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1 STATE OF NORTH DAKOTA
 2 PUBLIC SERVICE COMMISSION

3
 4 Public Service Commission)
 5 Montana-Dakota Utilities Co.) Case No. PU-17-295
 6 2017 Natural Gas Rate Increase)
 7)
 8)
 9)

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 12 TRANSCRIPT OF PROCEEDINGS
 13 HEARING
 14 VOLUME 2
 15 (Pages 349 to 625)
 16 Taken Thursday, May 31, 2018
 17 Commencing at 8:30 a.m.

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1 Volume 2 of 3, PUBLIC SERVICE COMMISSION
 2 HEARING taken on Thursday, May 31, 2018, commencing at
 3 8:30 a.m. at the North Dakota State Capitol Building,
 4 600 E Boulevard Avenue, Bismarck, North Dakota, before
 5 Christa A. Reeser, Registered Professional Reporter,
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5/31/2018**

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1 PROCEEDINGS, May 31, 2018: 8:30 A.M.
 2
 3 THE COURT: Okay. We're going to go back
 4 on the record. Day two. Mr. Sanderson is still going
 5 forward with MDU's case in chief, case number
 6 PU-17-295.
 7 Mr. Sanderson.
 8 MR. SANDERSON: Thank you, Judge.
 9 Montana-Dakota would call Dr. Stephen Gaske.
 10 THE COURT: Dr. Gaske, you were here
 11 yesterday when I gave the perjury admonition?
 12 THE WITNESS: I was.
 13 THE COURT: Okay. Would you raise your
 14 right hand, please.
 15
 16 DR. STEPHEN GASKE,
 17 duly sworn, was examined and testifies as follows:
 18
 19 THE WITNESS: I do.
 20 THE COURT: Thank you. Go ahead.
 21
 22 DIRECT EXAMINATION
 23 BY MR. SANDERSON:
 24 Q. Good morning, Dr. Gaske. Could you please
 25 state your full name and business address?

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1 A. My name is J. Stephen Gaske, and my address is
 2 1300 19th Street Northwest, Washington D.C.
 3 Q. And Dr. Gaske, whom are you employed by?
 4 A. Concentric Energy Advisors.
 5 Q. And what does Concentric Energy Advisors do?
 6 A. We are an energy and utility consulting firm.
 7 We do economic financial consulting for companies,
 8 mergers and acquisitions, various rate casework,
 9 planning, forecasting.
 10 Q. And Dr. Gaske, could you just provide a brief
 11 overview of your educational background?
 12 A. I have a bachelor's degree from the University
 13 of Virginia and MBA in finance from George Washington
 14 University and a PhD in -- from Indiana University
 15 where my major field of study was public utility
 16 economics and a supporting field in finance.
 17 Q. And could you just provide us an overview of
 18 your work experience?
 19 A. I have worked with regulated utilities for
 20 approximately 40 years now mostly in a consulting role.
 21 For a few years I taught public utilities at Indiana
 22 University and then was a finance professor at Trinity
 23 University. But throughout that time I was consulting
 24 with public utilities.
 25 Q. And Dr. Gaske, what is your personal area of

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1 expertise?
 2 A. I usually say it's several things, but all of
 3 them are related to public utility economics and
 4 regulation, and they include finance and various
 5 economic matters.
 6 Q. And in your professional career, Dr. Gaske,
 7 have you had the opportunity to testify in other
 8 proceedings before state regulatory bodies?
 9 A. Yes.
 10 Q. Can you just give us --
 11 A. Probably something a little more than 125
 12 proceedings at this point.
 13 Q. And Dr. Gaske, are you familiar with
 14 Montana-Dakota's application for a natural gas rate
 15 increase in this case?
 16 A. Yes.
 17 Q. And what was your involvement in the
 18 application process?
 19 A. I was asked to conduct a study on the required
 20 rate return for the Company.
 21 Q. And before we get into that, Dr. Gaske, you
 22 filed pre-filed direct and rebuttal testimony in this
 23 proceeding?
 24 A. I did.
 25 Q. Okay. Now, I ask this question, but if you

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1 were asked the same questions in your pre-filed
 2 testimony, would your answers remain the same?
 3 A. I do need to make a correction, and that would
 4 be in my direct testimony, I believe that's Exhibit
 5 MDU-1, on page 30, footnote 23.
 6 Q. Could you just describe what you'd like to
 7 change on that?
 8 A. Certainly. At the end of the first sentence in
 9 footnote 23, I need to add a clause, "except that I
 10 omitted companies with negative growth rates."
 11 Q. Okay. Now --
 12 A. And --
 13 Q. Go ahead.
 14 A. And then I have a second one.
 15 Q. Certainly.
 16 A. On my rebuttal testimony, which I believe is
 17 MDU-2, on page 38, footnote 41 I have essentially the
 18 same change.
 19 Q. Okay. The same footnote you used in -- on both
 20 your direct and rebuttal?
 21 A. Yes. They're slightly different, but . . .
 22 Q. Okay. Now, Dr. Gaske, have you prepared
 23 PowerPoint slides regarding your presentation today?
 24 A. Yes.
 25 Q. And as we move forward, feel free to use those

