**

6 A UPAP.

7 **Q USPAP.**

8 A No I don't.

9 **Q Okay. Just checking. What is a SCADA system?**

10 A SCADA system is an electronic instrumentation

11 and control system that provides monitoring. It can

12 just provide monitoring or it can provide actual

13 localized control, as well as remote control, of utility

14 systems, pumps stations, wells, anything that's really

15 mechanically driven, or to just take monitoring

16 information within the distribution system.

17 **Q What type of SCADA system did you find at**

18 **Mountain Water Company?**

19 A It was an Allen-Bradley system. They use

20 SLC 500 systems everywhere in every particular PLC, you

21 know, cabinet. Most of the time it was probably a lot

22 more than they needed in the terms of I/O. Usually

23 those were -- you know, you reserve SLC 500s for a

24 formal -- more treatment plant and more -- with a lot

25 more control required. They had battery backups. They

118

1 had radio telemetry. So it was a pretty robust system.

2 **Q And does that system allow the operator of its**

3 **system, or operators of its system, to both monitor and**

4 **control the system from a central location?**

5 A For the most part. There was some facilities

6 that were only monitoring.

7 **Q How many?**

8 A Typically all the tanks that were there. Some

9 of the booster stations were monitoring only. But for

10 the most part, the wells, and particularly the newer

11 pump stations, were all provided with remote control

12 capabilities.

13 **Q Well, when you say the reservoirs were only**

14 **monitored, you mean monitoring the tank levels?**

15 A Yes.

16 **Q But the wells themselves that fed those tanks**

17 **were controlled so that they could add water to the**

18 **tanks, correct?**

19 A Yeah. That would come through the SCADA system

20 that they would come down back to the PLC. The control

21 logic is in the pump station, the current from that

22 input signal.

23 **Q So what would you control on the reservoir**

24 **itself?**

25 A Well, a lot of times there are valves and other

119

1 things that you can isolate the reservoir that you can

2 control. There's an altitude valve or other kind of

3 control valve that you can actually then provide remote,

4 you know, setting of those valves. I didn't see any of

5 those, but a lot of it was buried. I don't know if they

6 had them.

7 **Q Sure.**

8 A But those are things that you would -- you

9 would monitor on a tank.

10 **Q Getting back to Exhibit 94, the question I'm**

11 **going to have is on page 81501.**

12 A Yes.

13 **Q This is facility B16, "Lower Far View." Should**

14 **that be fair view?**

15 A No. It was "far view."

16 **Q Far view. Okay?**

17 A Yeah.

18 **Q Did you cross any creeks when you were there?**

19 A We might have.

20 **Q Okay. It's a booster station. And it appears**

21 **that you had some 2s on this one. It looks like access**

22 **issues under "Comments." "Electrical improvements may**

23 **potentially require building modifications to meet**

24 **electrical code."**

25 **Did you assume that all of these facilities**

120

1 **within the next ten years would need to meet current**

2 **electrical codes?**

3 A Any improvements or upgrade to -- a lot of

4 these facilities did not provide the proper -- or code

5 access in terms of space and access in the facilities.

6 And to bring it up to industry standards, which is what

7 was the request that we were asked to do, industry

8 standards is meeting code, to be able to do that. So

9 yes, we recommended all those access issues and code

10 issues to be upgraded within the ten years.

11 **Q And how much, just ballpark, would that be, or**

12 **can you tell from your budget what the access issues**

13 **would cost to bring everything up to code?**

14 A Totally across the system or just for this

15 facility?

16 **Q Totally.**

17 A I'd have to add it all up, but I --

18 **Q There's not a line item for access?**

19 A No. We broke the cost down by facility.

20 **Q I see. Okay. So that was one of the**

21 **assumptions, then, that you were told, that this was to**

22 **meet industry standards within ten years. And as far as**

23 **you're concerned, industry standards is current code**

24 **standards.**

25 A Correct.

121

1 **Q What industry are you talking about?**
 2 A The water industry.
 3 **Q And where do you get these standards?**
 4 A Well, the standards that we're using is a lot
 5 of guidelines and things from EPA, as well as AWA. In
 6 terms, we -- HDR wrote the asset management roadmap for
 7 the Water Research Foundation. We use that as one of
 8 our guidelines to be able to do that. There are a
 9 number of industry other, you know, guidelines that are
 10 out there. There's no one standard within the water
 11 industry what's like on the wastewater for pipelines.
 12 There's the NASSCO PACP codes that are standardized.
 13 The water industry has yet to do that.
 14 So we take it from various different sources,
 15 as well as our own experiences with working with other
 16 private and public, you know, agencies in terms of their
 17 facilities.
 18 **Q Okay. On this facility you state that on the**
 19 **pump, one pump rehab in 1991. Is there just one pump at**
 20 **this facility?**
 21 A No. There are multiple pumps. I'd have to
 22 look -- go back and look how many, but I believe in this
 23 facility there were three, but I'd have to go back to
 24 confirm that. But only one was rehabbed that we could
 25 find any rehabilitation done in the history of the pump.

122

1 **Q So your -- this chart does not allow you to**
 2 **tell exactly how many pumps are there, correct?**
 3 A In this report, no. But we do -- we do have
 4 that -- on one of the sheets that was provided to us
 5 from Mountain Water Company had a listing of the number
 6 of pumps by facility.
 7 **Q Would that be in the notes to --**
 8 A Yes. That would also be in the notes that we
 9 had taken in the field.
 10 **Q That have not been produced.**
 11 A That we have not provided at this point.
 12 **Q Okay. That's fine. So all three -- did all**
 13 **three pumps get a 2, or is it just one pump that got a**
 14 **2?**
 15 A No. We did it by -- we made the overall rating
 16 by asset class, not by each and every individual
 17 component.
 18 **Q Okay. So at the end of the day, then, you**
 19 **looked at all the pumps across the system --**
 20 A Uh-huh.
 21 **Q -- and determined all the pumps were a 2?**
 22 A In this -- no. What I determined were that the
 23 pump rating for this facility was a 2.
 24 **Q I misunderstood you, then. I thought you said**
 25 **that you took categories --**

123

1 A Probably --
 2 **Q Let me finish. You took categories of**
 3 **equipment.**
 4 A Uh-huh.
 5 **Q And is a pump 1 category?**
 6 A In each facility.
 7 **Q Okay. Did you come up with an overall numeric**
 8 **rating or ranking for that category?**
 9 A No.
 10 **Q I misunderstood. I thought that's what you**
 11 **said.**
 12 A No. What we did is for -- we used the same
 13 asset class for each of the facilities, and we would
 14 then rate that asset class for that specific facility.
 15 **Q What do you mean by "asset class"?**
 16 A Well, pumps, motors, electrical, structural.
 17 Those are all asset classes.
 18 **Q And you call it asset type here.**
 19 A Well, type. I'm sorry.
 20 **Q That's what I was getting confused by.**
 21 A Asset type and class are the same. I use those
 22 interchangeably.
 23 **Q All right. Well, let's stick with type, if we**
 24 **can?**
 25 A The asset type that we used in this was we

124

1 analyzed and rated it for that specific facility.
 2 **Q So does the 2 mean that all three pumps at that**
 3 **facility received the same rating?**
 4 A Yes.
 5 **Q What if -- or did you have an indication or**
 6 **find a situation in a booster station where one of three**
 7 **pumps may have a 2 and the other two may be 4?**
 8 A Yeah. And we took that and we then made an
 9 aggregate of the overall rating.
 10 **Q How did you do that?**
 11 A Just weighted it, just by the number of pumps
 12 and what the ratings were.
 13 **Q So you just averaged them?**
 14 A Averaged them out.
 15 **Q Okay. So that's not a weighting. You just --**
 16 **that's an average, correct?**
 17 A Well, we weighted it, also, by the size. If
 18 one was 100 horsepower and another one was a 5
 19 horsepower, we put more weighting on the 100 horsepower
 20 **Q Where would I find your weighting calculations?**
 21 A That would be in our notes of what we did that.
 22 **Q So sitting here today, you don't know if that**
 23 **is average number or if all three pumps were a 2?**
 24 A No, not without going back and digging into the
 25 details. No, I don't know that.

125

1 **Q Now, on a capital improvement plan, if you had**
2 **more time and more resources in regard to putting**
3 **something together, you would list each pump, wouldn't**
4 **you?**
5 A That's correct. We would give a detail and
6 break it down, yeah.
7 **Q And you'd list each motor.**
8 A Yes.
9 **Q You'd list all the valves.**
10 A We'd list each valve. Each one would be an
11 individual asset.
12 **Q And you've not done that in this assignment,**
13 **have you?**
14 A No.
15 **Q What happens when you have an unknown install**
16 **date in your analysis?**
17 A Well, what we try to do in terms of age, that
18 everything start off as fair, without a known install
19 date, and we adjust it from there.
20 **Q I don't understand that. Why did you do that?**
21 A Based upon the physical condition and what we
22 saw in terms of the age, we'd judge each one from that,
23 and we would adjust up and down from that. We started
24 with that and adjust up and down from that.
25 **Q So you assume you go on a site in one of these**

126

1 **locations and you go into it with the mind-set,**
2 **everything is fair?**
3 A Yeah. That's pretty typical within this type
4 of work.
5 **Q Okay. Fair compared to what?**
6 A Fair compared to what a brand-new one would be.
7 **Q On page 81503, you have a facility -- it's**
8 **still the same facility, a lower far view, and this is**
9 **the potential improvements with the low and high cost**
10 **range?**
11 A Uh-huh.
12 **Q You need to say yes or no.**
13 A Yes. I'm sorry.
14 **Q All right. Although you have the pump with a 2**
15 **rating, you're showing no replacement within the next**
16 **ten years, correct?**
17 A That's correct.
18 **Q Is that incorrect? I mean should you have**
19 **shown a replacement?**
20 A I'd have to go back and look at the details as
21 to why we made that decision not to do that.
22 **Q Yeah. Because the power distribution on the**
23 **very first one we looked at is a 3, and I believe you**
24 **recommended installing the entire new switch gear within**
25 **the ten-year period.**

127

1 A Well, it tells me that -- that maybe missing is
2 that there's no dollar, not even a zero, put in there,
3 and that things may not have gotten into the form.
4 **Q Excuse me?**
5 A What I'm saying is because there was no zero
6 put in there, that it looks like something was missed in
7 terms of putting it into the sheet.
8 **Q So are you saying, sir, that there should be a**
9 **high and low number for replacement?**
10 A I would expect. I don't know that for sure
11 until I went back and looked at the details.
12 **Q So did I just get lucky and find this one?**
13 A I think so.
14 **Q I'll take a look because it looks like the**
15 **motor also received a 2, and there's no entry for cost**
16 **on page 81503 either for it.**
17 A Yeah.
18 **Q On the valves, you say, "No equipment history.**
19 **Operations are satisfactory. Corrosion on older**
20 **valves." You give the valves, though, a 2. Then you**
21 **have valves contingency on 81503 --**
22 A Uh-huh.
23 **Q -- zero to \$20,000. Why -- what's the**
24 **contingency category now for the description?**
25 A Well, we put some contingencies in there where

128

1 we weren't able to operate the valves during that. If
2 we were going to do a further inspection, we would
3 actually operate them. And based upon the physical
4 condition -- excuse me. Pardon me.
5 **Q That's fine.**
6 A Based on the --
7 **Q Are you okay?**
8 A Yeah. Just got a little frog in the throat
9 there.
10 Based on the physical condition of what we
11 observed, based on that we weren't able to actually
12 operate or test them, we then made a judgment that there
13 may be a need to replace those. So we put in a low-end
14 zero. If not -- if we test them and they were fine, if
15 not, there was money in there to be able to replace them
16 if they were not operable.
17 **Q Did you apply that contingency to all valves?**
18 A No. We based that upon physical inspection and
19 what we could see in terms of the deterioration of the
20 valve based on our observation.
21 **Q On page 81504, this is B17, "Hill view at**
22 **Skyview Booster Station installed in 1992." Did you**
23 **tour this facility, sir?**
24 A I'd have to go back and look at my notes.
25 Frankly, I don't remember all the facilities that I did

129

1 see.

2 **Q Okay. On this one there is a notation on the**

3 **second page under "Comments" that one pump and motor**

4 **needs rehab or replacement.**

5 A Uh-huh.

6 **Q You need to say yes or no.**

7 A Yes.

8 **Q Then if you go to the "Improvement cost"**

9 **section, "Potential Improvements, Pump," and there is**

10 **none listed. So although under "Comments" you indicate**

11 **that one pump needs rehab or replacement, you didn't put**

12 **anything in the low and high budget for that item,**

13 **correct?**

14 A Yes. That seems like that's an error that we

15 missed something in terms of updating the sheets here.

16 **Q So, you're saying that there should be at**

17 **least a cost for low --**

18 A There should be -- I'm sorry.

19 **Q There should be a low or high cost for that**

20 **pump.**

21 A Yes.

22 **Q Did anybody proof your work on this, sir?**

23 A Yes.

24 **Q Who?**

25 A We exchanged -- the two teams exchanged the

130

1 forms to go back and review that. Again, the time frame

2 was such that it was being done fairly rapidly.

3 **Q So the time frame may have caused you to have**

4 **some inadvertent errors in your report; is that what**

5 **you're saying?**

6 A Potentially, yes.

7 **Q Well, we did find some already?**

8 A We found some, but I would say, yes, there are

9 some in there.

10 **Q I haven't gone very far --**

11 A Okay.

12 **Q -- have we?**

13 A I don't know. Have we?

14 **Q No. So we're just up to 81509.**

15 A Uh-huh.

16 **Q Let's look at 81507, B18, "Upper Hill View" --**

17 **are you with me?**

18 A Yes.

19 **Q All right. On this one, the motors received a**

20 **2, which is poor. "Shows severe signs of**

21 **deterioration." So my guess is that one would be for**

22 **sure included in the ten-year replacement under your**

23 **scenario -- under your guidelines for that; is that**

24 **correct?**

25 A Yes.

131

1 **Q Okay. Let's see what you did. "Motor, replace**

2 **motor" -- "motors" -- and this is on page 81509.**

3 **There's a low of zero and a high of 10,000. Shouldn't**

4 **there be both a low number and a high number if it's**

5 **going to be replaced in ten years?**

6 A Well, the question is, I think, on that one --

7 and I would go back and look at the notes, again, on

8 that one. You know, we could look at rehabbing them,

9 which would not be a capital cost.

10 **Q Well, your notes, your comments on page 81508**

11 **don't say anything about rehab. It says, "May require**

12 **motor replacement."**

13 A Uh-huh.

14 **Q Correct?**

15 A Correct.

16 **Q So what notes are you referring to that you'd**

17 **need to go back to review in order to make that**

18 **determination?**

19 A Our facility inspection notes. The ones we

20 have yet to produce.

21 **Q On page 81513, facility name "B21-Upper Linda**

22 **Vista Booster Station, installed 8/1993." Are you**

23 **there?**

24 A Yes.

25 **Q Okay. On this one, the HVAC received a 2 and**

132

1 **the piping received a 2. I'm just looking to see what**

2 **you did. On this one, I think you did replace the**

3 **building HVAC with a low and a high. And on piping, you**

4 **say, "Replace and/or prep and coat piping 2000 to**

5 **10,000."**

6 **So that one would appear to be consistent with**

7 **what your guidelines were for this assignment.**

8 A That is correct.

9 **Q With respect to the power distribution asset**

10 **type and your analysis, if the power distribution**

11 **received a grade of 3, are you recommending that all of**

12 **those be replaced within the next ten years?**

13 A I wouldn't say that all of them, no. I think

14 we would look at the age and the condition that we saw

15 in the field, and look at the actual equipment and make

16 the determination if it was or wasn't needed to be

17 recommended.

18 **Q So even if all the power distribution asset**

19 **types for these facilities received a 3, you're saying**

20 **that not all of them would be replaced within the next**

21 **ten years.**

22 A That's correct.

23 **Q Would that apply to all of your asset types?**

24 A Yeah. We would -- we took in our physical

25 observations and the information off of name plate data

133

1 and looked at the condition, and if we looked at any
 2 maintenance data that we could find, and use those in
 3 determining that.

4 **Q Okay. Why did you not include pictures with
 5 respect to each facility?**

6 A Well, what we did -- as part of the report, we
 7 try to pick out very specific things as to the notes,
 8 but we knew that we were providing -- you had requested
 9 pictures of everything we had taken, and we had
 10 delivered that to you, but by separate file.

11 **Q Okay. I have a number of pictures that were
 12 produced. Did -- and, honestly, I haven't gone through
 13 all of them. But are we able to tell, from going
 14 through those photographs, which facility applies -- or
 15 which facility they're identified with?**

16 A Yeah. They were broken into files by facility
 17 with the pictures for that specific facility.

18 **Q Okay. And is there a -- did you take a picture
 19 of the name of the facility or you put a paper up or
 20 something to reflect --**

21 A We took a picture of the name of the facility
 22 that was up there.

23 **Q So if I would go through, then, your picture
 24 file, the name of the facility should be the first -- or
 25 if I see a name of the facility, the pictures after that**

134

1 **will be in the facility?**

2 A Yeah. There were some facilities that didn't
 3 have a name and we just put those in the folders for
 4 that facility. But the ones that did, we did -- that's
 5 what we did. We took a picture of it.

6 **Q Okay. Now, when you say the folders, what do
 7 you mean?**

8 A There are file folders within the electronic
 9 file, and each -- there's a -- there's a folder for each
 10 one of the facilities.

11 **Q Those were not produced in that manner to us.**

12 A Oh. That's how we produced them.

13 **Q That's how I would liked to have had them.**

14 A Okay.

15 **Q They were produced in one long PDF and there's
 16 Bates numbers on them.**

17 A Oh. I'm just telling you how we collected them
 18 and put them together.

19 **Q Okay. And I've noticed that there was a thumb
 20 drive that you sent with those photographs; is that
 21 correct?**

22 A Yes.

23 **Q So it would be easy enough just to download
 24 that information to another thumb drive, correct?**

25 A Yes.

135

1 **Q Thank you.**

2 **On page 2 of your report, Exhibit 92, and the
 3 first paragraph towards the end says, "An overall
 4 facility condition assessment rating was calculated and
 5 recorded." How did you calculate the overall condition
 6 assessment rating?**

7 A It was just an average of the ratings for each
 8 of the asset types.

9 **Q When you say an average, what do you mean?**

10 A We took the rating for each one of these, added
 11 them up, and then divided it up by each of the number of
 12 assets that were actually inspected.

13 **Q Okay. And then how did you get the overall?**

14 A That was -- that's a numerical calculation.

15 **Q Okay. So you took each asset type and added
 16 all of the ratings for each of those asset types in all
 17 the facilities?**

18 A That's correct.

19 **Q And let's say that was a 3 on pumps.**

20 A Uh-huh.

21 **Q Okay?**

22 A Yes.

23 **Q And then you rated -- I have to look at it.
 24 Then let's say you did building structures the
 25 same way and it received a 3.**

136

1 A Uh-huh. Yes.

2 **Q On each of these categories when you have the
 3 total for the entire asset grouping that you reviewed in
 4 all these inspection sheets, did you add all of those up
 5 and divide them by the number of asset types?**

6 A What we did is we did it for each facility, not
 7 as a total overall.

8 **Q Oh, I see. Okay. So you have the overall
 9 facility rating at the bottom. And the very first page
 10 of Exhibit 94, that's the Gharrett Street Booster
 11 Station, and it received an overall rating of 4.4.**

12 A Correct.

13 **Q All right. Then did you take all of the
 14 overall ratings and average them together to come up
 15 with --**

16 A No, we did not.

17 **Q You did not. Okay. So the overall facility
 18 rating is what you were referring to in your report
 19 instead of -- when you said "facility," that's a
 20 facility-by-facility rating?**

21 A Correct.

22 **Q Not the whole system.**

23 A That's correct.

24 **Q All right. So you did not come up with an
 25 overall system rating.**

137

1 A Correct. That would be a system rating rather
 2 than a facility rating.
 3 **Q Got you. I understand now. Thank you.**
 4 **Now, you did not perform a condition assessment**
 5 **depreciation study, did you?**
 6 A I'm sorry?
 7 **Q You did not perform a condition assessment**
 8 **rating study, did you?**
 9 A No.
 10 **Q Or depreciation study.**
 11 A Depreciation. No, we did not.
 12 **Q And I think you identified that for me earlier**
 13 **as -- when we were talking about depreciation. Did I**
 14 **say it right?**
 15 A Condition-based depreciation.
 16 **Q Yeah. You did not perform a condition-based**
 17 **depreciation analysis of the Mountain Water system did**
 18 **you?**
 19 A No. Further analysis of the assets would be
 20 necessary to do that.
 21 **Q Appendix C, sir, what is Appendix C?**
 22 A Appendix C was the useful life table that we
 23 use as a basis, that one right there.
 24 **Q And that's Exhibit Number 95, Craig?**
 25 A Yes.