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1 slides in your presentation. But just kind of to begin
2 with, Dr. Gaske, based upon your analysis in this case,
3 what did you determine to be the appropriate rate of
4 return and return on equity for Montana-Dakota?
5 A. Ten percent.
6 Q. Can you explain to the commissioners why this
7 rate -- or first, why rate of return is important to
8 the Company in a rate case?
9 A. Rate return is important because it's the
10 return to the investors who supply the capital. And
11 capital is an essential input for a public utility, and
12 the capital has a cost to it just like the salaries and
13 wages of the employees, the investors need to be
14 compensated for the capital that they provide.
15 Q. And Dr. Gaske, can you explain how you arrived
16 at the appropriate rate of return in this case?
17 A. Yes. There are several methods that you use to
18 try to determine an appropriate cost of capital. But
19 in general, I began by selecting proxy companies, other
20 natural gas distribution companies. I had to use large
21 publicly traded ones that have enough information about
22 forecasted growth rates, they have to be publicly
23 traded so that you have stock prices to examine. I use
24 that to determine reasonableness. And then I need to
25 compare the Montana-Dakota, North Dakota Gas operations

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1 to those proxy companies to determine where in the zone
2 of reasonableness they should be placed. Although the
3 proxy companies are all natural gas distribution
4 companies, none of them is exactly like North Dakota or
5 the North Dakota Gas operations, so an important step
6 in the process is that placement within the zone.
7 So that's the process -- general process I went
8 through.
9 Q. Can you explain the methods used to determine
10 the cost of common equity capital?
11 A. Yes, several methods that are commonly used.
12 Probably the most common method is the discounted cash
13 flow method. That involved determining the dividend
14 yield of a utility and adding an expected future growth
15 rate to it. The dividend yield is simply the current
16 annual dividend that the Company is paying divided by
17 stock price. And then the expected future growth rate
18 is usually based on analyst estimates, and you can use
19 other methods for determining growth rate.
20 Another method that's often used is the risk
21 premium method. With that, you look at what the
22 current bond yields are and you add a premium for the
23 additional risk of common equity. And so you have
24 various ways that you might determine an equity risk
25 premium and how much to add to the bond yield.

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1 The capital asset pricing model is also
2 commonly used. I would say it's less used by
3 Commissions but you'll see it in textbooks quite a bit.
4 In this case, I used what I call an unbiased capital
5 asset pricing model. But the general idea is that you
6 start with a bond yield and you add a risk premium to
7 it. But in the capital asset pricing model, the risk
8 premium that you add is a very specific formula, and
9 that's the -- you look at the average risk premium that
10 is being required by all stocks in the market and then
11 you adjust it up or down based on the risk of the
12 individual company that you're looking at. So for
13 example, if a company has -- and beta, what you see in
14 the formula there, that measures how sensitive that
15 stock price is to changes in the general market. If
16 you have a beta of one, that means that a company,
17 their stock price will go up by ten percent if the
18 general stock market goes up by ten percent. If you
19 have a beta of .7, it means that your stock price would
20 only go up seven percent if the stock market went up by
21 seven percent. So you use the beta times the market
22 risk premium to determine the cost of equity.
23 And in this particular case, I also added a
24 size risk premium. Duff & Phelps, who now publishes a
25 series on returns on common equity, has data on the

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1 risk premium that they recommend that you add if you're
2 going capital asset pricing model and adjust -- they
3 found that the capital asset pricing model tends to be
4 biased based on the size of the company, that it
5 doesn't come up with good answers or correct answers,
6 and so you adjust it for the size. And in general, the
7 smaller the company, the larger the size premium that
8 you need.
9 Finally, another approach is the comparable
10 earnings approach. And that is to look at the actual
11 earnings of other companies and in particular companies
12 that have similar risks so that you know that the --
13 that this particular company could compete for capital
14 against those companies and what they earn.
15 Q. And Dr. Gaske, can you explain the results of
16 your cost of equity studies?
17 A. Certainly. I conducted a couple of DCF
18 analyses. The first one I did is what I refer to as a
19 basic DCF analysis, and that has the dividend yield
20 plus the growth rates that investment analysts are
21 forecasting for each of the companies. So I had my
22 group of proxy companies and conducted that. The high
23 company in the group came in at 11.8 percent, the
24 median at 9.2 and the low was at 7.1.
25 I also conducted a blended growth rate DCF

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1 analysis where, again, I used a dividend yield plus a
2 growth rate. But in this case, I averaged the analyst
3 growth rate forecast with an estimate of what I'd call
4 a sustainable growth rate based on the amount of
5 earnings that the company is retaining and reinvesting
6 in the company and the external stock issuances. So it
7 takes into consideration both the analyst and the
8 amount of reinvestment or investment that the company
9 is doing.

10 In this case, I got a high of 10.8, a median of
11 9.1, and a low of 7.9. Now, I should say one thing --
12 and I'll talk more about this later -- is that within
13 that range, obviously Montana-Dakota North Dakota Gas
14 is not necessarily the same as all of those companies.
15 In addition, you probably saw in my testimony that in
16 recent years there's been a question as to whether the
17 DCF results have been kind of held down by the Federal
18 Reserve policies that have been trying to push money
19 into the market, drive interest rates down, and have
20 more or less induced investors who might normally
21 invest in short-term debt or treasury bonds, they've
22 been buying utility stocks for the dividend. And so
23 FDRC in particular a few years ago determined that
24 because of the Federal Reserve policy that the DCF
25 approach currently is coming in with some low results.

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1 One of the other approaches that I did was a
2 gas utility risk premium. And with this approach, I
3 looked at what kind of premium Commissions have allowed
4 on bond yields over the last 25 years. And I did an
5 analysis of that and determined more or less a formula
6 for what the appropriate risk premium should be based
7 on different levels of bond yields. When I did this
8 with gas -- natural gas distribution utilities, I came
9 out with ten percent as the current indicated risk
10 premium. The CAPM approach that I used, you can see
11 here, it also had a range between 10.7 and 12.2 percent
12 and a median of 11.3 percent.

13 Finally, if -- looking at comparable earnings,
14 Value Line, which is widely used investment
15 publication, reviews about 760 companies every
16 quarter -- or on a rotating basis every quarter, they
17 forecast what return on equity various companies are
18 likely to earn in the next few years. For the natural
19 gas distribution utilities in my proxy group, the
20 median for the group was ten percent and the range was
21 between 9 .5 at the low end and 11.5 at the high end.

22 So in essence, because for two reasons looking
23 at my DCF analyses, I believe that Montana-Dakota North
24 Dakota Gas operations should have a return above the
25 median both because of its higher risk, which I'll talk

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1 about in a few minutes, and because of the Federal
2 Reserve policies, I thought that -- I'm quite certain
3 it should be above the median, and I landed on the
4 results of the gas risk premium analysis as the point
5 that would be most appropriate.

6 Q. And Dr. Gaske, can you discuss the gas utility
7 risk premiums?

8 A. Yes. This is a table -- I apologize for all
9 the detail on it. But what it really is, is it graphs
10 the allowed rates of return over the last 25 years for
11 gas utilities. And on the horizontal axis you have the
12 30-year U.S. Treasury bond yields at various times.
13 And on the vertical axis going up and down you have how
14 much of a premium above the bond yield was implicit in
15 the Commission allowances at that time.

16 So if you look way over to the right corner,
17 you'll see the returns at a time when U.S. Treasury
18 bonds were yielding seven and a half, eight percent.
19 Commissions were allowing risk premiums in the three
20 and four percent range. And essentially you would add
21 three or four percent to whatever the treasury bond
22 yields are, horizontal axis. And in more recent times
23 on the left-hand side, you'll see that the bond yields
24 were very, very low. But the risk premiums went up.
25 With that data, I calculated a line of best

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1 fit, essentially a regression equation, which is that
2 line through there. And it shows that there's a strong
3 relationship between the level of treasury interest
4 rates and the level of risk premiums that Commissions
5 allow. And there's an equation there for it. So I
6 used that equation, and where we are right now is that
7 U.S. Treasury bonds are at exceptionally low levels.
8 And basically Commissions have been allowing lower
9 rates of return overall, but the risk premium they've
10 been allowing has been much higher than it was, say,
11 20, 25 years ago. So I used that regression equation
12 to plug in what the current bond yield is and to
13 determine what the risk premium should be for a gas
14 utility.

15 Q. And can you explain the relative risk analysis
16 you performed and how it affects Montana-Dakota's ROE?

17 A. Certainly. There are three general categories
18 of risk that investors look at. By far the most
19 important one is business risk. And in the case of
20 Montana-Dakota North Dakota operations, I determined
21 that they were above average relative to the companies
22 in my proxy group. They tend to have slower customer
23 growth, but most importantly these operations are
24 extremely small compared to the proxy companies which
25 suggests higher risk. And you have relatively