138

1 **Q On buried piping, you have 75 years' useful**
 2 **life.**
 3 A Yes.
 4 **Q Correct?**
 5 A Right.
 6 **Q Then you say "assessment frequency." What does**
 7 **that mean?**
 8 A What this would be is how often that you would
 9 go back and go -- in terms of a condition-based
 10 assessment, how often you would go and assess that
 11 condition.
 12 **Q So with respect to a pipe and a water system,**
 13 **HDR is recommending that to expect a useful life of**
 14 **75 years, regardless of pipe material?**
 15 A No. That was just -- materials are entirely
 16 different, broken down based upon what experience and
 17 the knowledge we have. This was just from the guideline
 18 from the -- what information is available in the
 19 industry.
 20 **Q Well, you had all the different materials. Did**
 21 **you develop different useful lives for all the different**
 22 **pipe materials in your analysis of the Mountain Water**
 23 **system?**
 24 A Yes, we did.
 25 **Q Okay. So you didn't give 75 years as useful**

140

1 (Deposition Exhibit 95 was marked for
 2 identification by the Certified Shorthand
 3 Reporter and is attached hereto.)
 4 BY MR. CONNER:
 5 **Q Can you explain to me, sir, how this was**
 6 **developed?**
 7 A Yes. This was done as -- a number of sources
 8 were brought in. Manufacture estimates, owner's failure
 9 analysis, and obviously some owners and engineering
 10 judgment. We did this in workshops. This was done as
 11 part of some water resource project as we developed this
 12 table of useful life estimates for new assets.
 13 **Q So what water research project was this --**
 14 A This was the actual road map that I mentioned
 15 earlier.
 16 **Q When was this developed, this worksheet?**
 17 A This would have been back in 2007.
 18 **Q Has it been updated since then?**
 19 A I don't know. I'd have to verify that.
 20 **Q So this is something that HDR already had in**
 21 **the can, I guess.**
 22 A Yeah. We actually had this from the -- from
 23 one of the standards and things that are out there in
 24 the industry that was developed with more research,
 25 yeah.

139

1 **life for all pipe?**
 2 A No, we didn't.
 3 **Q Then what was this document used for?**
 4 A This was where we started, particularly for the
 5 vertical facilities, as they age.
 6 **Q Just for the vertical facilities.**
 7 A Vertical facilities.
 8 **Q Not for the pipe.**
 9 A Not for the pipe.
 10 **Q Why would this document only show -- or show**
 11 **just one useful life period for all buried pipe?**
 12 A Well, there's a lot of knowledge and difference
 13 of opinions within the industry as to that. So, there's
 14 a general determination of service life of material for
 15 pipe if you don't know the material or -- so there's a
 16 general starting point, and it's refined based upon
 17 material and installation type.
 18 **Q You would agree -- or have you ever seen lined**
 19 **cast iron pipe in the field?**
 20 A Yes.
 21 **Q You've probably seen a lot of it?**
 22 A Yes.
 23 **Q And some of the -- well, a lot of the American**
 24 **systems have lined cast iron pipe, don't they, American**
 25 **Water?**

141

1 A They have a lot of both lined and unlined cast
 2 iron, yeah.

3 **Q And in some conditions, depending on soil**
 4 **conditions, the condition of the water, chemicals and**
 5 **that sort of thing, if you have properly installed lined**
 6 **cast iron pipe, it can last a lot longer than even**
 7 **75 years, can't it?**

8 A Well, there are certainly examples of some pipe
 9 out there. Some lined cast iron pipe has lasted less
 10 than 50. So, I think it has to do with a lot of other
 11 variables and conditions to be able to make a -- you
 12 know, just a general conclusion.

13 **Q Oh, I'm not saying it's a general, but I said**
 14 **it could, couldn't it?**

15 A There's a potential, yes.

16 **Q Did you apply a five-year useful life for the**
 17 **SCADA equipment?**

18 A Yes.

19 **Q So, are you -- in your cost calculations for**
 20 **the city over the next ten years, are you assuming a**
 21 **complete replacement of the SCADA system over the next**
 22 **ten years?**

23 A No. What we did was we indicated what it would
 24 be to be able to bring it up to industry standards, and
 25 we evaluated that the SCADA system that was installed

142

1 was at industry standards and being maintained there.

2 **Q So you didn't have any need to replace it**
 3 **within the next ten years?**

4 A Within the next ten years.

5 **Q Were there any other assets that you determined**
 6 **were within industry standards today, or at the date of**
 7 **your analysis -- your inspection, that were at industry**
 8 **standards today and would not need to be replaced in the**
 9 **next ten years?**

10 A As a whole asset type?

11 **Q Yes, sir.**

12 A I'm not aware that there was a whole another
 13 asset type that was set by industry standards; however,
 14 there were specific, you know, facilities of those asset
 15 classes that met industry standards at the individual
 16 facility.

17 **Q Now, your report on page 2, the first**
 18 **paragraph, last sentence, states, "In Appendix C is a**
 19 **table of useful life expectancies for water asset**
 20 **classes that were developed from industry and**
 21 **manufacturing guidelines" -- "or industry and**
 22 **manufacturer guidelines" --**

23 A Yeah. Yeah.

24 **Q Let me finish.**
 25 **-- "and engineering/water utility operating**

143

1 **experience." You don't indicate that -- in this comment**
 2 **that all of the guidelines provided in Appendix C were**
 3 **used or not used in the report, do you?**

4 A I don't understand your question.

5 **Q Well, you indicated that you didn't use the**
 6 **75 years' useful life for the pipe?**

7 A Right. Yeah. So what we did is we used other
 8 experience from other utilities that we've gotten useful
 9 life data on pipe materials from other sources, other
 10 than just this table.

11 **Q Where will we find that in your work papers?**

12 A I'd have to go back and ask Mr. Spencer who did
 13 that analysis where that is.

14 **Q You don't -- it's not in your report?**

15 A It's not in my report.

16 **Q So we don't know what you relied on to**
 17 **determine the estimated useful lives for the pipe with**
 18 **respect to the Mountain Water system, do we?**

19 A I don't have it here, but, yes, we do have a
 20 basis when we made those determinations.

21 **Q We don't have it here and I don't have it here**
 22 **to ask you about it either, do I?**

23 A No.

24 **Q It makes the deposition go shorter, anyway.**
 25 **General assessment on page 2, you state that**

144

1 **"HDR's assessment is that the water system overall is in**
 2 **fair to poor condition as compared to industry**
 3 **standards."**

4 **Now, again, sir, that's based on your**
 5 **observation of the aboveground facilities, correct?**

6 A And also the age and comparison age of mains
 7 that we evaluated.

8 **Q Right. But in order to -- you would agree that**
 9 **the main cost in this system is the distribution system**
 10 **underground, right, transmission distribution mains?**

11 A It's a significant cost, yes. I don't know if
 12 it's the -- the source supply, the wells are another
 13 particularly significant cost of the water system.

14 **Q Isn't the -- wouldn't the replacement of the**
 15 **water mains in this system be the most expensive part of**
 16 **the system?**

17 A If you were to replace it all, yes.

18 **Q That's what I'm talking about.**

19 A Sorry.

20 **Q So that's the -- percentage-wise, what would you**
 21 **think the cost to replace the transmission and**
 22 **distribution mains would be as compared to the entire**
 23 **replacement of the system?**

24 A I would only be speculating at that. I'd have
 25 to look at the actual, you know, estimates again and

145

1 calculate what the replacement costs would be.
 2 **Q Well, in most systems -- and you've looked at**
 3 **systems for a long period of time -- isn't it true that**
 4 **at least 60 percent of most systems would be, or if not**
 5 **more, the cost of replacing the pipe?**
 6 A I would say 50, 60 percent would be most likely
 7 the piping in the system, yes.
 8 **Q So there's 50 to 60 percent of this system that**
 9 **you were not able to properly evaluate under a typical**
 10 **condition-based assessment?**
 11 A We were not able to physically inspect those
 12 particular assets, that's correct.
 13 **Q And that would have -- if you were able to**
 14 **inspect those assets, that could have a remarkable or a**
 15 **significant impact on the overall condition assessment**
 16 **of fair to poor that you found in this -- in your**
 17 **report, correct?**
 18 A Yes.
 19 **Q Is it typical, when you do a condition**
 20 **assessment of this nature, for you to take into account**
 21 **someone planting flowers in a median in developing what**
 22 **your opinion is concerning the condition of the water**
 23 **system?**
 24 A We do take in what the community does and
 25 take -- when we drive around the system and how the

146

1 community looks at it. It was an observation that we
 2 took when we were going around and touring the system.
 3 **Q That observation on someone planting flowers in**
 4 **a yard or a median has nothing to do with the actual**
 5 **condition of the water system, does it?**
 6 A No. But it has opinions of the culture of the
 7 community.
 8 **Q And you have -- you based your opinion on the**
 9 **culture of this community on being there one week; isn't**
 10 **that right?**
 11 A That's correct.
 12 **Q Did you stop and talk to the lady that was**
 13 **planting the flowers?**
 14 A No, I did not.
 15 **Q So you don't know if she's happy with her water**
 16 **service or not, do you?**
 17 A I do not.
 18 **Q Did you happen to check to see if there were**
 19 **any regulatory violations by Mountain Water Company over**
 20 **any period of time?**
 21 A No, I did not. That was not part of the scope
 22 of what we were asked to do.
 23 **Q Well, if you're trying to determine the**
 24 **condition based on what you could see, wouldn't that be**
 25 **something you would want to check?**

147

1 A Actually, you know, that is something we would
 2 actually check; however, based upon the limited scope
 3 that we were asked to do, we focused on the condition of
 4 the facilities.
 5 **Q Well, that's something that you could have**
 6 **checked before you even went to the site, correct?**
 7 A Yes.
 8 **Q And how many people did you take to the site**
 9 **for the inspections?**
 10 A Four -- five. Excuse me.
 11 **Q And how many people do you have in your**
 12 **department in San Diego?**
 13 A My department, I have roughly 120 people.
 14 **Q Any -- could any one of those individuals have**
 15 **been assigned the task to check the environmental**
 16 **compliance records of Mountain Water Company?**
 17 A They could have, if we were asked to do that.
 18 **Q Did Ms. Jones ask you not to check**
 19 **environmental compliance records?**
 20 A No, she did not ask us not to. We were not
 21 asked to do so, though.
 22 **Q But you made the decision not to check them,**
 23 **correct?**
 24 A I didn't make the decision not to check them.
 25 We focused on what we were assigned to do.

148

1 **Q Are you telling me, sir, that the assignment --**
 2 **let's get your engagement letter out again, if you don't**
 3 **mind.**
 4 **If you'll turn to page 2, which -- actually**
 5 **it's page 3. It's Exhibit A, Scope of Services. "HDR**
 6 **will provide professional opinion on current condition**
 7 **and quality of the Missoula water system owned and**
 8 **operated by Mountain Water Company."**
 9 **Now, that's -- is there anything in that that**
 10 **would prohibit you from checking the environmental**
 11 **compliance record of Mountain Water Company as part of**
 12 **your assignment?**
 13 A No, there's nothing that would prohibit us from
 14 doing it. The focus that we were asked and the tenor of
 15 this was to focus on the condition and develop a capital
 16 plan of what would be necessary over ten years. That
 17 was the direction that we were focused on -- that we
 18 were asked to do.
 19 **Q Okay. I understand. Isn't it true, sir, that**
 20 **kind of a general condition of a system or whether or**
 21 **not you have a good operator or bad operator is somewhat**
 22 **indicative of any environmental regulatory violations**
 23 **that they might have, correct?**
 24 A Yes.
 25 **Q So if you have a -- let's say you have either a**

149

<p>1 wastewater or water system that has regular, let's say 2 yearly, notices of violation with respect to reporting 3 requirements. What would that be an indication of to 4 you? 5 A Well, I'd literally like to see what the 6 specifics are behind that to be able to indicate that. 7 Certainly, it would certainly raise questions as to 8 their capabilities of routing their system; however, I 9 don't know if that would have a direct comparison to the 10 actual condition of the system. I'd rather base that 11 upon physical inspection. 12 Q I understand. Well, I believe the second item 13 in your scope -- let's see. Hold on. Let me just read 14 through real quickly. That's okay. I think you 15 answered my question. I don't think. You did. Thank 16 you. 17 Sir, is it your position that the employees at 18 Mountain Water Company do not take pride in performing 19 their services? 20 A That they do not take pride? No, I've never 21 indicated that. 22 Q Okay. Would you agree with me that from what 23 you saw, that there is a sense of pride in the operation 24 of the Mountain Water system as exhibited by the 25 employees and what you saw?</p> <p style="text-align: right;">150</p>	<p>1 Q That's why I was asking you if the fact that 2 you think the facilities, for the most part, did not fit 3 in with the surrounding community impacted your overall 4 opinion of the condition of the water system? 5 A It had a piece of it, yes. 6 Q What percent? 7 A I wouldn't -- I wouldn't say it would be a 8 tremendous percentage. Probably 10 to 20 percent. 9 Q 10 to 20 percent? Really? 10 A Uh-huh. 11 Q Although you would agree with me, sir, that the 12 fact that a facility does not fit in with the 13 surrounding communities has nothing to do with the 14 operational capabilities of that asset? 15 A No. But being a good custodian of the water 16 system within the community, that's part of being a good 17 operator. 18 Q All right. I'm not sure we had the yes and nos 19 correctly there. It might have been my fault with the 20 question. 21 Isn't it true that -- assuming this statement 22 is correct -- that if the facilities for the most part 23 did not fit in with the surrounding community, that fact 24 alone does not have anything to do with the operational 25 condition of the system itself, correct?</p> <p style="text-align: right;">152</p>
<p>1 A Well, I -- 2 MR. McCREEDY: I'm going to object just because 3 that's vague. 4 But you can answer. 5 THE WITNESS: Well, as I stated in my report, I 6 think they're doing a good job of operating the system 7 with what they have to work with. 8 BY MR. CONNER: 9 Q Did part of your overall assessment of 10 condition that you did perform, was it influenced by the 11 statement on the top of page 81419 that the facilities, 12 for the most part, did not fit in with the surrounding 13 community? 14 A That certainly played into some of the 15 facilities, yes. I wouldn't necessarily say that that 16 was the fundamental or the basis of that. 17 We, again -- our analysis was based upon the 18 assessment that we started with age, based upon the 19 condition of vertical, and we adjusted it based upon 20 what maintenance and what records of physical things we 21 observed. 22 Q No, I understand. I understand that part of 23 it. I was just asking you if this statement -- it's in 24 your report. 25 A Uh-huh.</p> <p style="text-align: right;">151</p>	<p>1 A With the mechanical operation of the system, 2 no. As to the overall operation of the system, yes. 3 Q And that's the -- what is that, the goodwill of 4 the system? 5 A No. The customer service, the part of being -- 6 providing -- being a good custodian of the system, being 7 part of the community, those are all parts of being a 8 good purveyor of water. 9 Q Did you find -- or do any type of analysis, 10 other than this week and what's in your report, as to 11 whether or not Mountain Water Company is a good 12 community citizen? 13 A What would you -- I guess what I'm trying to 14 refer to is what community outreach programs and things 15 that they've done? 16 Q Yes, sir. 17 A Did not. 18 Q So you've not done that type of assessment in 19 your assignment, have you? 20 A No. 21 Q So you really don't know, do you, sir, what 22 Mountain Water Company does with respect to community 23 engagement or being a good corporate citizen, do you? 24 A Not overall their program, but rather this was 25 to -- associated with their facilities, we made an</p> <p style="text-align: right;">153</p>

1 adjustment on that.

2 **Q And that was a 10 to 20 percent --**

3 A Roughly.

4 **Q -- impact in your overall condition assessment?**

5 A About 10 percent, yes.

6 **Q About 10 percent?**

7 A Yes.

8 **Q Will that be reflected on any of your**

9 **worksheets?**

10 A No.

11 **Q Then how do we --**

12 A We use the --

13 **Q How do I go back and check that and see where**

14 **that calculation was made?**

15 A Well, it was done -- our judgments and our

16 ratings were based, also, on engineering judgment, and

17 we took those things into our engineering judgment of

18 operations.

19 **Q You state on page 81419, "During the week, we**

20 **also had an opportunity to inspect the City of**

21 **Missoula's wastewater treatment plant and lift stations**

22 **as a comparison to the MWC facilities," correct?**

23 A Correct.

24 **Q You say, "There was no comparison as to the**

25 **standards of design and operational practices as the**

154

1 **City of Missoula's facilities were at or above industry**

2 **standards, and the wastewater treatment plant is a state**

3 **of the art" -- "is state of the art technologies."**

4 **How long did you inspect the wastewater treatment**

5 **system?**

6 A We spent a day inspecting the plant and their

7 pump stations.

8 **Q Did you look at all the pump stations?**

9 A Yes.

10 **Q Was your inspection of the plant and the pump**

11 **stations as intensive as the inspection that was**

12 **performed by Black & Veatch?**

13 A Well, they spent a day there, as well. I would

14 say that would be pretty comparable.

15 **Q Did you review any documents with respect to**

16 **the wastewater treatment facility?**

17 A I reviewed their SCADA system and did review

18 what operating reports that they did have there at the

19 plant.

20 **Q What operating reports did they have?**

21 A Their monthly operating production reports and

22 water quality reports.

23 **Q Did you find -- or did you look at any of their**

24 **reports to the DEQ?**

25 A Yes.

155

1 **Q How many?**

2 A I don't recall.

3 **Q Did you look at the permit?**

4 A Yes, I did.

5 **Q Are you aware their permit is out of date?**

6 A Yes, I am.

7 **Q Did you -- were there any prior reports related**

8 **to capital improvements, operational reviews, anything**

9 **like that that you reviewed?**

10 A Prior to that or --

11 **Q No, sir. During this inspection.**

12 A Yeah. We did look at spill reports, if there

13 were any, any on their maintenance, their cleaning

14 programs on their collection system.

15 **Q Did you see any reports of notices of violation**

16 **from DEQ?**

17 A No, I did not.

18 **Q Did you ask for any?**

19 A Yeah, I did.

20 **Q Did they give you any?**

21 A I don't recall seeing any, no.

22 **Q Did they tell you that they didn't have any**

23 **notices of violation?**

24 A No, they didn't tell me that.

25 **Q Did you ask them?**

156

1 A I don't recall.

2 **Q What other facilities in other Montana water**

3 **systems did you review or investigate?**

4 A We looked at the City of Hamilton, wells and

5 facilities that they had at their facility.

6 **Q Who did you talk to at the City of Hamilton?**

7 A I would have to go back and look at my note.

8 **Q Did you produce those notes?**

9 A I don't believe we provided those yet.

10 **Q All right. When did you go see the City of**

11 **Hamilton water system?**

12 A I'd have to go -- it was after we were out

13 there in the week. So I'd have to go back and -- I

14 didn't do this personal inspection. I had one of our

15 team do it.

16 **Q Oh, you didn't look at it.**

17 A I didn't look at it.

18 **Q Oh. Who did?**

19 A Tom Hanou.

20 **Q This Tom, did he give you a report, written**

21 **report?**

22 A No.

23 **Q What did -- how did he convey the knowledge to**

24 **you?**

25 A He just -- we talked briefly describing -- he

157

1 provided some of the pictures that he had taken and gave
 2 me an assessment of what he observed.

3 **Q How many wells did the City of Hamilton system**
 4 **have?**

5 A I don't know. I'll have to go back and verify
 6 that.

7 **Q How many miles of pipe does it have?**

8 A I don't know.

9 **Q What pipe material is in the system?**

10 A I'd have to go back and look at what we have in
 11 the record.

12 **Q You don't know anything about the Hamilton**
 13 **system, do you, sir?**

14 A I don't know any details. I do know that we
 15 looked at the condition. Particularly we were comparing
 16 the wells, the well facilities, for Mountain Water
 17 Company to Hamilton.

18 **Q Did you have a color picture of this well?**

19 A Yes.

20 **Q It's on page 81419?**

21 A Uh-huh.

22 **Q Excuse me?**

23 A Yes.

24 **Q Did Mr. Hanou put a temperature gauge on this**
 25 **well, this pump?**

158

1 being done in Montana.

2 **Q Would you say that this is a standard of what's**
 3 **being done in Montana, this picture?**

4 A I would consider that, yes.

5 **Q Would you agree with me that there are a number**
 6 **of facilities that Mountain Water Company has that have**
 7 **some of these same similar conditions?**

8 A Some of the facilities, yes.

9 **Q But you would view this as the industry**
 10 **standard in Montana.**

11 A In Montana.

12 **Q How many other water systems did Mr. Hanou look**
 13 **at and inspect, investigate?**

14 A We didn't look at any others.

15 **Q Excuse me?**

16 A We did not look at any others in this time
 17 frame, although we worked for a number of other of those
 18 in the past.

19 **Q Well, you state here that you reviewed -- it**
 20 **says, "Additionally, we investigated what the condition**
 21 **of facilities in other Montana water systems as compared**
 22 **to MWC." So that's plural. That's incorrect, isn't it?**

23 A That is correct. We only inspected Hamilton.

24 **Q So this is incorrect.**

25 A That is incorrect.

160

1 A I don't know.

2 **Q You didn't ask him if he ran the pump?**

3 A I didn't ask him if it was running or if he ran
 4 the pump, no.

5 **Q Now, you notice there's some corrosion at the**
 6 **base of that pump, correct?**

7 A There is some. Yes.

8 **Q And can I see your picture, because I don't**
 9 **have a color one of it with me.**

10 **It looks like the valve has a hat on it that**
 11 **looks like a funnel. Do you notice that?**

12 A Well, that's just a funnel. I'm sure they were
 13 using it for some -- either oil for the motor. It's
 14 just sitting there.

15 **Q Do you know how the motor is on that pump?**

16 A No. I don't personally know.

17 **Q Do you know if it has ever been rehabbed?**

18 A No, I don't.

19 **Q So did Mr. Hanou, did he provide you with any**
 20 **of that information?**

21 A No.

22 **Q Or did you just take a picture of it?**

23 A Well, we went and took a look in the facilities
 24 to see if they were of similar type and construction and
 25 just to be able to establish the standards which were

159

1 **Q Do you know how many customers the system of**
 2 **Hamilton serves?**

3 A No, I don't.

4 **Q Isn't it true, Craig, that to do a fair**
 5 **comparison of Mountain Water Company to another system**
 6 **in Montana, you would need more information than what**
 7 **you've provided in this report?**

8 A I would say that would be -- to provide a
 9 comparison of apples of one system to the other, yes.

10 **Q So on reconsideration, isn't it true that**
 11 **that's something that you really shouldn't have even put**
 12 **in this report based on the information that you have?**

13 A I think it's a point of reference that we can
 14 compare to a system that's nearby as a comparison. I
 15 don't say that it -- that was a mistake to put it in
 16 there, no.

17 **Q But it's really not a valid comparison because**
 18 **you don't have the information on the Hamilton system on**
 19 **which to make that comparison, do you?**

20 A We don't have as much information on the
 21 Hamilton system as we do on Mountain Water. That's
 22 correct.

23 **Q You don't have anything other than this**
 24 **picture, do you, today?**

25 A No. We have other information.

161

1 **Q What other information do you have on Hamilton?**
 2 A We have information on the different wells and
 3 on their mains. We have done work for Hamilton. We
 4 know more about that system.
 5 **Q Where is your information on the City of**
 6 **Hamilton system?**
 7 A I don't have it.
 8 **Q Is it your understanding that Mountain Water**
 9 **Company does not perform any maintenance or**
 10 **redevelopment on its wells?**
 11 A We cannot find any evidence in all the records
 12 that were provided that any well maintenance was done.
 13 **Q If there is records -- if there are records and**
 14 **evidence of maintenance and redevelopment of wells, then**
 15 **that would impact your opinion, correct?**
 16 A That is correct.
 17 **Q How many metered customers are there in the**
 18 **Mountain Water system?**
 19 A The report that you were copying, there's --
 20 the report -- there's my file over there.
 21 **Q If you'll take a look at page 81425, I think**
 22 **that's where that can be found.**
 23 A 8124?
 24 **Q 8125 -- 81425.**
 25 A It's indicated from the data that we were

162

1 provided that there's roughly 24,890 services in the
 2 system and, roughly, a number of those were -- 9,950
 3 were metered services.
 4 **Q So the majority, then, over 60 percent of all**
 5 **customers are not metered?**
 6 A According to the records that we were provided,
 7 yes.
 8 **Q Did you have access to the annual reports filed**
 9 **by Mountain Water at the PUC -- or PSC?**
 10 A Yes.
 11 **Q Did you look in that report with respect to**
 12 **whether or not there's a delineation between metered**
 13 **customers and non-metered customers?**
 14 A I did not look there for -- but I eventually
 15 pulled it out of the other reports that were provided.
 16 **Q Now, you put your hand on the draft.**
 17 A Exhibit 76.
 18 **Q All right. Where in Exhibit 76 does it say**
 19 **that there are only 9,950 metered services?**
 20 A Where's the other report? I don't see it as we
 21 currently speak. I'd have to go back and find out where
 22 I got that reference.
 23 **Q Okay. That's fine. Is it your understanding**
 24 **that Mountain Water does not have regular read meters?**
 25 A Excuse me. I'm sorry. I didn't hear you.

163

1 **Q Is it your understanding that Mountain Water**
 2 **does not have regular read meters?**
 3 A No. They did have remote read meters.
 4 **Q If you'll turn to page 81425. I really wasn't**
 5 **clear about the second paragraph.**
 6 A Okay.
 7 **Q When you say that -- the second sentence, "This**
 8 **data was not provided. So HDR used the pipeline**
 9 **installation data to estimate the approximate age**
 10 **distribution of the meter since it is assumed that the**
 11 **majority of the meters were installed on newer**
 12 **developments funded by developers that were installed in**
 13 **the last 20 to 30 years. Using industry standards for**
 14 **meter replacements, a projected cost of 2.5 to**
 15 **3.5 million to replace aged meters was included in the**
 16 **improvement schedule."**
 17 A Yes.
 18 **Q Okay. Are you assuming, then, that -- or when**
 19 **did remote read meters come into vogue in the industry?**
 20 A Probably in the last 20 years.
 21 **Q Are you assuming that -- or are you -- do you**
 22 **know whether the meters in the Mountain Water system are**
 23 **remote read meters?**
 24 A These newer meters were remote read. Based
 25 upon our investigation of the operation center, it

164

1 indicated that they are now replacing them with remote
 2 read meters.
 3 **Q So --**
 4 A I don't know if all of them are remote read or
 5 not.
 6 **Q And you don't know -- well, that's okay.**
 7 **But in your ten-year forecast, budget forecast**
 8 **for the city on capital expenditures, you included**
 9 **replacement of all meters, correct?**
 10 A No, we didn't. I didn't increase all meters,
 11 no.
 12 **Q Did you include installing new meters in all**
 13 **the homes that are not served by a meter?**
 14 A Yes.
 15 **Q So there's 60 percent, then, of 24,890 services**
 16 **that are currently unmetered will be metered within the**
 17 **next ten years under your program?**
 18 A That's correct. That was one of the issues,
 19 that all customers would be metered as an industry
 20 standard.
 21 **Q So that's included in your cost estimate.**
 22 A That's included in our cost estimate.
 23 **Q Did you include the cost of the customers**
 24 **incurring to replace their service lines?**
 25 A I did include costs for replacing the customer

165

1 service lines, indicating, yes, I think, in my report,
 2 that some type of assistance or other program needs to
 3 be put in place to help them with that, some type of --
 4 particularly low-income customers to be able to do that.
 5 **Q Did the city give you a plan or say that they**
 6 **would give assistance and basically pay for all the**
 7 **service replacements?**
 8 A No, but that's fairly typical within -- within
 9 the industry.
 10 **Q So you're assuming in your analysis that -- and**
 11 **your budget, at least for the next ten years on CAPEX,**
 12 **that all unmetered customers would be metered, and all**
 13 **of those customers would have new service lines paid for**
 14 **by the system, the water system?**
 15 A I didn't have all the services. We took the
 16 age, again, by the pipe and had a percentage of the
 17 services that would be replaced during that period, not
 18 all.
 19 **Q How many?**
 20 A I'd have to go back and look at my worksheets.
 21 **Q Where are your worksheets?**
 22 A Again, we haven't provided those.
 23 **Q Okay. Let me just get you to identify, if we**
 24 **can, some of the other exhibits. Let's see. What is**
 25 **Exhibit D? This is your chart of condition.**

166

1 **What exhibit number?**
 2 **THE REPORTER: 96.**
 3 **(Deposition Exhibit 96 was marked for**
 4 **identification by the Certified Shorthand**
 5 **Reporter and is attached hereto.)**
 6 BY MR. CONNER:
 7 **Q What is Exhibit Number 96?**
 8 A 96 is a summary of all the costs that we had
 9 taken from the inspection sheets and summed up -- we
 10 provided a list of all the facilities, provided a
 11 condition rating, and the low- and high-end cost range
 12 from the -- from the sheets from Exhibit -- from
 13 Attachment B.
 14 **Q And you're recommending that within the next**
 15 **ten years, anywhere from 12.7 million to 15.6 million**
 16 **needs to be spent on the replacement of cast iron pipe,**
 17 **correct?**
 18 A Yes. This is information that we were given,
 19 and it's all unlined cast iron.
 20 **Q All what?**
 21 A Unlined.
 22 **Q If it turns out that that is lined cast iron,**
 23 **what would -- would that change your opinion?**
 24 A That would change our opinion.
 25 **Q By how much?**

167

1 A I would have to look at the percentage. If
 2 it's all -- you're saying if it's all?
 3 **Q Yes, sir.**
 4 A I'd have to go back and look at the age and
 5 when it was installed and look at other parameters
 6 again. We'd have to reassess that.
 7 **Q And with respect to the AC pipe, how much of**
 8 **that are you expecting to replace over the next ten**
 9 **years? All of it?**
 10 A No. I think it was only 10 percent.
 11 **Q AC pipe is a good product, although you can't**
 12 **get it anymore, correct?**
 13 A That's correct. The biggest issue with AC pipe
 14 is how it was installed because of settlement and
 15 displacement because it's a more brittle material.
 16 **Q Now, you have service lines on page 81673.**
 17 **That's the service lines that you're estimating that**
 18 **need to be replaced, and those were the customer service**
 19 **lines, correct?**
 20 A Yeah. These were -- well, these were
 21 the service -- it also included the portion that was
 22 the -- that's owned by Mountain Water Company.
 23 **Q Between the service from the main to the**
 24 **property line?**
 25 A Correct.

168

1 **Q But, in essence, you're assuming that the city**
 2 **will pay for -- will pay that 8.4 million to**
 3 **12.1 million of cost over the next ten years?**
 4 A Or a portion of those costs. I don't know
 5 about all the costs. They have to come up with what
 6 their program would be, yes.
 7 **Q Well, I understand that, but for your --**
 8 **A For my --**
 9 **Q -- budget -- just a second. Your budget**
 10 **includes this amount of money that the city should**
 11 **include in the CAPEX program, correct?**
 12 A That's correct.
 13 **Q How many work papers do you have, you think,**
 14 **that support Exhibit 96?**
 15 A I would have to go back and look. The majority
 16 of them are already attached, the work papers are here
 17 in terms of the facility reports and all the costs are
 18 there.
 19 **Q What is Exhibit E? I have D and then -- oh, I**
 20 **know what Exhibit E is. It's all the photographs, isn't**
 21 **it?**
 22 A It's all the photographs. Yeah.
 23 **Q Yeah. I see. I'm sorry.**
 24 A Yeah. I was like, okay. Yeah, that's all the
 25 photographs.

169

1 **Q That wasn't a trick. I apologize.**
 2 A Okay. You had me there. I'll grant you that.
 3 **Q Well, I didn't intend to.**
 4 **Exhibit F --**
 5 A Yes.
 6 **Q -- or Appendix F to your report is this next**
 7 **exhibit, which is Exhibit Number --**
 8 **THE REPORTER: 97.**
 9 **(Deposition Exhibit 97 was marked for**
 10 **identification by the Certified Shorthand**
 11 **Reporter and is attached hereto.)**
 12 BY MR. CONNER:
 13 **Q -- 97. What is this document?**
 14 A This is the analysis of the information, the
 15 data that we got from the GIS data, all the output on
 16 all the mains, materials on all the raw data that we
 17 pulled out of GIS that are attached and summarized in
 18 these three tables.
 19 **Q Okay. The GIS information had more than just**
 20 **the mains in it, didn't it?**
 21 A Yes.
 22 **Q It had the valves, correct?**
 23 A Yes.
 24 **Q It had all the assets, correct?**
 25 A Well, for the most part, the best I can say, it

170

1 **didn't have an asset listing to go by on his report?**
 2 A No, I did not notice that.
 3 **Q What is Exhibit G -- or Appendix G? I keep**
 4 **saying exhibit. Sorry.**
 5 A That was a report that -- let me see. Make
 6 sure I'm talking about the right thing. Yeah. What we
 7 had is we were asked to do a quick review, kind of a
 8 50,000-foot review of the financials that were given in
 9 the discovery documents. And Angelina Flores summarized
 10 that for me, her review of the financial statements.
 11 **Q Now, I think I saw something in regard to this**
 12 **in the exhibits that were in your file. Do you recall**
 13 **seeing a report that goes with this?**
 14 A Not with this. Are you sure you weren't
 15 referring to the tables -- these tables? Those tables
 16 were in my file.
 17 **Q It may have been. Can I see those documents**
 18 **again?**
 19 MR. McCREEDY: Can we just make sure we're all
 20 talking about the same thing and maybe reference the
 21 exhibit number when we do that next time?
 22 MR. CONNER: Sure. We'll do that next time.
 23 THE WITNESS: I believe it's the same one as
 24 the Exhibit 74.
 25 BY MR. CONNER:

172

1 had a majority of the assets. I wouldn't say it's all
 2 inclusive.
 3 **Q So, is it fair to say that you could have taken**
 4 **the GIS information on the assets that were reflected**
 5 **there and performed a replacement cost new less**
 6 **depreciation analysis, or at least come up with an**
 7 **inventory?**
 8 A We at least could have come up with an
 9 inventory, yes.
 10 **Q And then you could have priced that inventory,**
 11 **correct?**
 12 A Yes.
 13 **Q And if your assignment was to do a condition-**
 14 **based depreciation analysis, you could have done that**
 15 **within the time period?**
 16 A Condition-based, I'd say not because of
 17 additional information and things that would have to be
 18 done.
 19 **Q I understand. If your scope had been expanded.**
 20 A If our scope would have been inclusive of doing
 21 all that work.
 22 **Q And this information was provided to you on**
 23 **September the 12th, correct?**
 24 A Yes.
 25 **Q So did you notice Mr. Hayward indicated that he**

171

1 **Q That's not the one I was talking about.**
 2 A Sorry. I apologize.
 3 **Q That's all right.**
 4 MR. McCREEDY: Joe, I'm getting ready to head
 5 out. So we can switch off and have Harry do this, if
 6 you want.
 7 MR. CONNER: Yeah. I'm going to be finished
 8 here shortly. But yeah, that's fine.
 9 MR. McCREEDY: Okay.
 10 BY MR. CONNER:
 11 **Q Is Exhibit G your last exhibit?**
 12 A Yes.
 13 MR. CONNER: Okay. Thank you, Craig.
 14 THE WITNESS: Okay.
 15 MR. McCREEDY: Oh. So when you say shortly,
 16 you mean shortly.
 17 MR. SCHNEIDER: You should have spoken up
 18 earlier.
 19 THE WITNESS: These are all yours, right, the
 20 exhibits?
 21 MR. CONNER: Harry --
 22 MR. SCHNEIDER: Yes, sir.
 23 MR. CONNER: -- could you call the lady at the
 24 front desk. She was going to have someone come by and
 25 box some stuff up.

173

1 MR. SCHNEIDER: I'll get right on that, Joe.
2 MR. CONNER: I appreciate that.
3 THE WITNESS: I have a question --
4 MR. SCHNEIDER: Anybody else need anything,
5 seriously?
6 THE WITNESS: These were my copies. Did you
7 make copies?
8 MR. CONNER: We're off the record. We're
9 finished.
10 THE VIDEOGRAPHER: This now concludes today's
11 deposition of Craig Close. We're now going off the
12 record. The time is 3:20.
13 (At 3:20 p.m., the deposition concluded.)
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1 Certification of Court Reporter

2
3 Federal Jurat

4
5 I, the undersigned, a Certified Shorthand
6 Reporter of the State of California do hereby certify:
7 That the foregoing proceedings were taken
8 before me at the time and place herein set forth; that
9 any witnesses in the foregoing proceedings, prior to
10 testifying, were placed under oath; that a verbatim
11 record of the proceedings was made by me using machine
12 shorthand which was thereafter transcribed under my
13 direction; further, that the foregoing is an accurate
14 transcription thereof.

15 That before completion of the deposition, a
16 review of the transcript [] was [X] was not requested.

17 I further certify that I am neither financially
18 interested in the action nor a relative or employee of
19 any attorney of any of the parties.

20 IN WITNESS WHEREOF, I have this day
21 subscribed my name Claire DiLoretta

22 CLAIRE DILORETTA
23 Certificate No. 13722



24 Dated: November 24, 2014
25

*City of Missoula vs.
Mountain Water Company, et al.*

*Trial Transcript, Phase 2
Vol. 6
November 6, 2015
Missoula County Cause DV-14-352*

*Martin-Lake & Associates, Inc.
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Page 1416

1 MS. DESOTO: Yes.
 2 THE COURT: All right, thank you.
 3 You may call your next witness,
 4 Ms. Jones.
 5 MS. JONES: The City calls Mr. Craig
 6 Close from HDR.
 7 Thereupon,
 8 CRAIG CLOSE, P.E.
 9 having been first duly sworn to tell the truth,
 10 testified upon his oath as follows:
 11 THE COURT: So try and make yourself as
 12 comfortable as you can, Mr. Close. Adjust the
 13 mike so we can hear you.
 14 Please state your full name, spell your
 15 last name for us.
 16 THE WITNESS: My name is Craig Close.
 17 Last name C-L-O-S-E.
 18 THE COURT: All right, thank you. You
 19 may inquire.
 20 DIRECT EXAMINATION
 21 BY MS. JONES:
 22 Q. What do you do for work?
 23 A. I'm an engineer by training. I work for
 24 HDR Consulting Firm and I'm the national director
 25 of our Utility Management Services Group.