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<p>1 undiversified economy. It's primarily based on 2 agriculture, mining and in recent years above all, the 3 oil industry. And so it's not a highly diversified 4 economy relative to what you see with the proxy 5 companies. And as we all know, the oil industry is 6 prone to boom and bust cycles that pose greater risk.</p> <p>7 With regard to financial risk, that has 8 primarily to do with the capital structure of the 9 company, how much debt that it takes on. The more debt 10 that it takes on, the riskier the common equity is.</p> <p>11 In this case, the Company has pretty much 12 average -- an average capital structure compared to the 13 proxy companies, an average amount of financial risk. 14 And the last area that is typically important for 15 public utilities is regulatory risk. The regulatory 16 climate is typically -- well, it is rated by an outfit 17 called Regulatory Research Associates, and they rate 18 North Dakota as an average/one, so it's a slightly 19 above average commission from the standpoint of 20 investors. So in terms of regulatory risk, it would 21 have slightly below average regulatory risk.</p> <p>22 I mentioned the size question. And I've got a 23 couple of slides that just give you a general idea of 24 how small the Montana-Dakota Gas operations are 25 relative to the proxy companies that I used in my</p>	<p>1 that they consider when they're looking at the risk of 2 a utility, they talk about economic diversity, which is 3 typically a function of the population, the size, 4 breadth of the territory and the types of businesses 5 that drive its GDP unemployment.</p> <p>6 As I said before, the population that is served 7 by these North Dakota Gas operations is not 8 particularly large compared to the population of the 9 proxy companies. The local economy is very much tied 10 to oil and agriculture, not a -- there are lots of 11 other kinds of businesses, but, you know, if you're 12 talking about grocery stores and shops and housing 13 market and things like that, the really big drivers in 14 the economy for those individuals, those kinds of 15 businesses are oil and agriculture. So the North 16 Dakota operations are exposed to more than average risk 17 there.</p> <p>18 They also talk about size of the territory, the 19 number of customers and the volumes, and those are not 20 at all large relative to the proxy companies. And 21 Moody's also says they look at number of sizeable 22 metropolitan areas and the economic diversity 23 concentration in particular areas or industries. In -- 24 as far as sizable metropolitan areas, my proxy group 25 typically has companies that serve very large cities.</p>
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<p>1 analysis. You can see circled in red in the lower 2 right-hand corner there is the size of the MDU North 3 Dakota Gas operations in terms of assets as compared 4 with the proxy companies, and it's extremely tiny.</p> <p>5 The second measure I used was the operating 6 income of the companies. And again, you can see that 7 the North Dakota Gas operations really aren't even in 8 the same category as the other companies, it's 9 extremely small.</p> <p>10 Unfortunately, the ideal would be to find other 11 proxy companies that are in the same size category. 12 The problem with that is that there aren't any that 13 have publicly traded common stock that you can use for 14 your analysis. And you don't have analyst growth rate 15 forecast and things like that. So your second best 16 choice is to use other natural gas distribution 17 companies that are not in the same size category but 18 they do have the financial information you need. So 19 you use them as a starting point and then you take off 20 from there to determine where, say, the Montana-Dakota 21 North Dakota operations would rate relative to those 22 other companies.</p> <p>23 Moody's is a well-known bond rating agency. 24 I'm sure everybody's familiar with them. And when they 25 talk about utilities and the size and diversity risk</p>	<p>1 In the Montana-Dakota service territory, you've got 2 some good size cities, but nothing like the proxy 3 companies. For example, you've got Bismarck that has 4 about 70,000 people, that's by far the largest. You 5 have Minot, which is maybe a little under 50,000, and 6 then you've got a handful of ones that are in the 7 20,000s, Dickinson, Jameson, Mandan, Williston. And 8 then probably the other 65 or so towns that it serves 9 are under 5,000. So it's mostly small towns, not large 10 diversified metropolitan areas. So that -- those same 11 considerations are why I consider this jurisdiction, 12 this company, to have above average risk relative to 13 the proxy companies.</p> <p>14 I mentioned the Federal Reserve policies. 15 Probably most important indicator of that is on this 16 slide. The vertical bars that you see are for about 17 the last ten years what the utility dividend yields 18 have been. And you can see that they were up around 19 four percent a number of years ago before the Federal 20 Reserve kicked in with its policy of quantitative 21 easing and lowering of interest rates. And since then, 22 they declined fairly substantially down to about two 23 and a half percent, 2.6, 2.7 percent. That would not 24 be significant in and of itself, except that you can 25 see the blue line that goes through the middle there is</p>

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1 the dividend yields of the S&P 500 companies. They
 2 stayed very steady throughout that time period. You
 3 don't see a precipitous drop in those. And that is an
 4 indicator that people were moving into utilities as
 5 substitutes for bonds but not necessarily for the
 6 ability to put pipe and mains in the ground, they just
 7 wanted that dividend on a short-term basis. So that's
 8 the other consideration I had.

9 Q. And Dr. Gaske, how does your recommended rate
 10 of return compare to recent range of authorized returns
 11 in contested cases by state regulatory bodies?

12 A. In the last three months -- regulatory research
 13 collects data on these authorized returns, they have
 14 essentially ranged between 9.3 and 9.8 percent with a
 15 median at around 9.7 percent. So again, that's --
 16 that's the latest information on what other Commissions
 17 are -- have been allowing.

18 Q. And Dr. Gaske, you talked about the comparable
 19 proxy companies. And am I correct there's very little
 20 disagreement between you and the other experts that are
 21 going to testify with respect to the proxy companies?

22 A. There are some differences, but not really
 23 major difference.

24 Q. Okay. With respect the rate of return you
 25 propose, how does that compare to the rate of return

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1 for future Value Line projections for those comparable
 2 proxy companies that the experts in this case have
 3 selected?

4 A. Well, I talked before about the Value Line
 5 projections of what they think the proxy companies are
 6 likely to earn in the next few years, and that
 7 comparable earnings is one of the important
 8 considerations. Will the Company be in a position to
 9 compete for capital on reasonable terms? You can see
 10 that actually the first three on the list are expected
 11 to have a return on equity of about 11.5 percent in the
 12 next few years. Others are lower, 10, 9.5. So the
 13 range is between 9.5 and 11.5. And the average in that
 14 group is 10.5.

15 Q. And just to be clear, Dr. Gaske, this isn't a
 16 table you created, this is published by Value Line?

17 A. Yeah, I took the data from Value Line.

18 Q. And what was the date of that publication?

19 A. Uh --

20 Q. December 1, 2017, is that the footnote?

21 A. Yes.

22 Q. Okay. And Dr. Gaske, you've had the
 23 opportunity to review the ROE analysis of the other
 24 experts for Advocacy Staff and the interveners in this
 25 case. Can you just briefly summarize the areas of

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1 disagreement?

2 A. Certainly. There are a lot of kind of
 3 technical issues that we disagree on. With regard to
 4 Dr. Griffing, he initially filed recommending 8.91
 5 percent, but in his surrebuttal testimony he revised
 6 that to 9.23 percent. Where I would disagree with him
 7 is that 9.23 percent is the median DCF result for his
 8 proxy companies. And I -- as I've explained, I think
 9 that Montana-Dakota North Dakota operations require
 10 return above the median. So that's probably the
 11 biggest difference.

12 With regard to Mr. Gorman, he recommends 9.1
 13 percent. It's -- it's based on a composite of three
 14 different approaches. I think I indicate in my
 15 rebuttal testimony that his risk premium approach I
 16 disagree with. If you correct it for what I think he
 17 should have done, that approach would have come out at
 18 10.0 percent.