Page 1417

1 Q. How long have you been working in the
 2 field of engineering?
 3 A. Over 36 years.
 4 Q. Were you hired to assess the condition of
 5 the Mountain Water system facilities and assets?
 6 A. Yes.
 7 Q. Were you hired to compare the operations
 8 of Mountain Water Company to industry standards?
 9 A. Yes.
 10 Q. And were you also hired to analyze the
 11 replacement cost new less depreciation analysis
 12 conducted by Mr. Mantua of Black & Veatch?
 13 A. Yes, I was.
 14 Q. Did you do all those things?
 15 A. Yes.
 16 Q. And have you reached opinions related to
 17 that work?
 18 A. Yes, I do--yes, I have.
 19 Q. Before we get into the details of those
 20 opinions, can you please describe your education,
 21 training and background briefly for the
 22 commissioners.
 23 A. Yeah. I received a Bachelor of Science
 24 degree from Swarthmore College. And I worked at
 25 Stone & Webster originally out of school. And I

Page 1418

1 went to work for American Water Works Company
 2 after that and worked for approximately 13 years.
 3 And then I worked for PBS & J and now for HDR
 4 Engineering Consulting Company.
 5 Q. When you worked for American Water, what
 6 did you do?
 7 A. I originally started off as a design
 8 engineer. And then I ended up being promoted and
 9 went out to the west region of American Water
 10 where I was the vice president of engineering and
 11 operations of the four Western Region companies,
 12 including California, Arizona, New Mexico and
 13 Hawaii.
 14 Q. Can you give the commissioners a sense of
 15 the scope of that organization versus what we're
 16 talking about here at Mountain Water.
 17 A. Yeah. Those four companies encompass
 18 over 26 communities and a population of over
 19 500,000 people in terms of providing water and
 20 wastewater services.
 21 Q. When you were at American Water, were you
 22 involved in the--in both the acquisition and the
 23 sale of water utilities?
 24 A. Yes, I was.
 25 Q. At HDR what do you do as it relates to

Page 1419

1 water utilities now?
 2 A. I provide all the relative services a
 3 utility needs to operate their operation of public
 4 works. We're essentially a mirror image of a
 5 public works department. We provide utility
 6 planning, utility rates, management optimization,
 7 a lot of regulatory consent decree work and other
 8 functions, including operations for water and
 9 wastewater utilities across the country.
 10 Q. Is assessing the actual functioning
 11 condition of a water company something that you do
 12 in your line at HDR and based on your experience
 13 at American Water?
 14 A. Absolutely. We do asset management and
 15 condition assessment. We have our own
 16 laboratories where we actually do corrosion
 17 assessment of particular assets.
 18 Q. Can you briefly summarize your expert
 19 opinions and then we'll talk about each opinion in
 20 more detail. But let's just get the summary out
 21 there.
 22 A. Overall--our assessment, we went and
 23 toured all the vertical assets of Mountain Water
 24 Company. And, overall, our assessment was that it
 25 was--their system was rated fair to poor in terms

Page 1420

1 of their condition of the vertical assets.
 2 The only thing we could do for the buried
 3 assets was to rely on data that was provided to us
 4 from Mountain Water Company. We were not allowed
 5 to go and do any investigation of, you know,
 6 underground assets, to be able to actually
 7 physically inspect the pipe or any other
 8 underground assets.
 9 **Q.** Okay. And did you compare what you saw
 10 in the field to industry standards?
 11 **A.** Yes, we did.
 12 **Q.** And give us a summary of what your
 13 opinions are in that regard.
 14 **A.** Overall their standards of
 15 their--particularly their backbone assets, their
 16 wells, their mains, their booster stations were
 17 generally below industry standards.
 18 **Q.** Did you evaluate the use of capital
 19 expenditures and whether capital expenditures
 20 needed in this system have met industry standards?
 21 **A.** We felt that there was not an adequate
 22 level of investment made into the facilities by
 23 Mountain Water Company to maintain the facilities
 24 at industry standards.
 25 When we went through and we put together

Page 1421

1 our cost estimate we get a range that it would
 2 take \$66- to \$95 million over about a ten-year
 3 period of time to bring this system up to industry
 4 standards.
 5 **Q.** Lastly, did you reach some opinions about
 6 the RCNLD analysis conducted by Mr. Mantua, Black
 7 & Veatch?
 8 **A.** Yes, we did.
 9 **MR. CONNER:** Your Honor, may I register
 10 an objection? Would you mind if we go to
 11 chambers?
 12 **THE COURT:** Nope.
 13 (In chambers.)
 14 **MR. CONNER:** Your Honor, the reason I
 15 wanted to do this is that, and outside the
 16 presence of the commissioners, is Mr. Close as you
 17 know testified at the initial trial. I took his
 18 deposition. I--Mr. Mantua testified at that
 19 trial. All the facts were out with respect to
 20 Mr. Mantua's testimony.
 21 **THE COURT:** Not about the RCNLD. That
 22 didn't come out in the earlier trial.
 23 **MR. CONNER:** I understand that, Your
 24 Honor, but he already had all that information.
 25 We have not received a supplement from him in a

Page 1422

1 report in regards to what he's going to testify
 2 about today.
 3 **MS. JONES:** Except for the 5th supplement
 4 that was served in December of last year. On
 5 Page 5 at Category 3 it discloses the rebuttal
 6 opinions of Mr. Craig Close. And it's stated
 7 there that Mr. Close is expected to provide
 8 rebuttal testimony as to Black & Veatch.
 9 And specifically on Line 6 it lists the
 10 category of testimony that will be offered at
 11 trial related to his opinions in rebuttal to the
 12 replacement cost less depreciation opinions of
 13 Mr. Mantua. And it states that the asset approach
 14 measure of value is significantly overstated
 15 because Black & Veatch overstates the condition of
 16 the system, understates and incorrectly determined
 17 the level of depreciation, assumed excessively
 18 high standards and cost of repair of the assets,
 19 and goes on from there.
 20 All of this was disclosed in December of
 21 last year.
 22 **THE COURT:** It seems like you got notice.
 23 **MR. CONNER:** We'll see what he says, Your
 24 Honor, thank you.
 25 (In open court.)

Page 1423

1 **THE COURT:** So you may continue,
 2 Ms. Jones.
 3 **MS. JONES:** I can't recall, was he
 4 allowed to answer that last question?
 5 **THE COURT:** I don't think he got an
 6 opportunity to answer.
 7 **MS. JONES:** Okay.
 8 **Q.** (By Ms. Jones) What are your opinions
 9 related to the replacement cost new less
 10 depreciation analysis performed by, in summary,
 11 performed by Mr. Mantua?
 12 **A.** The analysis we performed, we determined
 13 that Mr. Mantua's analysis was flawed. That he
 14 did the replacement cost less condition-based
 15 depreciation incorrectly.
 16 He readjusted depreciation, which you
 17 cannot reset the depreciation clock, essentially,
 18 and go back and restate that it's no longer this
 19 amount of depreciation.
 20 Mountain Water Company has already
 21 collected depreciation at a certain rate based
 22 upon the condition that was on their books.
 23 So--their accumulated depreciation. So
 24 essentially they would have to refund their amount
 25 of depreciation if they are saying that those

Page 1424

1 assets aren't as depreciated as they say they were
 2 previously.
 3 **Q.** Okay. Do you have other opinions about
 4 Mr. Mantua's analysis as well, in summary, and
 5 then we'll go back and talk about it in more
 6 detail.
 7 **A.** The methodology in which he rated the
 8 percentage, he basically took assets in very
 9 blanket type of generalized categories rather than
 10 getting down to the individual assets.
 11 And, also, he used an arbitrary
 12 percentage of depreciation rather than actually
 13 looking at the remaining useful life. Many of the
 14 projections of depreciation resulted in him
 15 projecting some of these assets to have 100 or
 16 200 years of remaining useful life, which is very
 17 unrealistic.
 18 **Q.** We'll talk more about that later.
 19 Let's--
 20 **MS. JONES:** Your Honor, if I may use for
 21 demonstrative purposes D-9, which is the cost
 22 estimate.
 23 **THE COURT:** All right.
 24 **MR. CONNER:** Do you have a copy of that,
 25 Tasha?

Page 1425

1 **MS. JONES:** I sure do, yup.
 2 **Q.** (By Ms. Jones) You stated it briefly a
 3 moment ago, but--and we'll talk more in detail
 4 about this as well.
 5 But can you please describe the total
 6 amount based on your assessment in summary form of
 7 the types of capital expenditures that HDR
 8 believes are necessary to bring this system up to
 9 industry standards.
 10 **A.** Yes. As I said, we looked at both the--I
 11 mean, physically inspected the vertical assets.
 12 We did inspection reports. We broke down--each of
 13 the facilities down into primary asset classes.
 14 We then rated each of the asset classes
 15 on condition independently of each other and then
 16 came up with an overall--a rating of a condition
 17 assessment of each of those facilities.
 18 On this form that overall rating of those
 19 facilities are here. A 3 is considered fair, a 2
 20 is considered poor, 4 is good, 5 is considered
 21 excellent or new, and 1 is considered in imminent
 22 failure and unrepairable, in our rating.
 23 **Q.** Okay.
 24 **A.** We then went forward and provided an
 25 opinion of cost from a range of a low end to a

Page 1426

1 high end of each of those asset classes and added
 2 those up for each of the facilities, which is then
 3 summarized on this table here.
 4 **Q.** Can you quickly just summarize those
 5 categories for us here.
 6 **A.** Yes. We then provided a category for all
 7 the wells themselves. The well facilities, the
 8 booster stations, the reservoirs, the tanks, the
 9 dams, pipelines and mains, services and meters,
 10 PRB stations and general facilities like the
 11 operation center and rolling stock inventory and
 12 those type of things.
 13 **Q.** And the total amount of capital that you
 14 think is necessary, you and HDR team think is
 15 necessary, what's that?
 16 **A.** The total for all the facilities that
 17 comes up to is roughly \$66-, \$67 million to around
 18 \$95 million over the next ten years.
 19 **Q.** Okay. Let's back up now.
 20 Describe in a bit more detail the process
 21 that HDR followed in order to assess these assets
 22 to reach the estimates that we just discussed.
 23 **A.** Well, what we did is, like I said, we
 24 broke it into different asset classes, like pumps,
 25 motors, valves, piping, instrumentation. All the

Page 1427

1 primary asset classes that we would see in these
 2 type of facilities.
 3 We then compared each of those asset
 4 types by physical inspection to industry standards
 5 of that type of piece of equipment. We would
 6 compare a pump or a motor to what it should be and
 7 rate it against an industry standard.
 8 Then once we used our rating based on
 9 condition on that particular asset class, and then
 10 we put a cost to what it would bring--to be able
 11 to bring that asset up to where it should be as an
 12 industry.
 13 **Q.** Did you come to Missoula and actually
 14 spend time evaluating these assets?
 15 **A.** Yeah. We spent a whole week touring
 16 around all the facilities for Mountain Water
 17 Company. And then at each night our inspection
 18 team, there were five of us, we would get together
 19 and we would compare notes. We did--the vertical
 20 inspections were done with two-man teams and then
 21 we compared notes and compared so there was
 22 consistency across all the valuations.
 23 **Q.** When you and the HDR team were evaluating
 24 those assets, did you find evidence of deferred
 25 maintenance?

Page 1428

1 A. Yes, we did. There was a lot of work
 2 that was done on terms of piping that was corroded
 3 and not maintained. There was a lot of evidence
 4 in terms of pumps and motors that had not been
 5 properly maintained. Building structures that
 6 were deteriorating and needing repairs.
 7 So there was a lot of evidence that
 8 certain proper preventative maintenance was not
 9 done.
 10 Q. Did you photograph that evidence as you
 11 saw it during the inspection?
 12 A. Yes, we did.
 13 MS. JONES: Your Honor, we would move to
 14 admit all of the photos taken by HDR which are
 15 found in Exhibits 1190, 1191, 1192, 1193, 1194,
 16 1195, and 1196.
 17 THE COURT: Any objection?
 18 MR. CONNER: No objection, Your Honor.
 19 THE COURT: Very well, they are admitted.
 20 EXHIBITS:
 21 (Exhibit Nos. 1190-1196 received into
 22 evidence.)
 23 THE COURT: Mr. Mercer, any objection?
 24 MR. MERCER: No objection.
 25 Q. (By Ms. Jones) Let's finish the

Page 1429

1 discussion, then, related to the above-ground
 2 assets. Okay?
 3 So when you broke those well houses down
 4 into categories as an example, why didn't you just
 5 give a blanket assessment to everything that was
 6 in a well?
 7 A. Well, it's not realistic to provide a
 8 blanket condition assessment that would cover a
 9 whole facility because each of the different
 10 assets have a different useful life. Obviously
 11 the life of a pump and a motor is different than a
 12 concrete structure, per se; or that the piping and
 13 valves, and particularly SCADA instrumentation,
 14 has a much shorter life than does electrical
 15 equipment.
 16 So to break all those down you need to
 17 assess each one individually to be able to give it
 18 a proper assessment against the expected useful
 19 life.
 20 Q. Does the useful life of, say, the
 21 chemical feed have the same useful life of the
 22 pump and motor?
 23 A. No, absolutely not.
 24 Q. And what is the relative costs of those
 25 two pieces of equipment?

Page 1430

1 A. Well, depending on the facility it could
 2 be significantly different based upon those,
 3 absolutely. Obviously, depending on the size of
 4 the pump, if it's a small pump it's not a very big
 5 cost. If it's a large horsepower, it would be a
 6 lot more. Chemical feed, it certainly could--
 7 depending on how complex, it could be a large or
 8 relatively small cost.
 9 Q. And what about the useful life? Is it
 10 different for chemical feed versus the pump and
 11 motor?
 12 A. Oh, yes.
 13 Q. Okay. Can you describe some of the
 14 general problems that you saw when you guys
 15 analyzed and assessed the condition of these
 16 assets? Let's start with the pumps and the
 17 motors.
 18 A. Well, there was a lot of antiquated
 19 equipment, older pumps and inefficient pumps that
 20 we saw that were out there.
 21 When we first went out, most of the
 22 facilities were not running. We had asked the
 23 Mountain Water Company to turn them on. They
 24 indicated they wouldn't do that. We then did
 25 reach an agreement that they would turn five

Page 1431

1 facilities on that we went back to and evaluated
 2 when those were running. And in each of those
 3 five cases we felt--we found there were, you know,
 4 particularly the pumps, the motors, vibration and
 5 pinging noises and things, that we downgraded the
 6 condition of all of those facilities once we got
 7 to look at those.
 8 So there was definitely corrosion that
 9 was present in a lot of the pumps. A lot of
 10 presence of water. A lot of the well pumps were
 11 not anchored down to the foundation. They were
 12 just sitting there.
 13 There was a lot of--like I said, in the
 14 piping, a lot of corrosion, a lot of rust and
 15 other, you know, the exposure problems that were
 16 there.
 17 Q. How about the chemical feed systems that
 18 you evaluated? How did they stack up?
 19 A. Well, the chemical feed systems was
 20 relatively in poor condition. They were all--you
 21 could tell they were all added to the facilities
 22 at a later date, basically tacked onto buildings
 23 or structures to the well facilities.
 24 A lot of them--some of them didn't have
 25 adequate spill containment. There was a lot of

Page 1432

1 evidence of chemical spills. They did not have
 2 adequate spill containment for fill--for the
 3 chemical fill capabilities. Or at the diffusers,
 4 where they were put into the pipe, there was a lot
 5 of evidence of chemical spills within the pump
 6 station, on the pipe, and on the floors of the
 7 facilities.
 8 **Q.** How about the HVAC systems? Did you look
 9 at those?
 10 **A.** They were in extremely poor condition.
 11 Most of them were not operable. And a lot of them
 12 were blanked off, which is of great concern
 13 because of cooling for the pumps and electrical
 14 equipment.
 15 Also the HVAC systems in the chemical
 16 buildings were almost all corroded to the point of
 17 where they weren't operable. So we found that
 18 almost in all facilities the HVAC system would
 19 have to be replaced across-the-board.
 20 **Q.** As you evaluated each of these wells and
 21 booster stations, did you encounter facilities
 22 where all the pipe had been wrapped in aluminum
 23 sheeting?
 24 **A.** Yeah, there were several facilities that
 25 we came across that had basically metal-jacketed

Page 1433

1 insulation around the pipe where we couldn't
 2 inspect the pipe directly. We had then asked
 3 Mountain Water Company to remove the jacketing of
 4 one facility, Upper Prospect.
 5 **Q.** Let me ask you another question before
 6 you go there. Were you surprised to see that?
 7 **A.** Very much so. I had asked one of the
 8 production supervisors, you know, if they had a
 9 freezing problem. And he indicated that that was
 10 a new policy that they were using instead of
 11 painting and maintaining the pipe.
 12 The only reason you would actually put
 13 that insulation on is if you had a freezing
 14 problem or if you had a corrosion problem, that
 15 you were trying to protect the pipe.
 16 **Q.** Now, what is the appropriate way based on
 17 your experience to protect against corrosion for
 18 these types of pipes?
 19 **A.** Before you put the metal jacketing on you
 20 have to properly prep the pipe in terms of taking
 21 off all the rust and all the debris, prime it,
 22 paint it, and make sure it's properly protected.
 23 Because what happens is when you put a
 24 metal jacketing on and there is going to be some
 25 moisture that's present, it's not airtight, you've

Page 1434

1 actually created a worse environment for corrosion
 2 to be able to hit for spot corrosion along those
 3 pipes between the surface of the insulation and
 4 the pipe itself.
 5 **Q.** In the records and the information that
 6 you have reviewed in this case, did you find any
 7 evidence that Mountain Water Company had ever used
 8 this aluminum sheeting to cover their pipes before
 9 2014?
 10 **A.** No, we had not seen any evidence of that.
 11 **Q.** Okay. So you asked to have some of it
 12 removed?
 13 **A.** Yes.
 14 **Q.** What did you find?
 15 **A.** What we found was that the pipe was not
 16 prepped. It was all rusted and corroded
 17 underneath the piping we found. The similar
 18 metals, galvanized piping against steel piping,
 19 metal piping where you have a galvanic action.
 20 But the piping was in relatively--and valves were
 21 in relatively poor condition.
 22 **Q.** Okay. Let's go to the pipes, what's
 23 under the ground, and let's talk about that.
 24 What conclusions has HDR drawn related to
 25 the piping in terms of age, materials, leakage,

Page 1435

1 the condition of what's in the ground?
 2 **A.** We got only limited data from Mountain
 3 Water Company, most of it from their GIS system,
 4 in terms of their piping. They had aged material
 5 for most of their assets in there.
 6 We then did analysis in categorizing the
 7 history and what break history we did have and
 8 came up with a projection of the remaining useful
 9 life of the different types of pipes by age and
 10 material. And we found it relatively fair, and
 11 some of them, of the materials, were in imminent
 12 need of replacement.
 13 **Q.** When you were looking at the pipes, was
 14 leakage important?
 15 **A.** Absolutely. You know, we looked at the
 16 leakage that they were experiencing. Roughly
 17 anywhere between the high 40 percent, 48, 49
 18 percent, to as high as 56 percent in any given
 19 year. They are actually pumping more water to go
 20 back in the ground than they were selling to their
 21 customers.
 22 But what that really shows, it gives
 23 evidence of how poor the condition of the pipes
 24 and services are in the system.
 25 **Q.** How does the leakage rates that you

Page 1436

1 evaluated compare to industry standards?
 2 **A.** To be perfectly honest, for a system of
 3 this size this is unprecedented as to the amount
 4 of leakage that we should see in a system with
 5 such a little amount of mileage of pipe.
 6 A lot of comparisons to--a well-run water
 7 utility should have water loss of under 15
 8 percent. Many try to have goals of under 10
 9 percent. So I would say that the industry
 10 standard, though, is somewhere in the 20, 25
 11 percent, industry average out there. There are
 12 some that have larger systems, I would say, around
 13 the country that may have, you know, 30, 40
 14 percent leakage, but those are much larger
 15 municipal systems, much more main that they have
 16 to deal with. A system of this size, they
 17 shouldn't be anywhere near that.
 18 **Q.** As a community, should we be worried
 19 about the leakage at Mountain Water?
 20 **MR. CONNER:** Objection, Your Honor. He's
 21 not here to testify what the community should be
 22 worried about, but the condition.
 23 **THE COURT:** Sustained.
 24 **Q.** (By Ms. Jones) Okay. Does the leakage
 25 factor into your overall assessment of the

Page 1437

1 condition as a whole of Mountain Water Company?
 2 **A.** Yes, it does.
 3 **Q.** Why?
 4 **A.** It's not sustainable. I know there has
 5 been discussion about it's economic to be able to
 6 go and continue to provide additional wells in
 7 production, but it's not sustainable to be able to
 8 do that. You can't go and continue to increase
 9 leakage up to 70, 80, 90 percent and continue to
 10 build production facilities to be able to do that.
 11 From a community standpoint or from a
 12 condition assessment, at some point in time that
 13 balloon payment of when you are going to have to
 14 replace all that main and infrastructure is going
 15 to come due. And the impact on the community and
 16 the ratepayer is going to be significant.
 17 **Q.** Let's talk about the service lines.
 18 We've heard assumptions made by Mountain Water
 19 Company that they blame 50 percent of the leakage
 20 on the service lines. Do you agree with that
 21 assessment?
 22 **A.** No, I don't. The ability--they are
 23 losing about 4.6 billion gallons a year through
 24 leakage of the system.
 25 To say that 2.3 billion gallons of water

Page 1438

1 a year is coming out through service lines and
 2 that there is no evidence of that in terms of
 3 surface--I don't care how much percolation and
 4 indicate that that goes back in the ground--there
 5 would be evidence of water--of that magnitude of
 6 water around source lines in people's yards to be
 7 able to see that kind of leakage.
 8 We're talking about a hundred thousand
 9 gallons of water a year per household for every
 10 single service in the system to be able to kind of
 11 reach that kind of leakage. That's not realistic.
 12 **Q.** As a part of your analysis, did you give
 13 an estimate of what it would take to bring the
 14 services in this community up to industry
 15 standards as well?
 16 **A.** Yes.
 17 **MR. CONNER:** Objection, Your Honor. The
 18 services are not being acquired as part of the
 19 assets in this system, so I think it's not
 20 relevant to the valuation of the assets being
 21 condemned. It's been established that the
 22 services are not owned by Mountain Water and are
 23 not being taken by the City.
 24 **MS. JONES:** This was directly testified
 25 to by Logan McInnis when he testified about the

Page 1439

1 fact that Mountain Water has done the right thing,
 2 they have taken responsibility for some of the
 3 services and they have a plan to do that in the
 4 future. So it's directly in response to that.
 5 **THE COURT:** No, I'm going to sustain
 6 Mr. Conner's objection. I think it's
 7 inappropriate to go there.
 8 **MR. CONNER:** Your Honor, could we also
 9 request that--the exhibit that's been provided has
 10 a section on it for the replacement cost of
 11 services, and that that should be redacted in what
 12 goes to the Commission.
 13 **MS. JONES:** That's just for demonstrative
 14 purposes. We didn't intend it to go into
 15 evidence. It's listed as D-09 and we'll just
 16 collect it at the end of this, Your Honor.
 17 **THE COURT:** It looks like that section
 18 also includes meters, right?
 19 **MR. CONNER:** Well, their line item, they
 20 could redact it, Your Honor, is what they could
 21 do. But she's already given it to the
 22 commissioners, so that's okay.
 23 **MS. JONES:** Whatever you want us to do,
 24 Your Honor, we will do.
 25 **Q.** (By Ms. Jones) All right. Let's talk

Page 1440

1 about the materials and the age of the pipes in
 2 the ground. Is that problematic?
 3 **A.** Yeah. The majority of the pipe that's in
 4 the ground is older than 45 years, with much of it
 5 closing on 80, 90 years old. You know, a great
 6 deal of it, about 20 percent, has already exceeded
 7 its useful life.
 8 **Q.** In your opinion, is it reasonable to
 9 expect that the pipe that is 40 to 80 years old
 10 will still have 70 percent of its useful life
 11 left?
 12 **A.** No. There is no evidence to be able to
 13 show that. Particularly the type of materials. A
 14 lot of the materials are antiquated, aren't even
 15 manufactured any longer, like Kalamein pipe and
 16 invasion piping. Cast iron piping is not used any
 17 longer.
 18 And to be able to say that there's in
 19 some cases 70 or 80 or, in some of the estimates,
 20 over 100 years in projected remaining life is not
 21 realistic.
 22 **Q.** All right. Let's go back to the RCNLD
 23 analysis by Mr. Mantua.
 24 Did you find discrepancies in the
 25 construction costs and administrative fees used by

Page 1441

1 Mr. Mantua?
 2 **A.** Yes. We reviewed his construction costs.
 3 In most cases they were reasonable. However, in
 4 particularly the pipelines, the cost that he used
 5 was--really should have been inclusive of
 6 engineering construction costs, as well as all the
 7 appurtenances. He's stated in there that's he's
 8 included appurtenances in his report. So anything
 9 like valves, isolation valves, you know, other
 10 fittings and those types of things should have
 11 been all included in his base rate. So it's
 12 relatively inflated for some of those extra cost
 13 factors.
 14 **Q.** How about the administrative fees as
 15 well? Typically are the construction and design a
 16 part of the capital project for constructing main
 17 replacement projects?
 18 **A.** In review of quite a few number of the
 19 job orders that were provided here recently right
 20 before the Court hearing is, they had included a
 21 Mountain Water Company administrative fee on every
 22 job order, work order that I reviewed.
 23 **Q.** Was that appropriate?
 24 **A.** I don't know what it's for. It certainly
 25 raises a red flag.

Page 1442

1 **Q.** Okay. You mentioned that when you worked
 2 at American Water that you were involved in
 3 the--both the sale and in the acquisition of water
 4 companies at American Water; is that right?
 5 **A.** Primarily the acquisition of smaller
 6 water utilities, yes.
 7 **Q.** Okay. Can you describe your experience
 8 in that regard?
 9 And really the question is, is it
 10 appropriate at all to use the replacement cost
 11 less depreciation analysis, in your opinion?
 12 **A.** No.
 13 **MR. CONNER:** Objection, Your Honor.
 14 This witness has not been identified as
 15 an expert to talk about valuation of the
 16 companies. In his deposition he testified he was
 17 not a valuation expert. He's an engineer. And no
 18 foundation has been laid.
 19 **THE COURT:** Ms. Jones, is there
 20 additional foundation that you need to lay?
 21 **MS. JONES:** I'm not asking him for a
 22 valuation opinion. I'm asking him, based on his
 23 experience of, whether the method of replacement
 24 cost new less depreciation has ever been used by
 25 him in his experience in valuing the companies.

Page 1443

1 I'm not asking him to put a price on it. I'm just
 2 asking him about the method and whether it was
 3 appropriate in his experience.
 4 **THE COURT:** I think that's legit.
 5 **MR. CONNER:** There is a difference
 6 between valuing companies and buying companies at
 7 a certain price.
 8 If she's asking him testimony about what
 9 he's experienced in valuing companies, he's
 10 testified he's not a valuation expert. If she's
 11 asking him about the price American Water may have
 12 paid for a company, then I don't mind that
 13 question.
 14 **THE COURT:** I thought she was asking him
 15 about the method that they used to set the price.
 16 **MR. CONNER:** She said value, Your Honor.
 17 And she said "appropriate at all."
 18 **MS. JONES:** I can rephrase the question.
 19 **THE COURT:** All right, thank you,
 20 Ms. Jones.
 21 **Q.** (By Ms. Jones) In your experience at
 22 American Water, did you ever use the replacement
 23 cost less depreciation analysis in looking at the
 24 acquisition of any company?
 25 **A.** No, we did not.

Page 1444

1 Q. What methods did you use?
 2 A. We used original cost less depreciation,
 3 or rate base, which is essentially book value.
 4 Q. And what's the difference? Why did you
 5 use that analysis versus what we've seen in court
 6 today?
 7 A. Well, what you are really looking at--
 8 Q. Or over this week, excuse me.
 9 A. Yeah. What you are really saying is what
 10 the value of the asset is, and it's based on the
 11 original cost it took to put the pipe in the
 12 ground, less its depreciation.
 13 Rather than saying what would it take to
 14 rebuild the system today. And that would be the
 15 valuation of whatever--you know, that asset is.
 16 So we typically never would use that as a
 17 justification of any of the systems that we
 18 purchase.
 19 Q. Is there a difference between replacement
 20 cost and reproduction cost?
 21 A. Yes.
 22 Q. What is that?
 23 A. Replacement cost is going and replacing
 24 that particular asset with a new, updated--I guess
 25 I use it--my best way in terms of replacement cost

Page 1445

1 is using a car. You know, if it's got a 1947
 2 Chevy in there, you know, the--I'm sorry, not
 3 replacement cost, but--
 4 Q. Reproduction?
 5 A. Reproduction cost would be putting the
 6 exact 1947 car in place.
 7 Replacement cost is that you are going to
 8 put a new car in there that would replace that
 9 actual car. That would be actually the difference
 10 between those.
 11 Q. When you evaluated Mountain Water
 12 Company's assets, did you find that there were
 13 inefficiencies systemic in the system?
 14 A. Yes, we did.
 15 Q. Can you please describe those.
 16 A. Well, mainly in terms of the condition of
 17 the facility. I think the employees did a great
 18 job of operating based upon the antiquated
 19 equipment and limited resources they had. But
 20 there was definite evidence of not actually
 21 replacing and maintaining equipment up to
 22 standards that would actually reduce the operating
 23 costs of the company.
 24 Q. How about the number of wells? Did you
 25 find inefficiencies there?

Page 1446

1 A. Absolutely. Due to the leakage issues
 2 that they had to continue to put wells, they had
 3 probably twice as many wells as they would need to
 4 be able to provide to actually meet their max day
 5 demand. So actually half the wells that they are
 6 operating are actually pumping water back into the
 7 ground.
 8 Q. If the leakage is fixed, what would
 9 happen?
 10 A. Obviously as they continue to reduce
 11 leakage they wouldn't need those wells unless
 12 there was other additional growth and customers
 13 that were there. They would have stranded
 14 investments. And in terms of the PSC, if it's not
 15 used and useful, then they are required to take
 16 those assets out of rate base and can no longer
 17 earn on them.
 18 Q. What about the storage? What did you
 19 find about the storage?
 20 A. They had very limited storage in their
 21 system for a system of this size and of demand.
 22 They only had 10 million gallons worth of storage.
 23 And that they were augmenting storage from the
 24 wells to be able to meet operational storage, as
 25 well as fire flow demands.

Page 1447

1 Q. We know that we have some hills in this
 2 community. Can you describe how the water moved
 3 into the hills and whether that's an efficient
 4 use.
 5 A. Yeah. They have 40-some-odd different
 6 pressure zones through the system, and they do a
 7 lot of pumping the water from the wells into the
 8 first gradient and booster stations that pump that
 9 up to higher elevations.
 10 But then they turn around and have, I
 11 think, 27 pressure-reducing stations where they
 12 actually break the head and actually go and burn,
 13 basically, power to be able to reduce those
 14 pressures back into these different. If we were
 15 going to go and build a system today, we wouldn't
 16 build it with all those inefficiencies. It's
 17 obvious this system has been piecemealed together
 18 over time.
 19 Q. All right. At this time I would like to
 20 have you turn to D-100. Let's talk about--
 21 MS. JONES: And, Your Honor, these
 22 are--D-100 is a selection of photos. All of them
 23 are found within Exhibits 1190 through 96 which
 24 you already admitted, and we would just like to
 25 demonstrate to the commissioners some of the

Page 1448

1 problems that HDR found.
 2 **MR. CONNER:** Your Honor, I object to the
 3 characterization of the photographs. They know
 4 they are photographs. She doesn't have to give
 5 them what they look like.
 6 **THE COURT:** Go ahead.
 7 **Q.** (By Ms. Jones) What are we--well, can
 8 you set us up on how these photographs are
 9 organized.
 10 **A.** Yeah. At each of the facilities we then
 11 took a picture of the nameplate of the facility as
 12 we went into it to keep a record of what pictures
 13 went to what facility.
 14 **Q.** All right. Let's turn to 100, Page 2.
 15 **A.** This is an example in the Russell--well,
 16 one of the discharge pipes that's in the well
 17 facility. You can see considerable rust and
 18 corrosion on the pipe, blistering.
 19 You can also see on the floor
 20 where--those are the chemical feed application
 21 points--where there is chemical spills on the
 22 floor. Of particular concern is, there is a floor
 23 drain there that has chemicals spilled on top of
 24 it, so you are exposing chemicals to an open floor
 25 drain.

Page 1449

1 So this was a pipe that was in relatively
 2 poor condition and you can see the evidence of
 3 deferred maintenance on maintaining the pipe that
 4 was there.
 5 **Q.** Let's look at the next page, 100, Page 3.
 6 **A.** Yeah, this is the same pipe, just looking
 7 at the pipe that's below it and the chemical
 8 spills that are falling down on the pipe below and
 9 corroding the pipe underneath of it.
 10 **Q.** Is it important--is the condition of the
 11 flooring important?
 12 **A.** Yeah, there's spalling on the concrete.
 13 Obviously deterioration of the concrete itself is
 14 reducing the life of the facility.
 15 **Q.** Let's go to the next photo, 100-4. Just
 16 carry on. I'm not sure I can fix it.
 17 **A.** This is an example of one of the
 18 operating fans of the HVAC system where they use
 19 an actual regular house fan and strap it up to the
 20 wall at the louver to be able to try to cool the
 21 facility.
 22 **Q.** Go ahead to the next photo, 100-5.
 23 **A.** This is one of their chemical feed
 24 systems and they use all sodium hypochlorite in
 25 day tanks. There was no actual proper fill

Page 1450

1 capabilities where they would maintain the spill
 2 from actually when they fill the chemical. So
 3 there's exposure of spills outside of the spill
 4 containment. All the feed lines were not double
 5 lined or contained along the system. And there
 6 was evidence of spills and corrosion on the HVAC
 7 system from the chemical vapors themselves.
 8 **Q.** I'll go ahead and show you guys the
 9 bottom of that photograph since it's cut off.
 10 **A.** You can see the chemical on the floor.
 11 And the other point there, is there is
 12 another open floor drain within the spill
 13 containment area.
 14 **Q.** Let's go to the next photo, D100, Page 6.
 15 **A.** This is just showing the corrosion within
 16 the chemical of the equipment that's mounted on
 17 the wall of the chemical room. You can see it's
 18 rusting and supported. It's turned sideways,
 19 unfortunately, there.
 20 **Q.** Let's go to the next photo.
 21 **A.** This is the Pattee Creek well facility.
 22 **Q.** 100, Page 8.
 23 **A.** This is the motor. It's cut off at the
 24 bottom again. The pump is actually the blue
 25 portion. That's the pump head.

Page 1451

1 Most noticeably is the amount of moisture
 2 and water corrosion along the wall down at the
 3 bottom.
 4 The other thing is, this is one that the
 5 pump was not mounted to the foundation. It was
 6 just sitting there. They did not use anchor bolts
 7 or anything, so all the stress of the vibration is
 8 being taken out by the discharge piping itself,
 9 which then leads to premature, you know, life of
 10 the pump itself.
 11 **Q.** Let's go to the next photo.
 12 **A.** This is just an example down below, where
 13 you see where the anchor bolt would be, it's
 14 missing. The hole's there. And you can see how
 15 much corrosion there is on the floor and of the
 16 concrete foundation.
 17 **Q.** Why don't we step ahead to 100-11.
 18 **A.** Again, this is just showing the base of
 19 the pump where it's not connected, and the
 20 corrosion of the foundation.
 21 **Q.** Is this a condition that you found at
 22 multiple locations?
 23 **A.** Yes, we did.
 24 **Q.** Okay. Let's go to 100, Page 12.
 25 **A.** This is the Rattlesnake Booster Station

Page 1452

1 that we looked at.
2 **Q.** Okay. And next photograph.
3 **A.** What you see here, there are three pumps
4 in this facility and there was quite a bit of
5 moisture. There is only a partial concrete floor.
6 A lot of dirt that's in there.
7 They have truck mats that are over
8 top--laying over the top of the pumps because of
9 excess spray. We'll show it again in another
10 picture, but you can see it in the background.
11 On instrumentation equipment, there is
12 corrosion on instrumentation equipment.
13 And there is also hazard signs on pumps
14 that because of concerns of arc flashing with all
15 the water, there's hazard signs on the equipment
16 for protection. There is inadequate space between
17 the pumps to actually work on them.
18 **Q.** Let's go to the next photo, Page 14.
19 **A.** This is just a close-up of the two pumps.
20 You can see how close they are. You can see the
21 dirt floor. The pumps were not mounted on the
22 concrete base. They were actually on wood shims.
23 They were just sitting there.
24 Again, there was spray and corrosion on
25 the walls from overspray from the pumps.

Page 1453

1 Again, we show a picture of the warnings
2 of the concerns that they had of arc flashing on
3 the motors.
4 **Q.** Let's go to 100, Page 16. There you go.
5 **A.** This is just a close-up of the
6 instrumentation panel and the corrosion from the
7 overspray.
8 **Q.** Can you determine from what you were
9 seeing there whether this has been a long-term
10 problem?
11 **A.** Yes, you can see evidence by the rust and
12 water exposure that this has been going on for
13 quite some time.
14 **Q.** The next page, 17.
15 **A.** This is the warning sign that they have
16 on the pumps, indicating that there is a shock
17 hazard and arc flash concern from these motors and
18 it's a safety hazard.
19 **Q.** Next photograph, please.
20 **A.** This is really kind of showing the
21 close-up of the corrosion of the piping that was
22 under the metal mesh that was covering the piping
23 on the discharge of the pumps.
24 **Q.** Page 19.
25 **A.** This is a close-up of the wood shims that

Page 1454

1 were supporting the pump. Again, they just set
2 the pumps there and shimmed them up with no
3 foundation.
4 The proper way is to use a nonmetallic,
5 nonshrink grout. Float it underneath and anchor
6 bolt them down to prolong the life of the pumps.
7 **Q.** Next photograph.
8 **A.** That's turned as well. There you go.
9 The roof was repaired, a new roof was put
10 on. However, there was considerable evidence of
11 leakage that was in the ceiling of that.
12 And the only ventilation for this whole
13 facility is that one louver that's there, which is
14 really inadequate for the facility.
15 **Q.** Next photograph.
16 **A.** This is one of the discharge pipes from
17 the pumps. You can see the corrosion that's
18 occurred. You can see the dirt floor below it.
19 And obviously you can see that it's not
20 been maintained, the pipe painted, or it's
21 starting to corrode and pit and will need
22 significant maintenance to maintain the life.
23 **Q.** Let's go to the next photograph. It's
24 22.
25 **A.** This is the Willowwood well.

Page 1455

1 **Q.** Next page, 23.
2 **A.** This is a motor that was there. It was a
3 2,400-volt motor that was rebuilt for 480 use,
4 which is very inefficient. There was no really
5 evidence that we could find on the pump. When I
6 asked the operator the age, he indicated it was
7 probably over 75 years old. So this is the age of
8 the materials that were there that we saw in one
9 of the facilities.
10 **Q.** Did you evaluate information about the
11 general efficiency of the pumps in the booster
12 stations and the wells?
13 **A.** Yeah. Mountain Water Company had two
14 recent electrical or power efficiency/pump
15 efficiency studies done. We reviewed those.
16 And it was evident that the pumps were
17 almost all below industry standards in terms of
18 efficiencies. We would expect well pump
19 efficiencies in the 75, 80 percent efficiency for
20 the well pump. They were down in the 50s and 60
21 percent range of efficiencies.
22 And as well as for the booster pumps, we
23 would expect that in and around the 70 percent
24 range of efficiency. We saw some as low as 25
25 percent efficient in that study. And that study

Page 1456

1 was done in 2013, well past the time frame that
 2 they indicated that there was any maintenance
 3 really done.
 4 Q. And when were these photographs taken?
 5 A. These photographs were taken in
 6 September-October of 2014.
 7 Q. Okay. Next photograph.
 8 A. This is just a picture of the--whoops,
 9 turn. Here you go--of the pump, the waste valve,
 10 pump control valve. You are starting to see it.
 11 This is one of the facilities that had
 12 the metal jacketing, and we'll have another
 13 picture of that coming up here.
 14 Q. Can you see evidence of corrosion on this
 15 piece of equipment?
 16 A. Yes. You can actually see the rust and
 17 the corrosion on the valve itself and on the
 18 piping that we could see.
 19 Q. Okay, next photograph. That's upside
 20 down, too.
 21 A. That's flipped upside down. You had it
 22 right there.
 23 Anyway, what this is showing is this pump
 24 is not anchored down as well. There were no
 25 anchor bolts found mounting it to the foundation.

Page 1457

1 It was just sitting there.
 2 Q. All right. Next photograph.
 3 A. It's difficult to see, but this is the
 4 discharge pipe that leaves the well station going
 5 out. There you go.
 6 And one that was operating. This is one
 7 of the facilities that was operating. There was
 8 water and spray that was coming out. It was
 9 severely corroded and in imminent failure just by
 10 the amount of water that was blowing out of the
 11 different cracks that were there.
 12 Next picture is--whoops, again, turned
 13 around.
 14 This is the discharge as they dumped it
 15 into an open channel that was there. What you can
 16 see there is they used fence to try to hold back
 17 the embankment that they were eroding away from
 18 the discharge of the pump. So they actually put a
 19 regular fence right in there and tried to backfill
 20 against it.
 21 Q. Next photograph.
 22 A. This is turned around. There you go.
 23 This is what the metal jacketing looks
 24 like. This is how--a number of the facilities and
 25 the insulation was put around it. We could only

Page 1458

1 visualize--it wasn't on all of the facilities, but
 2 it was on several that we did inspect.
 3 Q. Okay. Let's go to the next photo, 29.
 4 A. This is the Hilda well.
 5 Q. Let's go to 30.
 6 A. This is the building of the well facility
 7 itself. It's a metal building. You can see the
 8 chemical building that's been tacked on to the
 9 side of the facility there.
 10 Q. Next photograph.
 11 A. This is the inside of the chemical
 12 building. You are not seeing the bottom which--
 13 Q. There you go.
 14 A. --which shows there were chemical spills.
 15 And there was inadequate spill containment for
 16 holding these, so any spill is going to leak out
 17 onto the ground.
 18 Q. Next photo, Page 32.
 19 A. This is a picture of the discharge pipe
 20 of the well. And you can see the corrosion and
 21 the condition of the piping itself. It's severely
 22 rusted and corroded. And to keep it together they
 23 actually used, you know, rods to try to keep the
 24 coupling together there. So this is just an
 25 example of the condition of the facility itself.

Page 1459

1 Q. Next photo.
 2 A. This is just another picture of the pipe.
 3 It's turned sideways. Yeah, you see where the
 4 chemical feed point is. There was evidence of
 5 leakage of chemicals around that and actual
 6 corrosion on the pipe itself.
 7 Q. Next photograph, Page 34.
 8 A. This is the Lower Elk Ridge Booster
 9 station.
 10 Q. One more photo and then we'll wrap up.
 11 A. What's interesting about this is they
 12 obviously had a problem there on the pump
 13 coupling. They actually cut half of the housing
 14 away to be able to get access to it and left it
 15 that way, which is really not appropriate to do
 16 that in terms of repair.
 17 So you can see where they actually cut
 18 and ground away to be able to get to the coupling
 19 itself. But they didn't go and maintain it. They
 20 didn't go back and repair it or do anything for
 21 the structural integrity of that.
 22 Q. This is probably a good breaking spot.
 23 **THE COURT:** All right. So we really have
 24 reached lunchtime, so we'll be in recess until
 25 1:30.