19 One of the other issues that we disagree on is
 20 whether there should be a flotation cost adjustment in
 21 the DCF analysis. Mr. Gorman says there should not be
 22 a flotation cost adjustment at all. Dr. Griffing says
 23 that it should be a flotation cost adjustment but you
 24 only make that adjustment to the dividend yield portion
 25 of the DCF model. And I make the flotation cost

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1 adjustment to the entire DCF rate of return. I should
 2 say, I have made a flotation cost adjustment to the DCF
 3 rate of return, but there is not a flotation cost
 4 adjustment in the other methods that I relied on.

5 Q. Dr. Gaske, I have no further questions. Thank
 6 you for your time.

7 MR. SANDERSON: And at this time, Your
 8 Honor, we'd offer MDU Exhibit 14, Dr. Gaske's
 9 PowerPoint slide.

10 THE COURT: Any objection?

11 MR. ARMSTRONG: No objection.

12 MR. COFFMAN: No objection.

13 MAJOR UNSICKER: No objection.

14 MS. JEFFCOAT-SACCO: No objection.

15 Thanks.

16 THE COURT: Exhibit MDU-14 will be
 17 received.

18 Mr. Armstrong.

19 MR. ARMSTRONG: Thank you.

20

21 CROSS-EXAMINATION

22 BY MR. ARMSTRONG:

23 Q. Dr. Gaske, I'll start off where you left off.
 24 We've got three experts talking about this issue
 25 throughout this hearing and it seems they've all used a

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1 little bit different methods; is that fair?
2 **A. That's correct.**
3 Q. So there's some subjectivity to coming up with
4 the ROE return?
5 **A. Yes.**
6 Q. And you're usually hired by companies, correct?
7 **A. Yes.**
8 Q. Okay. How many times have you testified or
9 filed pre-filed testimony for MDU before, or one of its
10 related companies?
11 **A. I don't know exactly, but probably in the order**
12 **of about 30 times.**
13 Q. In your slides you talk about a zone of
14 reasonableness. What is that?
15 **A. Well, it's a zone in which the results of your**
16 **analyses fit. And it can be a very wide range. But**
17 **normally to be outside the zone of reasonableness means**
18 **that you're suggesting or adopting a rate of return**
19 **that is either above or below anything that your**
20 **studies indicate.**
21 Q. What is your zone of reasonableness in this
22 case?
23 **A. Well, I always start with the DCF analysis as**
24 **the zone, but -- and it's a very wide range. But then**
25 **you try to look at a variety of factors to settle into.**

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1 Q. No, I understand that from your testimony, but
2 just what is the zone? So it would be 9.2, which is
3 the median of the DCF? On slide 4.
4 **A. Well, that wouldn't be the zone. They -- the**
5 **zone would probably run from 7.1 to 11.8. So it's a**
6 **very wide zone. So you have to find something within**
7 **the zone.**
8 Q. Okay. So the zone is what -- are you saying
9 the zone is the DCF analysis?
10 **A. Well, that's what I usually start with as the**
11 **zone of reasonableness. It's -- FERC uses the term**
12 **"zone of reasonableness" all the time, and it uses that**
13 **definition.**
14 Q. Your 10 percent would fall in the upper portion
15 of that zone of reasonableness?
16 **A. That's correct.**
17 Q. Help me understand your gas utility risk
18 premium. As I understood that -- and I'm looking at
19 slide 4. As I understood that, that was something you
20 came up with?
21 **A. Well, it -- yes, I did that analysis. It's**
22 **something that is in the finance literature as looking**
23 **at historical risk premiums and trying to relate them**
24 **statistically to bond yields.**
25 Q. And from that, you calculated the equation on

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1 slide 5?
2 **A. That's correct.**
3 Q. And that's not an equation you go out and get
4 from some publication or something?
5 **A. No, I calculated that.**
6 Q. Okay. Now, moving on to slide 7 now, and we'll
7 come back to some of these things, I just want to get
8 through your slides first. Slides 7 and 8. As I
9 understand it, you're just assessing MDU's North Dakota
10 Gas component?
11 **A. That's correct.**
12 Q. If you used MDU Resources, Inc., where would it
13 fall on these slides?
14 **A. Probably somewhere in the middle, but I haven't**
15 **made that comparison. They're not really relevant to**
16 **the analysis.**
17 Q. And that would be the same for slide 8, it
18 would increase to be somewhere in the middle?
19 **A. Probably. I could get you a specific number if**
20 **you need it.**
21 Q. So it's your testimony it's just completely
22 irrelevant to consider the parent company?
23 **A. Well, for setting the rate of return, you do it**
24 **on a stand-alone basis for the local operations and the**
25 **risks that are inherent in those local operations as an**

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1 **investment. It really doesn't matter who owns them.**
2 Q. But you're aware that MDU is part of MDU
3 Resources, Inc., correct?
4 **A. That's correct.**
5 Q. It has four other -- or three other
6 brother/sister companies that are in the gas
7 distribution business?
8 **A. Yes.**
9 Q. Shares employees with those companies?
10 **A. Yes.**
11 Q. Shares technology with those companies?
12 **A. Yes. But it doesn't share risks.**
13 Q. You've got a chart in here now that is -- you
14 do have your rebuttal testimony available to you up
15 there as well, correct?
16 **A. Yes.**
17 Q. So you've got a chart in here that is on -- I
18 think it's the last chart, page 11 -- or page 12. I'm
19 looking at the chart on page 11 first.
20 And as I understand it, those are
21 commission-determined ROEs allowed between January and
22 May of 2018. I'm sorry, I'm on your slides. I'm still
23 on your slides.
24 **A. Oh, I'm sorry.**
25 Q. But I'm going to use it with your rebuttal

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1 testimony.