Page 1460

1 A reminder, just don't discuss the case,
2 do any independent research.
3 Mr. Close, if you would wait there until
4 the commissioners have left.
5 (Whereupon, court was in recess at
6 12:07 p.m., reconvened at 1:31 p.m.)
7 **THE COURT:** Once again, do the parties
8 agree that the jurors in the jury box are the
9 commissioners appointed by this Court to determine
10 fair market value of the water system?
11 **MR. MERCER:** Yes, Your Honor.
12 **MR. CONNER:** Yes, Your Honor.
13 **MS. JONES:** Yes.
14 **THE COURT:** Thank you.
15 Mr. Close, you understand you are still
16 under oath?
17 **THE WITNESS:** Yes.
18 **THE COURT:** You may continue, Ms. Jones.
19 **Q.** (By Ms. Jones) Before the break we were
20 talking about the Lower Elk Ridge Booster station
21 at D100-34. And I think we were two photos in at
22 37.
23 **A.** That's correct.
24 **Q.** I actually want to skip a few. We want
25 to try to get through these. Let's go to 37.

Page 1461

1 What do you see here?
2 **A.** You see the valve and the angled pipe
3 that's been manufactured. We looked at that pipe
4 and it was determined that it was at imminent
5 failure. The corrosion had reached the point
6 where the structural integrity of the pipe had
7 been exceeded.
8 **Q.** Let's go to the next photo, 38. The same
9 pipe?
10 **A.** That's the same piece of pipe, yes.
11 **Q.** Okay. And what is the problem here?
12 **A.** Well, the problem is that the pipe could
13 fail and--both in terms of damage to the station
14 itself.
15 Now, they do have redundant pumps, but
16 depending on what happens with the water until
17 that gets shut off, what happens to the station.
18 **Q.** Are there things that could be done to
19 stop the pipe from getting to this point?
20 **A.** Well, they should have had preventative
21 maintenance where they actually had taken off all
22 the rust, corrosion, primed it, painted it and
23 maintained it to a proper coating to protect it
24 from the corrosion that's occurred. But it's now
25 reached the point where it's pretty much beyond

Page 1462

1 the ability to repair.
2 **Q.** Let's go to the next photo, 100-39. What
3 is this?
4 **A.** This is the Upper Prospect booster.
5 **Q.** Okay, next page.
6 **A.** This is turned.
7 **Q.** I'll give you this one here. What are we
8 looking at here?
9 **A.** Well, what we're looking at is the pump
10 is on the left-hand side and the control valve is
11 the closest to us. The pump is not mounted on
12 anything. It's up in the air. It's mounted just
13 off the flanges of the piping, and you can see the
14 base of the pump is above the floor.
15 **Q.** Let's go to the next photo.
16 **A.** As you can see here, this is one of the
17 supports they have under the pipe. But the pump
18 itself is not installed on any type of foundation
19 or any type of support, which is totally against,
20 you know, best practices within the industry.
21 **Q.** The next photo, please, 44--excuse me,
22 43.
23 **A.** This is the other side. This is the
24 space that's underneath the pump, underneath the
25 pump itself.

Page 1463

1 **Q.** All right, let's go to the next photo.
2 Skip ahead to 50. We've already seen these.
3 Which well are we talking about here?
4 **A.** This is the South Avenue one.
5 **Q.** Okay. Next page, 51.
6 **A.** This is another example of how the
7 condition of the pipe is allowed to be severely
8 corroded. Evidence of chemical spills, and to the
9 point where it's corroding the actual concrete
10 floor underneath of it.
11 **Q.** And when you say spill, I mean, what are
12 you talking about there?
13 **A.** Well, there is an injector where the
14 sodium hypochlorite comes through a plastic line,
15 then goes into a diffuser into the pipe where they
16 use it for disinfection.
17 At that joint or that connection there is
18 a leak around the diffuser or in the connection of
19 the plastic pipe that then runs down onto the
20 pipe, then onto the floor.
21 **Q.** Can you see that in this photograph in
22 particular?
23 **A.** It's hard to see.
24 **Q.** There is a pointer that I just gave you.
25 **A.** Yeah, this is the line that's coming in

Page 1464

1 from there into the diffuser. It's going into the
2 top of the pipe. It's hard to see it behind it,
3 but there might be a better picture later.
4 **Q.** Okay. Did you see this at multiple
5 locations?
6 **A.** Yes. At numerous locations did we see
7 that there was no spill containment around the
8 connection point to the pipe, and that there was
9 evidence of spills and leakage.
10 **Q.** Could you tell whether or not these were
11 isolated events or chronic problems?
12 **A.** Based on the deterioration of the piping
13 and the floor and the concrete, these were
14 long-term issues.
15 **Q.** Okay. Let's go to Page 52.
16 **A.** This is a close-up of the pipe. You can
17 see the diffuser coming in here. But you can see
18 there the pipe has reached the point where the
19 structural integrity of the pipe is now starting
20 to fail.
21 **Q.** Okay. 53.
22 **A.** This is the chemical room. You can see
23 obviously that they had some problems with spill.
24 Obviously this is chemical. This is sodium
25 hypochlorite that's dripping off of the fan. You

Page 1465

1 can see the corrosion on the fan and the sodium
2 hypochlorite all over the walls, so they have
3 obviously had operational problems where they have
4 had spill or spray from the chemicals all over
5 inside of the chemical building.
6 **Q.** Let's go to the next photo, 54.
7 **A.** This is again the same station. The fan
8 was just above this. You can see all the
9 corrosion and the deterioration of the wall and
10 the evidence of spill of the chemical on the wall
11 itself. There is no spill containment on the
12 chemical lines themselves, which they are required
13 to do.
14 **Q.** Okay. Page 55.
15 **A.** Just to show how much vapors and how much
16 spill, this is the door to the chemical building.
17 It's corroded to the point where it's starting to
18 fall apart. So that's how much chemical vapors
19 that are actually in this room. So the
20 ventilation system is not working and there's just
21 having that much exposure to chemical. So that's
22 a safety hazard that they have right there.
23 **Q.** All right. And that's not all the photos
24 that you took; is that right?
25 **A.** No. We experienced these types of things

Page 1466

1 at numerous facilities.
2 **Q.** You can take that down now.
3 One follow-up question about Mr. Mantua.
4 You understand that he was allowed to take some
5 samples of the pipe. Do you recall that?
6 **A.** Yes.
7 **Q.** Do you find Mr. Mantua's pipe sampling to
8 be reliable?
9 **A.** No, I do not.
10 **Q.** Why not?
11 **A.** It's relatively such a small and
12 selective sampling of the piping. It's only
13 150 feet of pipe. It's very evident that they
14 didn't take any of the real older pipe, and some
15 of the materials that they selected were not
16 necessarily the, you know, worst materials they
17 could have checked. There wasn't a good
18 cross-section of the sampling of the pipe that was
19 out there.
20 **Q.** Okay. I want to talk to you briefly
21 about the Wilderness Dams and the intake dam.
22 **A.** Okay.
23 **Q.** Did HDR also do an assessment of those
24 dams?
25 **A.** Yes.

Page 1467

1 **Q.** And did that include a physical
2 inspection of the dams?
3 **A.** Yes, it did.
4 **Q.** What were the findings? In summary
5 fashion, please.
6 **A.** We found--relatively they were in fair to
7 poor condition. There was a lot of
8 stability--slope stability issues, seepage issues,
9 cracking on the structures themselves. There was
10 a lot of erosion. And the fear of the overtopping
11 during winter months of flow would ultimately
12 bring--you know, overtop and the dams could fail
13 and damage the environment, habitat and
14 particularly the trout fisheries habitat
15 downstream.
16 **Q.** Did you also review the inspection
17 reports that were provided to Mountain Water by
18 Hydrometrics?
19 **A.** Yes. Mountain Water Company would have
20 annual kind of operations inspection reports, not
21 stability analysis or any detailed analysis,
22 comprehensive analysis done. And they listed a
23 number of deficiencies and preventative
24 maintenance that they had ticked off. And those
25 were repeated from year to year, that they weren't

Page 1468

1 being done. So, yes, we looked at that. And it
 2 was evident when we did our inspection they were
 3 still not done at the time of our inspection.
 4 **Q.** Okay. Let's talk about the intake dam
 5 quickly. I would like to show you D1, Page 1.
 6 **MS. JONES:** Another demonstrative
 7 exhibit, Your Honor.
 8 **Q.** (By Mr. Jones) Can you explain to the
 9 commissioners what we're looking at here and what
 10 is of concern to you.
 11 **A.** Yeah, we're looking at the downstream
 12 face of the dam. There is a large longitudinal
 13 crack that goes across the top of the dam.
 14 The deterioration of the divider there is
 15 almost completely gone now. There is evidence of
 16 seepage and I think another picture will show
 17 that, but there is just the strength of stability
 18 and structural integrity of this. And there was
 19 evidence of erosion that was, you know, noticeable
 20 at the abutments.
 21 **Q.** Let's go to 3.
 22 **A.** This is again the abutment--whoops, back.
 23 You can see a vertical crack along the
 24 left side. Longitudinal cracks in the abutments.
 25 There's seepage along the interface between the

Page 1469

1 dam and the abutment. And there is definitely
 2 quite a bit of seepage at the weep hole that shows
 3 that they are having internal cracking and leakage
 4 through the structure itself.
 5 **Q.** Let's go to 5.
 6 **A.** This is in the face of the downstream
 7 face. We saw evidence of seepage was here.
 8 Obviously they had a problem before where they put
 9 a steel plate and there is seepage around the
 10 steel plate, during our inspection.
 11 **Q.** And No. 6.
 12 **A.** This is the upstream face. You can see
 13 the concrete deterioration of the face of the dam
 14 itself where it's spalling and starting to crumble
 15 apart.
 16 And just evidence to the downstream
 17 cracking, which we showed on the other picture,
 18 that the top of the dam is starting to fail.
 19 **Q.** Last one, No. 9 on demonstrative 1.
 20 **A.** Yeah, this is again on the upstream side
 21 of the dam where you see the undermining of the
 22 spillway apron. There is exposed concrete
 23 aggregate. And there is definitely a lot of
 24 sloughing off of the slope around the dam, and
 25 there is definitely a lot of concrete

Page 1470

1 deterioration in the face of the dam itself.
 2 **Q.** What was the overall assessment of the
 3 intake dam?
 4 **A.** The intake dam was in poor condition.
 5 And our overall recommendation for the dams was
 6 that we felt they needed to be taken out of
 7 service. That they be notched and stabilized and
 8 not used for future use.
 9 **Q.** Overall, have the owners of the Mountain
 10 Water Company water, in your opinion, met industry
 11 standards by funding sufficient maintenance and
 12 capital investment?
 13 **A.** No.
 14 **Q.** Overall, does Mountain Water--
 15 **MR. CONNER:** Object to the leading, Your
 16 Honor.
 17 **Q.** (By Ms. Jones) What is your opinion as
 18 to whether or not Mountain Water meets industry
 19 standards with respect to leakage?
 20 **A.** I don't think they have met the industry
 21 standards for providing the proper investment to
 22 maintain the system at industry standards at a
 23 level of service that is typically expected.
 24 **Q.** Overall, can you tell us whether or not
 25 the system as a whole is in good condition?

Page 1471

1 **A.** It's in fair condition. I would not say
 2 it's in good condition.
 3 **Q.** All right, thank you.
 4 **THE COURT:** Cross-examine?
 5 **MR. CONNER:** Yes, Your Honor. Just a
 6 minute if I could.
 7 **THE COURT:** Yes.
 8 **MR. CONNER:** Our piles are growing.
 9 **CROSS-EXAMINATION**
 10 **BY MR. CONNER:**
 11 **Q.** Good morning, Mr. Close--or afternoon.
 12 **A.** Good afternoon.
 13 **MR. CONNER:** May I approach, Your Honor?
 14 **THE COURT:** Yes.
 15 **Q.** (By Mr. Conner) Mr. Close, you
 16 identified your scale, I'll call it the Close
 17 Scale, in your assessment of condition, correct?
 18 **A.** Correct.
 19 **Q.** 1 through 5. 1 is failure or imminent
 20 risk of failure or unrepairable, correct?
 21 **A.** Yes.
 22 **Q.** 2 is poor, 3 is fair, 4 is good and 5 is
 23 like new condition or new.
 24 You just indicated to Ms. Jones that the
 25 system was in fair condition overall, correct?

Page 1472

1 A. Right.
 2 Q. Now, with respect to percentages, can
 3 you, with this scale of 1 to 5, and you rated the
 4 system right in the middle of 3, what percent
 5 condition would you give this system under this
 6 scale?
 7 A. I don't understand your question because
 8 the assets are all going to be different. I would
 9 rate the assets differently.
 10 Q. But you said overall. Can you not
 11 determine and give us if this system is rated 50
 12 percent good compared to original? You can't do
 13 that, can you? Or can you?
 14 A. I would think that would be very
 15 speculative to do that. We came up with a rating
 16 based on the different type of facilities,
 17 different type of asset classes and things to come
 18 up with that conclusion. So it's really not a
 19 percentage type of question.
 20 Q. Well, I understand your scale. I'm
 21 trying to help the commissioners, because
 22 Mr. Mantua did a percent condition. You
 23 understood what he did, right?
 24 A. Yeah. And I didn't agree with it.
 25 Q. I understand that. But you understood

Page 1473

1 what he did and we're seeing what you did. I'm
 2 just saying, how can we compare your scale to his
 3 scale. Can you?
 4 A. Well, let me answer it this way. The
 5 backbone of the system, the wells and the piping
 6 and those things, are more--which is probably more
 7 than half the system, is below fair.
 8 The tanks and booster stations and some
 9 of the other facilities were considered at fair
 10 and good.
 11 Q. All right. Well, give me those other
 12 facilities.
 13 A. The wells and pipes. The piping.
 14 Q. Fair to good?
 15 A. No, poor. Those are poor as well.
 16 Q. I thought you said--
 17 A. No.
 18 Q. Let me start--wait for me.
 19 I want to know what you are rating the
 20 categories to fair and good. You said tanks and
 21 boosters.
 22 A. Booster stations.
 23 Q. Not the wells?
 24 A. Not the wells.
 25 Q. I misunderstood you. What else is fair

Page 1474

1 to good?
 2 A. May I take a look?
 3 Q. It depends on how long it's going to
 4 take.
 5 A. Not very long.
 6 Q. Okay, go ahead. Oh, absolutely. Go
 7 ahead.
 8 A. Okay. The wells were fair to good.
 9 Q. I thought you said the wells were poor.
 10 A. I'm sorry, fair to poor. I misspoke.
 11 Q. So we've got category fair to poor for
 12 the wells.
 13 A. That's correct. Booster stations were
 14 considered fair overall. The reservoirs and the
 15 tanks were considered fair to good.
 16 Q. I'll put tanks/reservoirs.
 17 A. Pipelines were rated from--everywhere
 18 from--and a majority of the footage was considered
 19 poor, to some of it was considered to be in
 20 imminent failure.
 21 Q. So we've got--well, how much percentage?
 22 Would that be the Kalamein and the invasion?
 23 A. And cast iron.
 24 Q. The cast iron is in imminent failure?
 25 A. It was rated at 1.5.

Page 1475

1 Q. So we've got cast iron pipe, CIP, you
 2 know that designation. Does that include the cast
 3 iron lined and unlined, everything?
 4 A. That was the unlined. Unlined cast iron.
 5 Q. What percentage of the system had unlined
 6 cast iron?
 7 A. I would have to--I would have to look at
 8 that, but--go back and look at the actual
 9 percentage. But it's probably at least 10
 10 percent.
 11 Q. 10 percent? Okay.
 12 And then Kalamein and invasion make up
 13 about 5 percent of the whole system, right?
 14 A. There's about 15 miles of--a little over
 15 5 percent. 5 to 7 percent.
 16 Q. Say 5 would be good?
 17 A. 5.
 18 Q. I'll put K for Kalamein, I for invasion
 19 and that makes up total 5 percent. So 15 percent
 20 of the pipe you are saying is in imminent risk of
 21 failure.
 22 A. Plus the galvanized I would put into
 23 that. Galvanized pipe would be in imminent
 24 failure.
 25 Q. Would you agree with me, sir, that if

Page 1476

1 Mr. Mantua depreciated the Kalamein and invasion
 2 pipe by 95 percent, that that's an appropriate
 3 level of depreciation for those pipes?
 4 A. No, I would not. You would have to go
 5 back to what it was originally depreciated. You
 6 can't change the depreciation rate by doing this.
 7 You have to go back to find what was on the books,
 8 find out what was actually depreciated. My guess
 9 is they are 100 percent depreciated already.
 10 Q. On the books?
 11 A. On the books.
 12 Q. If they are 100 percent depreciated and
 13 still carrying water, they are still used and
 14 useful but they are not reflected in rate base,
 15 are they?
 16 A. No, they are not.
 17 Q. Let's take that right now because
 18 Mr. Barrett asked a question of the last witness
 19 about what book value is.
 20 Now, book value is original cost less
 21 book depreciation, isn't it?
 22 A. Correct.
 23 Q. That's the same as rate base, right?
 24 A. Correct.
 25 Q. Now, book value and rate base does not

Page 1477

1 include items that are fully depreciated but still
 2 in service. Correct?
 3 A. That's correct.
 4 Q. And a fairly large percent of the pipe in
 5 this system is fully depreciated on the books,
 6 isn't it?
 7 A. That's correct.
 8 Q. Would you say 40 percent, 50 percent?
 9 A. I would just be speculating. I'll take
 10 your word on it.
 11 Q. Say 50 percent of the pipe?
 12 A. Yeah.
 13 Q. So 50 percent of the pipe is fully
 14 depreciated and is not reflected in book value or
 15 rate base. One and the same.
 16 Okay. And I'm going to say that's the T
 17 & D mains?
 18 A. Uh-huh.
 19 Q. Yes, sir?
 20 A. Yes.
 21 Q. Okay. Transmission and distribution
 22 mains.
 23 All right. In addition to that you are
 24 familiar with contributions, whether they are
 25 coming to the system, developer?

Page 1478

1 A. Funded by Others.
 2 Q. Funded by Others. When something is
 3 Funded by Others, it's still owned by the utility,
 4 isn't it?
 5 A. Well, they are responsible for owning and
 6 operating it, that's correct.
 7 Q. Owning, operating it. They depreciate
 8 it. They pay taxes on it generally, correct?
 9 A. They don't--they don't earn on it. Only
 10 what's in rate base do they depreciate.
 11 Q. Right. But they own that pipe.
 12 A. Well, they--it doesn't go into rate base
 13 until they actually pay the developer back.
 14 Q. Right. But when they pay the developer
 15 back, that portion of it does go to rate base,
 16 right?
 17 A. That's correct.
 18 Q. All right, so contributions--and we'll
 19 call it CIAC, contributions in aid of
 20 construction, correct?
 21 A. Correct.
 22 Q. CIAC is not in rate base until the
 23 developer is paid back.
 24 A. That is correct.
 25 Q. And in Mountain Water's case they have a

Page 1479

1 40-year contract where they are obligated to pay
 2 back the full amount over 40 years.
 3 A. That's correct.
 4 Q. And then in addition to that, that's not
 5 included in rate base, would be any nonutility
 6 property or excess property that's not utilized in
 7 the system.
 8 A. So if it's not used and useful, it's not
 9 in rate base or book value.
 10 Q. Right. So if it's not in rate base--and
 11 I think you testified in the last trial and I
 12 believe you testified here just now, that Mountain
 13 Water has more than enough groundwater rights in
 14 the ground itself and it's not necessary for them
 15 to use the Rattlesnake water rights. Correct?
 16 A. That is correct.
 17 Q. So the Rattlesnake water rights would be
 18 excess property?
 19 A. Right.
 20 MS. JONES: Objection, calls for a legal
 21 conclusion.
 22 THE COURT: That's overruled.
 23 Q. (By Mr. Conner) The Rattlesnake water
 24 rights under that analysis would be excess,
 25 correct?

Page 1480

1 A. If there's value to it.
 2 Q. I didn't ask you about value, sir. I
 3 asked you about the water rights themselves.
 4 A. They would be outside of rate base.
 5 Q. So I'm going to say excess--or nonutility
 6 property.
 7 A. Nonutility property.
 8 Q. And so the Rattlesnake water rights
 9 are--should be considered as nonutility property.
 10 Correct?
 11 A. Correct.
 12 Q. Under this analysis.
 13 And then in addition to that with respect
 14 to the groundwater rights, if it's proven--not
 15 from you. But if it's proven that there are
 16 excess groundwater rights over what's needed for
 17 the operation of the system, that could also be
 18 viewed as nonutility property. Correct? Under
 19 the same analysis.
 20 A. Possibly. I would have to see the
 21 determination of value.
 22 Q. I understand. But just under that
 23 hypothetical the same would apply, right?
 24 A. Yes.
 25 Q. All right, excess groundwater rights.

Page 1481

1 Now, is there anything else that's not
 2 included in rate base that you are familiar with?
 3 A. Not that I'm aware of.
 4 Q. Okay. Thank you.
 5 Now, Mr. Mantua, I think you indicated
 6 that he had been--I believe you said, "We reviewed
 7 his construction costs and in most cases they were
 8 reasonable." Do you recall saying that?
 9 A. Yes.
 10 Q. And his construction costs are reflected
 11 on--summarized on Exhibit 2541.
 12 Can you pull that up, Matt.
 13 Craig, it's up here--or Mr. Close, I'm
 14 sorry. Now, you indicated that--I think you said,
 15 just did, that by and large they were reasonable.
 16 But you also indicated that you felt his RCN,
 17 replacement cost new, right here, for the pipe--
 18 A. Right.
 19 Q. --\$259 million--
 20 Can you highlight that one, Matt.
 21 --that that should have included the
 22 valves, the nuts, the bolts and things of that
 23 nature.
 24 A. Yes. Based on the unit prices that we
 25 have and what we used in our estimate. Our

Page 1482

1 estimate is very comparable to the 219,683, but
 2 that included valves, hydrants and also
 3 engineering construction costs.
 4 Q. Okay.
 5 A. So the other costs were--
 6 Q. Let me stop you there.
 7 So are you saying, then, that his system
 8 valves and regulating valves, approximately
 9 11.7 million there--
 10 Matt, highlight the 9 and the 2 there.
 11 There you go.
 12 You are saying that that should have been
 13 included in a line item for the pipe.
 14 A. Yes.
 15 Q. Okay. So under your analysis then he
 16 should just deduct those, to be fair in your
 17 assessment.
 18 A. Correct.
 19 Q. That should come off the top,
 20 11.7 million, off his RCN, correct?
 21 A. Correct.
 22 Q. Now, was his nonconstruction percentage
 23 that he applied for nonconstruction costs, was
 24 that appropriate?
 25 A. No. We felt that that should have been

Page 1483

1 in the actual base costs, because the cost he was
 2 using was inflated for the overall cost of the
 3 pipe.
 4 We feel that the overall value of the
 5 pipe is roughly--for the replacement cost new, is
 6 very close to the \$219 million.
 7 Q. So what we would need to do then is put
 8 the 219 where the 259 is; is that right?
 9 A. Correct.
 10 Q. And then delete the 9.5 and the 2.1 for
 11 system valves and regulating valves.
 12 A. And fire hydrants. You missed the six
 13 million for fire hydrants.
 14 Q. Well, fire hydrants are above the ground.
 15 A. Yeah, but that's included with all the
 16 piping. The cost is below ground anyway.
 17 Q. That's how do you it.
 18 A. That's how we do it.
 19 Q. So let's also delete 6 million there for
 20 hydrants.
 21 A. Correct.
 22 Q. So we're deleting everything in yellow:
 23 9.5, 2.1 for regulating valves, 6 million for
 24 hydrants and 259 for pipe. And we're replacing
 25 those entries with 219.6 million. Correct?

Page 1484

1 A. That's a typical cost that we've come up
2 with for that same--
3 Q. Just yes or no, sir.
4 A. Yes.
5 Q. Okay. And then based on what you said
6 earlier, are the other costs then and the
7 nonconstruction percentage that are applied, are
8 those reasonable? Are those what you were viewing
9 as the reasonable costs?
10 A. Yeah, they are relatively reasonable,
11 yes.
12 Q. For the commissioners' sake then, if we
13 just do simply what I said and deduct everything
14 that's in yellow on total RCN and put over 219,
15 then we'll add everything up and you would agree
16 that that's a reasonable reproduction or
17 replacement cost new for this system?
18 A. Yes.
19 Q. Okay. Did you make that calculation?
20 A. Yes.
21 Q. And what was your number?
22 A. Well, what we did is we checked this
23 number and we were very close to this. We were
24 slightly lower than that.
25 Q. But you would go with this number?

Page 1485

1 A. Close enough.
2 Q. Okay. Can you make that calculation for
3 me, Matt, and we'll come back to it, or Katie.
4 All right--didn't have quite a long-enough lunch
5 to do that.
6 Let's see. Now, you indicated that the
7 sampling that Mr. Mantua did was not reliable.
8 Correct?
9 A. Correct.
10 Q. You didn't sample any pipe, did you, sir?
11 A. We weren't allowed to. You did not let
12 us do it.
13 Q. I did not let you do it?
14 A. You did not let us do it.
15 Q. Did we have a conversation about that?
16 A. Yes, we did, on September 10th on the
17 phone.
18 Q. On the phone. And was that the phone
19 call that Craig Stonehouse was on with you and me
20 and Ms. Jones?
21 A. Yes.
22 Q. Did Ms. Jones forward you my e-mail in
23 regard to that?
24 A. No.
25 Q. She didn't?

Page 1486

1 A. No.
2 Q. Let's take a look at your deposition,
3 sir.
4 Matt, let's go to--I believe it's 58.
5 And let's go to Line 16--or 18. No, let's go
6 above that. Line 12.
7 "Isn't it true that prior to and during
8 the inspection of the water system--I believe
9 it began on September 29--that you--or that
10 neither you nor anyone else on your team
11 requested underground sampling of pipe?"
12 Your answer? What is your answer, sir?
13 "That is correct." Isn't it?
14 A. I have to answer the question as, we
15 asked on the 10th. You had already made it
16 abundantly clear beforehand that we were not
17 allowed to do it during our visit.
18 Q. Sir, I'm asking you about your
19 deposition.
20 A. We did not ask because we were already
21 told so.
22 Q. I was asking about your deposition, sir.
23 A. Okay.
24 Q. Let's go to the next question. "Isn't it
25 true"--this is Line 18.

Page 1487

1 "Isn't it true to this date, other than
2 requesting that pipe from the Hilda Avenue
3 main replacement project be retained, you have
4 not asked for any type of random underground
5 sampling of the water distribution system
6 owned by Mountain Water. You haven't asked
7 for it."
8 A. We did ask for it--
9 Q. Let me finish. Go to the answer. Please
10 highlight that, Matt.
11 "No, we have not asked for any sampling.
12 The idea was a piece of pipe that was
13 already being removed for a project and
14 available"--
15 And then let's go down.
16 --"rather than digging something up."
17 Now, that deposition was taken, sir, on
18 November 12, 2014, wasn't it?
19 A. Yes.
20 Q. Thank you.
21 With respect to your demonstrative
22 Exhibit D9-001. Can you pull that up, Matt?
23 MR. BURNS: We weren't provided that.
24 MR. CONNER: Can you pull it up?
25 MS. JONES: They have it.

Page 1488

1 **Q.** (By Mr. Conner) Do you have it, Craig?
 2 **A.** Yes, I have it right here.
 3 **MR. CONNER:** You didn't redact it at
 4 lunch?
 5 **MS. JONES:** It's demonstrative. We're
 6 going to collect it back. It's not in evidence.
 7 **MR. CONNER:** I just wanted to make sure
 8 it was still there.
 9 Can you pull it up, Tina, and go to the
 10 second page.
 11 **Q.** (By Mr. Conner) The 66 to 95 million
 12 range you said was necessary to be spent on this
 13 system from today through the next ten years is
 14 reflected on this document. Correct?
 15 **A.** That is correct.
 16 **Q.** Now, you included, and the judge just
 17 said earlier, sustaining my objection, that
 18 services and the cost of services should not be
 19 included. Right?
 20 **A.** I presume so. I wasn't in closed
 21 session.
 22 **Q.** Let's just do the math so we're clear
 23 it's not 66 to 95 million anymore.
 24 If you look at service and meters,
 25 unknown galvanized service lines, copper service

Page 1489

1 lines, galvanized service lines, plastic or poly
 2 lines, you have anywhere from--and I've added this
 3 up--14.2 million as the low, to 20.2 million.
 4 **A.** Correct.
 5 **Q.** If you deduct that from your overall
 6 total, you are at approximately 52.6 million and
 7 75--for a low, and 75 million for a high over the
 8 next ten years.
 9 **A.** Correct.
 10 **Q.** Now, in addition to that, your
 11 recommendation is that the dams should be retired
 12 and notched, correct?
 13 **A.** Correct.
 14 **Q.** So if that's the case, you've put a cost
 15 estimate in here to repair the dams at a low of
 16 925,000 to a high of 1.4 million. Correct?
 17 **A.** Correct.
 18 **Q.** Over the next ten years?
 19 **A.** That was just to bring them up to safety
 20 standards, yes.
 21 **Q.** So that would not have to be done if they
 22 were notched, correct?
 23 **A.** But the cost to notch them and everything
 24 else would have to be added to that. That would
 25 be additional.

Page 1490

1 **Q.** Okay, so it would be a wash then?
 2 **A.** No. It would be considerably more to
 3 retire them.
 4 **Q.** Well, why didn't you put that in?
 5 **A.** We were only asked to bring it up to
 6 safety standards.
 7 **Q.** Industry safety standards, correct?
 8 **A.** Industry safety standards, correct.
 9 **Q.** For the record--and we can check the
 10 math. Can you pull back up Exhibit 2541, I think,
 11 please. 2541, Matt.
 12 All right. Ms. Jones (sic) has made the
 13 calculation and this would be--
 14 Go to the second page.
 15 **MS. JONES:** Ms. DeSoto.
 16 **MR. CONNER:** Ms. Jones did not make this.
 17 I apologize. And I apologize, Ms. DeSoto.
 18 **MS. DESOTO:** Ms. DeSoto was an English
 19 major, so it took me awhile.
 20 **Q.** (By Mr. Conner) By making the deductions
 21 that you suggested from the 325 million total
 22 replacement costs new, can you read the new number
 23 for the record for us? And you can just round it.
 24 **A.** The number you put in front of me was
 25 264,791,000 and change.

Page 1491

1 **Q.** 264--I'm sorry, 264 what?
 2 **A.** 791.
 3 **Q.** Let's go 264.8. Can we do that?
 4 **A.** There you go.
 5 **Q.** RCN. Okay. We're in agreement there?
 6 **A.** Uh-huh.
 7 **Q.** Yes?
 8 **A.** Yes.
 9 **Q.** Thank you. You've only done two or three
 10 RCNLDs before in your career, correct?
 11 **A.** I've done probably three or four, yes.
 12 **Q.** Well, in your deposition you said two or
 13 three.
 14 **A.** Yeah. I've done actually some since
 15 then.
 16 **Q.** Oh, okay. In each of those or at least
 17 at the time of your deposition you had applied
 18 accumulated depreciation, correct?
 19 **A.** Yes.
 20 **Q.** And the ones that you've done since your
 21 deposition, did you also apply accumulated book
 22 depreciation?
 23 **A.** The way I've done it and the way it
 24 should be done, is that you go back and take the
 25 depreciation percentage of each asset. You use

Page 1492

1 that same depreciation percentage on the
 2 replacement costs new, and you can't go and alter
 3 the depreciation percentage. It's against
 4 Government Accounting Standards and GAAP.
 5 Q. Well, you can't alter the book--or
 6 base--or book value accumulated depreciation?
 7 A. And you can't alter the replacement cost
 8 depreciation percentage.
 9 Q. All right. What you are saying then, if
 10 I'm clear, that book value, which is reflective
 11 of, let's say, the PSC accumulated depreciation,
 12 is the depreciation that should be applied in an
 13 RCNLD.
 14 A. The percentage. Not the actual dollar
 15 amount.
 16 Q. The percentage.
 17 A. Right.
 18 Q. Okay. I'm just trying to get clear.
 19 A. So if it's 50 percent depreciated on
 20 their book value on the replacement cost it's 50
 21 percent depreciated.
 22 Q. Okay. So even then in your situation on
 23 an RCN, if you have assets that are in service,
 24 providing service every day--which a lot of these
 25 assets are, they are fully depreciated--but they

Page 1493

1 are 100 percent depreciated on the books, then
 2 they would be reflected in your RCNLD as zero
 3 value?
 4 A. That is correct.
 5 Q. All right. I just want to make sure
 6 we're clear.
 7 **THE COURT:** Mr. Conner, do you need that
 8 exhibit up anymore?
 9 **MR. CONNER:** Oh, no, Your Honor, we can
 10 take it down. Thank you.
 11 Q. (By Mr. Conner) Isn't it true,
 12 Mr. Close, that at trial you testified that you
 13 reviewed many of the facilities, the ones you
 14 talked about with Ms. Jones today and others that
 15 you didn't talk about. The above-ground
 16 facilities. I think you called them the vertical
 17 assets, correct?
 18 A. Correct.
 19 Q. And you also had an opportunity within
 20 doing that, some of those were developer-
 21 contributed locations, correct?
 22 A. Correct.
 23 Q. And isn't it true, sir, that you compared
 24 the developer-contributed locations to the
 25 Mountain Water built and designed locations?

Page 1494

1 A. Correct.
 2 Q. And you testified before that:
 3 "And typical Mountain Water facilities,
 4 particularly the wells and a number of booster
 5 stations, were fair to poor. The
 6 developer-contributed facilities were all
 7 rated good."
 8 Do you remember that testimony?
 9 A. Yes.
 10 Q. And you stand by that testimony today,
 11 correct?
 12 A. Yes.
 13 Q. And your conclusion from that testimony
 14 was:
 15 "Well, obviously they know, you know, the
 16 requirements that they are putting, providing
 17 to the developer to build and the standards
 18 that they are building to, are much higher
 19 than they are maintaining their own facilities
 20 at."
 21 A. Correct.
 22 Q. And you still believe that?
 23 A. Yes.
 24 Q. Okay.
 25 **MR. CONNER:** Give me just a moment, Your

Page 1495

1 Honor.
 2 Q. (By Mr. Conner) Mr. Mantua was--
 3 Mr. Mantua was here earlier. You are not
 4 Mr. Mantua, I know that.
 5 Mr. Close, you were here back in March
 6 for the trial as well, right, the necessity trial?
 7 A. Yes.
 8 Q. And you inspected this system for five or
 9 six days in September, first of October, correct?
 10 A. Correct.
 11 Q. And during the trial you did see all
 12 those pipe samples that we submitted, correct?
 13 A. Correct.
 14 Q. Did you look at them?
 15 A. Not closely, no.
 16 Q. You didn't pick them up and even consider
 17 those 12. Even though you said it was an inferior
 18 sample, you didn't want to even look at them, did
 19 you?
 20 A. It's not representative of the system.
 21 Q. Well, you wanted to look at one pipe,
 22 though, a failed pipe on Hilda Avenue, didn't you?
 23 A. For a particular reason.
 24 Q. Okay. I'm just asking--
 25 A. Because we wanted to look at Kalamein

Page 1496

1 pipe.
 2 Q. Okay. And Kalamein pipe is going to be
 3 replaced in this system anyway, right?
 4 A. The concern was if the Kalamein pipe had
 5 to be replaced sooner than over ten years.
 6 Q. And your determination was it didn't,
 7 correct?
 8 A. Well, we never got to look at it because
 9 they never delivered Kalamein pipe to us, even
 10 though it was on the records of their other
 11 drawings.
 12 Q. Isn't your replacement schedule,
 13 Mr. Close, premised on the fact that all Kalamein
 14 and invasion is to be replaced over a ten-year
 15 period?
 16 A. Yes.
 17 Q. Thank you.
 18 Now, with respect to sampling. You said
 19 that you had done some RCNLDs, four or five.
 20 You've never done a condition assessment that
 21 included underground sampling of pipe, have you?
 22 A. No, I--yes, I have.
 23 Q. You have?
 24 A. Yes, I have.
 25 Q. When have you done that?

Page 1497

1 A. We've done that at different times when I
 2 was at American Water. I've done condition
 3 assessment for this--as part of other valuations.
 4 Q. All right. Where you've actually sampled
 5 transmission/distribution main?
 6 A. Correct.
 7 Q. Matt, would you pull up his deposition,
 8 Page 32, Line 22. Page--this isn't his testimony.
 9 Not the testimony. It's the deposition.
 10 Question: "Have you ever performed a
 11 condition-based depreciation analysis that
 12 included sampling of transmission and
 13 distribution mains?"
 14 Answer: "No, we have not."
 15 A. What I was referring--
 16 Q. Is that correct, Mr. Close?
 17 A. No.
 18 Q. So your testimony in November of 2014 is
 19 incorrect?
 20 A. This was referring to that we did not do
 21 any for Mountain Water Company. I misunderstood
 22 the question.
 23 I have done it but on other projects.
 24 What I was referring to in this case was regarding
 25 Mountain Water Company. We did not do any

Page 1498

1 condition-based sampling of the Mountain Water
 2 Company pipe.
 3 Q. So you didn't understand my question to
 4 be, have you ever done it?
 5 A. No. I never took it as forever.
 6 Q. All right. Now, you said that the number
 7 of samples weren't sufficient for a system of this
 8 size?
 9 A. Yes.
 10 Q. What number samples are, Mr. Close?
 11 A. Well, no, there's actually defensible
 12 sampling in terms of statistical analysis that you
 13 go and analyze based on the length of the pipe,
 14 material of the pipe, and you statistically can
 15 have a cross-section to be able to do that.
 16 I haven't done that analysis here, but we
 17 have done it on other ones that we've done for
 18 condition-based sampling. And there is a way, a
 19 legal representation of that sampling criteria.
 20 But this doesn't meet that.
 21 Q. Well, let's just be clear, sir. You
 22 didn't look at the 12 samples we did, right?
 23 Correct?
 24 A. Correct.
 25 Q. And you didn't do this analysis to

Page 1499

1 determine what should have been the sample size,
 2 correct?
 3 A. No, we did not.
 4 Q. No further questions.
 5 **THE COURT:** Very well. Mr. Mercer, do
 6 you have any questions?
 7 **MR. MERCER:** No, Your Honor.
 8 **THE COURT:** Ms. Jones, any redirect?
 9 **REDIRECT EXAMINATION**
 10 **BY MS. JONES:**
 11 Q. Okay, just briefly.
 12 Do you know what percentage has been
 13 depreciated on the books at Mountain Water?
 14 A. No, I do not.
 15 Q. Could be higher or lower than 50 percent?
 16 A. Yes.
 17 Q. You are not going to take Joe's word for
 18 it?
 19 A. No.
 20 Q. Do you know whether or not the
 21 Rattlesnake water rights have been transferred
 22 from the Rattlesnake and used in wells in
 23 Missoula?
 24 A. I'm not aware if they have or not.
 25 Q. You don't know whether or not there is

Page 1500

1 any excess water rights?
 2 **A.** No, I do not.
 3 **Q.** All of this could be in rate base now?
 4 **A.** Could be. I haven't had a valuation rate
 5 case.
 6 **Q.** Why didn't you ask for more pipe samples
 7 after September 10th?
 8 **A.** Well, we discussed it internally, but it
 9 was made clear that that was not going to be made
 10 available to us.
 11 **Q.** And who made that clear?
 12 **A.** Joe Conner.
 13 **Q.** Why did you include the services
 14 originally in the cost estimate?
 15 **A.** Originally we included the services
 16 because it certainly is a part of the water system
 17 that's providing, you know, service to the
 18 customers. And even though they may not have--you
 19 know, Mountain Water Company may not own them, the
 20 City is going to have to do something to replace
 21 those. They are not going to be able to just put
 22 that onto the homeowner to resolve all those aging
 23 services.
 24 **Q.** Okay. Last question. I've now done the
 25 math.

Page 1501

1 By how much did Mr. Mantua overstate the
 2 construction costs? Does \$61 million overstated
 3 sound about right?
 4 **MR. CONNER:** Object to leading, Your
 5 Honor.
 6 **A.** Well, I have to look at the number that
 7 he gave me, which are the two numbers. I would
 8 have to do the math here, I'm sorry.
 9 **Q.** We'll let the commissioners do the math
 10 on that.
 11 **A.** Sounds in the ballpark anyway.
 12 **Q.** All right, well, let's just do it.
 13 So it was 325 million--we don't need to
 14 do the dollars and cents--minus that number. Will
 15 you do that?
 16 **A.** Roughly 60 million.
 17 **Q.** \$60 million overstated?
 18 **A.** Yeah.
 19 **Q.** Thank you.
 20 **THE COURT:** Anything further, Mr. Conner?
 21 **MR. CONNER:** Your Honor, could I take
 22 just a second to talk to co-counsel (sic) about
 23 something? This is about an exhibit. If we could
 24 just go off the clock for a second.
 25 **THE COURT:** Sure.