2 **A. Yes. Yes.**

3 Q. And so this is commission-determined ROEs from

4 January to May of this year?

5 **A. That's correct.**

6 Q. Do you know if those are litigated or settled

7 cases?

8 **A. Those are all litigated cases. None of them**

9 **are settlements.**

10 Q. And none of those have reached an ROE that is

11 10 percent; is that correct?

12 **A. That's correct.**

13 Q. In your rebuttal testimony on chart 1, which is

14 on page, I believe, 5 of your rebuttal testimony.

15 **A. Yes.**

16 Q. What is that chart?

17 **A. That is the authorized returns on equity that**

18 **were reported by Regulatory Research Associates.**

19 Q. And is that in litigated and settled cases or

20 just litigated?

21 **A. I believe it's all the ones they captured.**

22 Q. So it would include everything?

23 **A. Yes.**

24 Q. Okay. And on that one, in your testimony you

25 indicate that there were ten higher than yours total?

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1 **A. Yes. Or I'm not sure I said ten. Let me take**

2 **a look. That looks like about the right number, nine**

3 **or ten.**

4 Q. And the median in that range is 9.55, correct?

5 **A. Yes.**

6 Q. If you look at --

7 **A. Yeah. Yes over that two-year period.**

8 Q. And could you give us an idea, what is the

9 affect of your small size adjustment?

10 **A. Well, the affect is that I selected a rate of**

11 **return that was above median for the DCF analysis.**

12 Q. And in your rebuttal testimony you indicated

13 smaller companies generally face greater risk due to a

14 limited size of market, correct?

15 **A. Would you repeat that?**

16 Q. Due to a limited size of market as one of the

17 reasons?

18 **A. Oh, yes.**

19 Q. Leaving them more vulnerable to a downturn in a

20 local economy?

21 **A. That's correct.**

22 Q. Do you know if MDU has experienced a downturn?

23 **A. Yes.**

24 Q. Okay. How much of a downturn?

25 **A. Well, the -- essentially, when the oil boom**

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1 **ended there was a downturn in the market.**

2 Q. Is that coming back?

3 **A. Yes, it's somewhat common for the oil industry**

4 **to go through boom and bust.**

5 Q. And it says you may have -- and the small size

6 is supported by having inadequate resources to adapt to

7 changing market and technology in the future?

8 **A. That's correct.**

9 Q. Or may lack economies of scale?

10 **A. That's correct.**

11 Q. But they do share technology and employees with

12 three other gas distribution companies, correct?

13 **A. That's correct.**

14 Q. And they do get support from MDU Resources,

15 Inc., correct?

16 **A. Yes.**

17 Q. And then you say that leaves them more

18 vulnerable to competitive alternatives?

19 **A. Yes.**

20 Q. MDU is a monopolistic gas distribution service

21 in the territories it serves, correct?

22 **A. Well, depends on what you mean by monopoly.**

23 **They are the only ones who can distribute natural gas,**

24 **but, you know, you've got processing plants churning**

25 **out that natural gas liquids, propane. People can**

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1 **switch to electric heating, fuel oil. So it faces a**

2 **competitive market in all of those things.**

3 Q. Do you have any evidence that MDU is losing

4 business to those markets in any significant degree?

5 **A. Not at this time. But you can look at history**

6 **over decades and see that different fuels come and go**

7 **and have different primacy. Right now gas is the**

8 **premium. It's probably the most economical of the**

9 **fuels.**

10 Q. And they're not currently losing business to

11 those alternatives?

12 **A. Not that I'm aware of, no.**

13 Q. And nothing that you can point to that says I

14 expect them to in the next couple years?

15 **A. No, but investors, when they invest in a**

16 **company that's putting investments in the ground for**

17 **30, 40, 50 years, they're aware that this is not a**

18 **monopoly business in terms of gas being the only fuel**

19 **available to potential customers.**

20 Q. And MDU also provides electric service,

21 correct?

22 **A. That's correct.**

23 Q. And the vast majority of their electric and gas

24 service territories overlap?