Page 1502

1 **MR. SCHNEIDER:** We're not co-counsel.
 2 **MR. CONNER:** Not co-counsel, I'm sorry,
 3 opposing counsel. I just feel so warm and fuzzy
 4 today.
 5 Back to deposition page--you know what,
 6 Craig? No further questions. Thank you.
 7 **THE COURT:** All right. Commissioners, do
 8 you have any questions of Mr. Close?
 9 **EXAMINATION**
 10 **BY COMM. BARRETT:**
 11 **Q.** Mr. Close, you present me with a very,
 12 very, very rare opportunity. There is almost
 13 never a time when two Swarthmore graduates are in
 14 the room at the same time in the State of Montana,
 15 so go Garnet.
 16 **A.** What are the odds of that?
 17 **Q.** Not good, not good. Not good at all.
 18 I did want to go back. Mr. Conner asked
 19 you about what happens to your summary figure here
 20 when you remove services. And he--those numbers
 21 went past me really fast.
 22 If I look at this on Page 3 of your--I
 23 guess it's Page 2--Page 3 of your--of this
 24 document here, it looks like you would reduce your
 25 low estimate by \$30 million and your high estimate

Page 1503

1 by \$40 million. Is that correct?
 2 **A.** No. The bottom numbers of that are
 3 meters and not services. Just the services alone
 4 is \$14 million on the low end and roughly
 5 \$20 million on the high end.
 6 **Q.** Oh, okay, thank you.
 7 Now, let me ask you a couple more things.
 8 I'm interested in these industry standards. This
 9 is the amount of money that would be required to
 10 get up to industry standards in ten years. Is
 11 that what you said?
 12 **A.** That is correct.
 13 **Q.** Now, I don't know exactly what "getting
 14 up to industry standards" means, but I guess my
 15 general question--I guess I can frame it in this
 16 way.
 17 Would it be economically prudent to spend
 18 this amount of money to get up to those industry
 19 standards in that period of time?
 20 **A.** Yes, it would be. We did a rate analysis
 21 in which we showed that the City could make that
 22 type of investment, without having to raise rates,
 23 over ten years.
 24 **Q.** So that means that by making these kinds
 25 of investments there would be a cost savings in

Page 1504

1 terms of operating the system so that the rates
2 would be unaffected?
3 **A.** That's correct.
4 **Q.** So in a cost/benefit kind of an analysis
5 way these expenditures representing the costs are
6 matched by the benefits.
7 **A.** Correct.
8 **Q.** Discounted--
9 **A.** Yes.
10 **THE COURT:** Mr. Doherty, any questions?
11 **EXAMINATION**
12 **BY COMM. DOHERTY:**
13 **Q.** Yeah. Mr. Close, following up on Dick's
14 question about economically prudent to make the
15 investments.
16 We heard testimony and the number of--the
17 number that sticks in my head about the cost of
18 leakage was \$600,000 a year, representing 3
19 percent of income or revenue for Mountain Water.
20 Therefore, Mountain Water--Mountain
21 Water's contention was it wouldn't be economically
22 prudent, or they don't have to worry that much
23 about the leakage because it's a very, very tiny
24 part of the increased cost due to the waste of the
25 water. What do you think about that?

Page 1505

1 **A.** Well, I think that--you reach a certain
2 point, and I think they have reached and exceeded
3 that, where you have to keep--as the leakage
4 continues, you've got to go and build more wells,
5 more piping to connect it to the system from the
6 leakage standpoint. That's got to go into rate
7 base. They have to earn on that.
8 Plus the operating expense. The \$600,000
9 a year of just power costs that it costs to pump
10 it out of the ground to put it back down into the
11 ground. To me, as the system deteriorates and
12 continues to do that, those costs are going to go
13 up.
14 You have to fix the pipe at some point.
15 It cannot go on forever without having to fix it
16 at some point. You can't--you can do an economic
17 analysis in the short-term, but the long-term, you
18 have to fix it. You can't go until it's 80,
19 90 percent, 100 percent, 99.9 percent leakage and
20 you put wells every 20 feet down the basin. It's
21 not rational to do that.
22 They have reached the point. And the
23 indexes from the AWWA index has indicated they
24 have reached that point. The ILI Index is kind of
25 a way to compare one agency to another agency of

Page 1506

1 when you have to start making those improvements,
2 and they have far exceeded that.
3 To me, it's economically imperative they
4 start replacing main to reduce leakage at a much
5 higher right than they have historically or have
6 planned to do.
7 **Q.** Thank you.
8 **THE COURT:** Anything else, Mr. Doherty?
9 **COMM. DOHERTY:** No.
10 **THE COURT:** Mr. Higgins, any questions?
11 **EXAMINATION**
12 **BY COMM. HIGGINS:**
13 **Q.** So, yeah, I'll just have a follow-up
14 question on that.
15 So I think what I heard you just say is,
16 so they have to take action to reduce the leakage
17 at a much higher rate than they historically have.
18 **A.** Correct.
19 **Q.** And I thought, did we--now, I don't know
20 if you were here or not. But I thought I heard
21 testimony earlier this week where Mr. McInnis, I
22 think, testified to the fact that they planned to
23 increase the rate at which they were replacing
24 mains. Were you here for that?
25 **A.** I wasn't here for that, but I've seen

Page 1507

1 that in their work. They are talking about
2 increasing it to, you know, approximately two to
3 three miles a year, which will take 100 years to
4 replace the system.
5 **Q.** For the whole system.
6 **A.** For the whole system. But as you do
7 that, the pipe continues to get older. To be able
8 to do that at a renewal rate, is far below what's
9 necessary to catch up for how much deferred
10 capital investment they've made.
11 **Q.** Okay. And then I had a question because
12 I'm--I was doing the numbers just in my head here.
13 I don't have a calculator. But I wanted to go
14 back to the rating system for the wells.
15 **A.** Uh-huh.
16 **Q.** Did I hear you correctly that you said
17 the wells were rated poor?
18 **A.** Fair to poor.
19 **Q.** Fair to poor. So 3 to 2.
20 **A.** 3 to 2.
21 **Q.** So just my quick math, arithmetic
22 average, I get something greater than 3 on that
23 list.
24 **A.** I would have to go back and do the
25 weighting in terms of the size of the wells.

Page 1508

1 Q. Like I said, I just--I did it in my head
 2 and I kind of divvied it up a number of different
 3 ways. Would that--I mean, is it possible that
 4 it's 3 to slightly over 3?
 5 A. I'll concede that on a numbers basis,
 6 yeah.
 7 Q. This kind of stuff is just kind of
 8 housekeeping.
 9 I want to make sure I understand what you
 10 are calling useful life. And that's the cost of
 11 the equipment less the depreciation on the books.
 12 Is that right?
 13 A. Well, useful life is the estimated number
 14 of years that when you first put in an asset, you
 15 put in a useful life of the asset, if it's
 16 50 years, 70 years. If you use straight-line
 17 depreciation, you depreciate it over that period
 18 of time.
 19 On condition-based depreciation, you
 20 project where it is, how much additional useful
 21 life from the condition it is now to when do you
 22 think it will need to be replaced.
 23 Q. Okay.
 24 A. That's the remaining useful life out
 25 there to be able to do that, and you actually

Page 1509

1 project that as part.
 2 And then on condition-based depreciation,
 3 you then change and depreciate. Rather than
 4 straight-line on the original, you depreciate it
 5 over that changed or remaining useful life. It
 6 could be less than the original, it could be
 7 greater than the original useful life that was put
 8 on the books. But you can't change the percentage
 9 of the amount of what's already been depreciated.
 10 Q. I understand that. So if I buy something
 11 for \$100, it has 50 years of life and I just do
 12 straight-line depreciation, that's \$2 a year,
 13 right?
 14 A. Uh-huh.
 15 Q. If I'm ten years into it, I've
 16 depreciated it \$20, so now it's worth 80. But
 17 what's the useful life?
 18 A. Depending on the condition --
 19 Q. I see.
 20 A. -- it could be ten years, it could be 70
 21 years, it could be five years.
 22 Q. Could it be more than 80?
 23 A. It could be more than 80.
 24 Q. Okay. I'm also--I've got some personal
 25 experience in this. When companies that I've

Page 1510

1 worked for have depreciated things to zero on the
 2 books, there is also a salvage value.
 3 Is that--does that mean--in your opinion,
 4 is the salvage value, value for that asset, versus
 5 zero?
 6 A. You could if there is a market for that
 7 salvage.
 8 Q. Well, of course, right.
 9 A. There has to be a market for it, yes.
 10 Q. In your experience in the water industry,
 11 when you've removed piping and appurtenances and
 12 stuff like that, did you--is it standard practice
 13 to try to recoup any salvage value from those,
 14 those types of equipment?
 15 A. It is for piping and things. But it's
 16 unusual to pull it out of the ground because of
 17 the cost of removal.
 18 Q. You just abandon it in place?
 19 A. You abandon it in place. Most piping is
 20 abandoned in place.
 21 But something like a pipe or above
 22 ground, you know, there is the combination of if
 23 there is a market, you can salvage it. But you
 24 also have to take into account the cost of
 25 removal, what does it cost to remove it, plus

Page 1511

1 what's the cost of disposal if you can't sell it.
 2 And we haven't put that into the factor either.
 3 Q. Okay. I think that's all I have. Thank
 4 you.
 5 **THE COURT:** Thank you.
 6 Counsel, any questions in light of the
 7 commissioners' questions?
 8 **REDIRECT EXAMINATION**
 9 **BY MS. JONES:**
 10 Q. Just one question in response to
 11 Mr. Higgins.
 12 For each well did you actually do an
 13 independent assessment of each component part of
 14 the well?
 15 A. Yes, we did.
 16 Q. Did you separately rate each of those?
 17 A. Yes, we did.
 18 Q. So would you need that information to
 19 actually get a weighted average?
 20 A. You would have to go back and look at all
 21 the asset classes to really kind of do an average
 22 rather than just an arithmetic average. We did
 23 this for purposes, but to go back and look at it,
 24 we would have to look at all asset classes.
 25 Q. And your testimony as based on that

Page 1512

1 entire body of work, where would the wells fall?
 2 **A.** Yes.
 3 **Q.** Where would they fall?
 4 **A.** It's fair to poor.
 5 **THE COURT:** Mr. Conner.
 6 **RE-CROSS-EXAMINATION**
 7 **BY MR. CONNER:**
 8 **Q.** Yes. Mr. Barrett asked you a question
 9 regarding your--you said you did a rate
 10 analysis --
 11 **A.** Yes.
 12 **Q.** -- whether the City could pay for these
 13 over time.
 14 **A.** That's correct.
 15 **Q.** Isn't it true in your rate analysis you
 16 were instructed by the City to assume a purchase
 17 price of \$50 million for that analysis?
 18 **A.** That is correct.
 19 **Q.** So that's not a valuation you did,
 20 because you are not a valuation expert, correct?
 21 **A.** No, that was given to us.
 22 **Q.** So that's assuming then the City gets
 23 this system for 50 million, correct?
 24 **A.** Well, that particular analysis, yes.
 25 **Q.** Yes. Thank you.

Page 1513

1 **THE COURT:** All right. May this witness
 2 be excused?
 3 **MS. JONES:** Yes.
 4 **MR. CONNER:** Yes.
 5 **MR. MERCER:** Yes.
 6 **THE COURT:** Thank you, Mr. Close. You
 7 are free to go.
 8 Additional witness for the City?
 9 **MS. JONES:** We are going to use the Skype
 10 at this time to call Tom Stevens.
 11 **THE COURT:** All right.
 12 Mr. Stevens, would you raise your right
 13 hand and be sworn, please.
 14 **THE WITNESS:** I'm sorry, I couldn't hear
 15 you.
 16 **THE COURT:** Would you raise your right
 17 hand and be sworn.
 18 Thereupon,
 19 THOMAS STEVENS, MAI,
 20 having been first duly sworn to tell the truth,
 21 testified upon his oath as follows:
 22 **THE COURT:** So, Mr. Stevens, then have a
 23 seat. Please state your full name, spell your
 24 last name for us.
 25 **THE WITNESS:** Full name, Thomas, middle

Page 1514

1 initial G, Stevens. S-T-E-V-E-N-S.
 2 **THE COURT:** All right, thank you. You
 3 may inquire, Ms. Jones.
 4 **DIRECT EXAMINATION**
 5 **BY MS. JONES:**
 6 **Q.** Mr. Stevens, can you hear me?
 7 **A.** Just barely.
 8 **Q.** How about now?
 9 **A.** That's better, yes.
 10 **Q.** Okay. What is your profession? What do
 11 you do for work, Mr. Stevens?
 12 **A.** I'm sorry, you are cutting out. I can't
 13 hear you very well.
 14 **Q.** How about now?
 15 **A.** That's better, yes, thank you.
 16 **Q.** What do you do for work, Mr. Stevens?
 17 **A.** What?
 18 **Q.** What do you do for work?
 19 **A.** This is not working all that well. I'm
 20 going to try to turn on a different thing, if you
 21 don't mind, so I can hear you.
 22 **THE COURT:** So, Tasha, I think perhaps
 23 the best thing to do is to just do this by
 24 telephone. Are there exhibits that he's going to
 25 have to use?

Page 1515

1 **MS. JONES:** No.
 2 **MR. CONNER:** Well, Your Honor--
 3 **A.** I can hear well now.
 4 **MR. CONNER:** --there may be exhibits I
 5 need to use.
 6 **THE COURT:** So you are hearing me all
 7 right, Tom; is that right?
 8 **THE WITNESS:** Yes, ma'am, I am.
 9 **THE COURT:** I wonder if you can just get
 10 close to the phone.
 11 **Q.** (By Ms. Jones) Tom, can you hear me?
 12 **A.** Yes, I can.
 13 **Q.** Can you tell the commissioners what you
 14 do for work.
 15 **A.** Oh, I am a professional real estate
 16 appraiser.
 17 **Q.** Were you hired to review the consulting
 18 expert report prepared by Steve Hall?
 19 **A.** Yes, I was.
 20 **Q.** And did you also complete an appraisal of
 21 the 68 parcels of property?
 22 **A.** I did. During my review process under
 23 Standard Rule 3 of the Uniform Standards of
 24 Professional Appraisal Practice, as a reviewer if
 25 I find a report deficient, I'm allowed to render

Liberty-091 Re: Impacts on Future Operations

- a. Please describe the impacts the City contends Liberty's corporate structure or APUC's foreign domicile will have on future operations of Mountain Water if this transaction is approved.
- b. Please identify and provide copies of all documents or information on which the City relies for its responses

OBJECTION:

The City objects to this request. The City has no burden of proof in this proceeding.

RESPONSE TO LIBERTY-091:

- a. See the City's answer to Liberty-092.
- b. See the City's response to Liberty-092

Liberty-092 Re: Harm to Ratepayers

- a. Please describe any and all harm the City contends will result for ratepayers as a result of Liberty's acquisition of Western Water.
- b. Please describe how any of the items identified in response to (a) differ from harms the City contends will exist under the current ownership.
- c. Please identify and provide copies of all documents or information on which the City relies for its responses to (a) and (b).

OBJECTION:

The City objects to this request. The City has no burden of proof in this proceeding.

RESPONSE TO LIBERTY-092:

a. The harms proposed by Liberty/Algonquin's potential ownership are numerous. By no means exhaustive, the potential harms from Algonquin/Liberty ownership include the following. As a publicly traded entity, Algonquin/Liberty pose risks to the Mountain Water consumers. Algonquin owes a duty to shareholders to earn returns. Therefore, Algonquin/Liberty are predisposed to favor investor returns, maximize profitability, minimize capital expenditures and defer repairs and maintenance. Further, this removes income from capital investments and creates a tension between shareholders and consumers. This profit motive ensures that some revenue that could be turned back into the system is instead distributed to shareholders. Further, as a publicly traded entity, Algonquin is subject to volatile market conditions and potential hostile takeovers by other utility conglomerates or investment firms. As part of the Algonquin/Liberty conglomerate, Mountain Water would be required to continue to send millions of dollars a year out of Montana to fund various administrative overhead costs. These include, among other costs, corporate management, excessive corporate salaries, travel and entertainment costs,

executive bonuses or equity grants (e.g. Class B share agreements), costs associated with being a publicly traded entity, shareholder returns, etc. There could also be continued vague and unexplained affiliate transactions and unreported, upstream dividend payouts. There is a lack of accountability due to ultimate foreign ownership. Liberty is a foreign-owned entity that has, thus far, resisted PSC jurisdiction over its parent company, Algonquin, even though Algonquin makes the financial and strategic decisions for Liberty. Already, Mr. Robertson has refused to sit for a deposition for which he was court ordered to appear. There will also be a lack of transparency due to ultimate foreign ownership as has already been demonstrated in this proceeding. Due to Algonquin's foreign status and ongoing resistance to PSC jurisdiction, Algonquin's financial instability could impact Mountain Water, but the PSC would have no authority to ensure that does not occur. In light of the City's condemnation and a value set for Mountain Water, approval of the sale to Liberty would cause Mountain Water to transition to one owner, then to another, causing potential disruption and unnecessary financial expense. Liberty's investment models do not project enough capital investment to repair the Mountain Water infrastructure. As demonstrated by Mr. Close's testimony, the Mountain Water system is not in good condition.

Liberty/Algonquin will continue to accelerate depreciation while not investing the necessary repairs into the system as well as defer maintenance on assets. Further, there will continue to be an emphasis on California at the expense of Montana regarding capital expenditures. Yet, in spite of this, there will continue to be sizeable, regular rate increases. Liberty/Algonquin have a history of seeking extreme rate increases upon acquisition. As has already been demonstrated, there will continue to be a lack of coordination with the City regarding capital expenditures, city growth, and planning. There will be double-work, lack of project

streamlining, contractor competition, and lack of calendar coordinate. As a privately owned company, Algonquin/Liberty's growth planning will continue to be a private activity with little or no community or municipal input. Excessive hook-up costs will continue to drive customers from public water to private wells, which exposes them and the community to health and safety risks. With leadership in Canada through a myriad of corporate layers, local decision-making will get even less emphasis than it already has. This creates a lack of local control and transparency regarding the levels of capital expenditures and who decides where and what is spent. Those decisions will be made in boardrooms across the United States and Canada, not in Missoula, Montana. Liberty's proposed acquisition is funded by heavy levels of debt, Carlyle's was funded by equity. Finally, there is still the potential that Algonquin/Liberty may flip Mountain Water just as Carlyle has done.

b. Yes, some of the above concerns are the same concerns associated with Carlyle ownership, but others are not.

c. No specific documents were relied upon to form the answer.

Liberty-093 Re: Direct Testimony of Mr. Close, Page 6 Close, lines 14-18

- a. Please explain Mr. Close's understanding of the distinction between Contributions in Aid of Construction and Advances for Construction.
- b. Please explain Mr. Close's understanding of the accounting and regulatory treatment for Contributions in Aid of Construction and Advances for Construction.
- c. Please produce all documents used, referred to, or relied upon in responding to subparts (a) and (b).

RESPONSE TO LIBERTY-093:

a. Below are the definitions as Mr. Close understands Contributions in Aid of Construction and Advances for Construction:

Contributions in Aid of Construction ("CIAC") - CIAC is any amount of money, services, or property received by a water utility from any person or governmental agency that is provided at no cost to the utility (utility does not have to repay). It represents an addition or transfer to the capital of the utility, and is utilized to offset the acquisition, improvement, or construction costs of the utilities property, facilities, or equipment used to provide utility services to the public. It includes amounts transferred from advances for construction resulting from termination of refund contracts. Contributions received from governmental agencies and others for relocation of water mains or other plant facilities are also included.

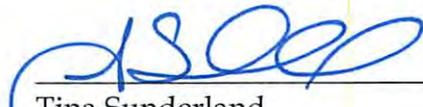
Advances for Construction ("AFC") - Advances made by or on behalf of customers or others for the purposes of construction, which is to be refunded either wholly or in part. When applicants are refunded the entire amount to which they are entitled according to the agreement or rule under which advance was made, the balance, if any, remaining in the account shall be credited to contribution in aid of construction.

b. CIAC: Not included in rate base; any amount in excess of construction cost is considered as income; can't earn a return on CIAC; can't depreciate CIAC on a water utility's tax return; no rate impact to existing customers -Advances for Construction: Advances are excluded from rate base for rate making purposes; Annual refunds are made to developers without interest; no rate impact to existing customers; Excess funds resulting from the developer going out of business, or termination of the refund contract are credited to CIAC accounts and treated as income..

c. Mr. Close's answers are based on his and HDR's experience in regulatory matters.

CERTIFICATE OF SERVICE

This is to certify that the foregoing was duly served by mail and email upon the following counsel of record at their addresses this 2nd day of December 2015:

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