25 **A. That's correct. But I should say, if customers**

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<p>1 switch to electric and suddenly made their gas business</p> <p>2 uneconomic, I don't think that this Commission would</p> <p>3 allow MDU to come in and say we need to raise our</p> <p>4 electric rates in order to recover our gas investment.</p> <p>5 Their gas investment has to stand on its own, and it</p> <p>6 would be a loss.</p> <p>7 Q. And if that change happened, then the gas</p> <p>8 company would come in for a rate issue as well,</p> <p>9 correct?</p> <p>10 A. Well, if you get enough competition, it becomes</p> <p>11 a vicious cycle because so much of their cost is fixed.</p> <p>12 At some point they would start losing customers,</p> <p>13 additional customers, the more they kept raising their</p> <p>14 rates.</p> <p>15 Q. At some point, which there's no evidence will</p> <p>16 happen in the near future?</p> <p>17 A. No. But, you know, in the natural gas pipeline</p> <p>18 industry, traditionally they thought of as monopolies,</p> <p>19 many of them are still monopolies. But over the last</p> <p>20 25 years many of them have had to deeply discount their</p> <p>21 rates, many of them cannot recover their costs, even</p> <p>22 though when they were built they were assumed to be</p> <p>23 monopolies and risk free, but they --</p> <p>24 Q. Has Montana-Dakota?</p> <p>25 A. No.</p>	<p>1 downgraded. You would agree with me that MDU,</p> <p>2 Montana-Dakota, was not one of them, correct?</p> <p>3 A. That's correct.</p> <p>4 Q. And you heard Ms. Kivitso state that was the</p> <p>5 case as well, correct?</p> <p>6 A. Yes.</p> <p>7 Q. Weren't the companies that were downgraded</p> <p>8 those with limited cushion in the rating for</p> <p>9 deterioration and financial performance?</p> <p>10 A. Yes.</p> <p>11 Q. And that Moody's also stated the vast --</p> <p>12 MR. ARMSTRONG: I should offer PSC-28 at</p> <p>13 this time.</p> <p>14 THE COURT: Any objection?</p> <p>15 MR. SANDERSON: No objection.</p> <p>16 THE COURT: Ms. Jeffcoat-Sacco?</p> <p>17 MS. JEFFCOAT-SACCO: No objection.</p> <p>18 THE COURT: Mr. Coffman?</p> <p>19 MR. COFFMAN: No questions.</p> <p>20 THE COURT: Major?</p> <p>21 MAJOR UNSICKER: No objection.</p> <p>22 THE COURT: Okay. PSC-28 will be</p> <p>23 received.</p> <p>24 BY MR. ARMSTRONG:</p> <p>25 Q. And didn't Moody's also state the vast majority</p>
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<p>1 Q. Thank you.</p> <p>2 A. That's the point. It has the potential.</p> <p>3 Q. Moving on -- well -- moving on. In your</p> <p>4 rebuttal testimony, you talk about a Moody's</p> <p>5 publication from January of 2018 on page 12? And</p> <p>6 that's actually in relation to the Tax Cuts and Job</p> <p>7 Act, correct?</p> <p>8 A. Yes.</p> <p>9 Q. And you're recommending some ways to stabilize</p> <p>10 companies as a result of the Tax Cuts and Jobs Act,</p> <p>11 correct?</p> <p>12 A. Moody's does.</p> <p>13 Q: And those are three ways listed on page 12 of</p> <p>14 your testimony, correct?</p> <p>15 A. Yes.</p> <p>16 Q. And just --</p> <p>17 MR. ARMSTRONG: May I approach the</p> <p>18 witness, Your Honor?</p> <p>19 THE COURT: You may.</p> <p>20 BY MR. ARMSTRONG:</p> <p>21 Q. Dr. Gaske, I've handed you what we've marked as</p> <p>22 PSC-28. Is that the Moody's source that you used in</p> <p>23 your rebuttal testimony?</p> <p>24 A. Yes.</p> <p>25 Q. You talked about several utilities being</p>	<p>1 of U.S. regulated utilities will continue to maintain</p> <p>2 stable rating outlooks?</p> <p>3 A. Yes.</p> <p>4 MR. ARMSTRONG: No further questions.</p> <p>5 Thank you.</p> <p>6 THE COURT: Okay. Mr. Coffman.</p> <p>7 MR. COFFMAN: No questions.</p> <p>8 THE COURT: Major.</p> <p>9 MAJOR UNSICKER: Yes, sir. Thank you.</p> <p>10</p> <p>11 CROSS-EXAMINATION</p> <p>12 BY MAJOR UNSICKER:</p> <p>13 Q. Good morning, Dr. Gaske. Do you know what</p> <p>14 MDU's current ROE is?</p> <p>15 A. I believe Ms. Kivitso said yesterday that --</p> <p>16 oh, I should ask you, what they're actually earning or</p> <p>17 what they're allowed.</p> <p>18 Q. What they're allowed?</p> <p>19 A. Oh, I believe they're currently allowed 9.5.</p> <p>20 Q. And that was part of a -- that was a settlement</p> <p>21 agreement in 2015, correct?</p> <p>22 A. That's correct.</p> <p>23 Q. And that settlement agreement was approved by</p> <p>24 the Commission?</p> <p>25 A. Yes.</p>

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1 Q. And their business risk at the time is, would
2 you agree, the same as it is today?

3 A. Pretty much, yes.

4 Q. And regulatory risk is about the same?

5 A. Yes.

6 Q. Would you agree that 9.5 -- or what they're
7 earning currently is a reasonable ROE?

8 A. Well, they're currently actually earning, I
9 believe, 6 something. But the allowed rate of return
10 of 9.5 was a settlement. In general, there are a lot
11 of tradeoffs made in a settlement. So I don't know
12 what else was involved that induced them to accept 9.5.

13 Q. What the Commission approved in that 2015
14 settlement agreement, the 9.5, would you agree that
15 that's reasonable?

16 A. I believe I testified in the settlement hearing
17 and -- it -- very softly I objected to it. I thought
18 it was too low. But I accepted the fact that the
19 Company was willing to settle and ostensibly got other
20 considerations in order to accept that number.

21 MAJOR UNSICKER: That's all I have. Thank
22 you, sir.

23 THE COURT: Okay. Ms. Jeffcoat-Sacco.
24 MS. JEFFCOAT-SACCO: I just have a couple.
25

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CROSS-EXAMINATION

1 BY MS. JEFFCOAT-SACCO:

2 Q. I guess I need you to -- and perhaps it's
3 buried in your direct testimony, but I'm not finding it
4 again at the moment. I'd like you to point to the
5 basis for the conclusion or recommendation that, you
6 know, because the bond yields are low then FERC says
7 low, then the adder is too low. Okay. Where is the
8 support and the analysis so that I can understand more
9 that cause and effect? Seems to me people are flocking
10 to buy utility stocks because bond yields are too low.
11 It's a condition that you accept, you know, at face
12 value as opposed to adjusting for it. I'm just showing
13 my ignorance here with economics. But point me to
14 where I need to go so I can get some more information.
15 Perhaps you've got a footnote or something in your
16 testimony.

17 A. There's a section in my rebuttal testimony
18 beginning on page 7, and the heading for that section
19 is Effective Capital Market Conditions on the DCF
20 Model. And I believe it runs probably about ten pages.

21 MR. SANDERSON: What page did you refer
22 to, Dr. Gaske? Sorry.

23 THE WITNESS: Page 27 of my rebuttal
24 testimony.
25

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1 MS. JEFFCOAT-SACCO: Oh, I thought you
2 said 7. I was lost too.

3 THE WITNESS: Oh, sorry. It runs from
4 page 27 to page 33.

5 BY MS. JEFFCOAT-SACCO:

6 Q. Okay. And so are you basically -- your sources
7 or your support then for this conclusion is -- are
8 these reports that I quoted in here and footnotes?

9 A. And -- yes, and the reasoning that I describe
10 through them.

11 Q. Okay. And I guess I have the same general
12 40,000-foot question about the small company
13 environment. I recognize that it is hard to perhaps
14 choose comparable -- your proxy companies. You're not
15 going to find them, I understand that, that are exactly
16 like MDU Gas, okay, in the same kind of demographic and
17 the same kind of geographic area and that sort of
18 thing. But it seems to me that an average person, as
19 opposed to an economist who does this for a living,
20 thinks that some of those things may -- that
21 environment, adds less risk as opposed to more risk.
22 So I need to get past your conclusions into what you're
23 using as your support or basis for that conclusion that
24 that kind of a company sitting in this kind of an
25 environment that there's to be more risk as opposed to

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1 less. I mean, all you have to do is live here a while
2 to understand that there's not a lot of competition and
3 there's not a lot of choice and the site -- yes, we
4 don't have a lot of variety in our economic base, but
5 it bounces back, et cetera, et cetera, et cetera. So I
6 need to know where you're getting that from as opposed
7 to just your recommendation.

8 A. Well, it's -- the results of my analysis of
9 these operations compared to the proxy companies, so --
10 the whole context of it has to be relative to those
11 companies. And when I do that comparison, I see some
12 fairly significant differences. They tend to be much
13 more diversified economies, generally much faster
14 growing, they're not subject to a single -- well, just
15 the small handful of industries that, frankly, could
16 fluctuate. And so I don't know if that's helping you,
17 but --

18 Q. What I'm -- send me to a textbook or send me to
19 some other analysis or some cases where what you're
20 describing equals more risk as opposed to less risk.
21 Because there are some factors about MDU that I would
22 see as less risk about the demographics and the
23 environments of where MDU Gas operates.

24 A. Right. The closest thing that I could probably
25 point you to, and I'm not sure I have it quoted in my

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1 testimony, is speaking of MDU in particular. Standard
 2 & Poors has written some credit reviews of MDU
 3 Resources, and in recent years they from time to time
 4 they will say that the diversity of the operations
 5 under the MDU Resources umbrella makes the parent
 6 company less risky than any of its subsidiaries
 7 individually, that they provide diversification.
 8 As far as an analysis of the North Dakota
 9 operations, I'm not aware of anybody, other than
 10 myself, who, you know -- there isn't a publicly
 11 published source that does that kind of analysis, so I
 12 have to do it.
 13 Q. Okay. How about just for the simple standards
 14 that these particular attributes, if your company has
 15 this attribute or that attribute it is more risky.
 16 A. I'd probably take you back to the Moody's
 17 slide, but the Moody'S slide is also in my -- or the
 18 quote from Moody's is in my testimony about the
 19 characteristics that they look for in terms of size and
 20 diversity.
 21 Q. Okay.
 22 A. And then there's a very large economic
 23 literature on the fact that small size does indicate or
 24 require higher rates of return.
 25 Q. But is that -- if other factors are held the

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1 same -- if all other factors are equal, the size may
 2 matter as opposed to other factors?
 3 A. That's correct, yes.
 4 Q. Okay. And where do I go in your testimony --
 5 again, I apologize if I have simply not remembered
 6 where to go -- to talk about the regulatory environment
 7 and the impact of the regulatory environment on the
 8 level of risk? It seems we have a tradition in North
 9 Dakota of a very favorable regulatory environment
 10 mitigating some of these other negatives.
 11 A. You do. You do. And it's rated somewhat above
 12 average. In my direct testimony I address regulatory
 13 risk on -- beginning on page 34.
 14 Q. And your conclusion on regulatory risk is? I'm
 15 not going to reread it right now.
 16 A. It has slightly below average regulatory risk
 17 compared with the proxy companies.
 18 Q. And with this request for the SSIP rider, would
 19 that not increase the positive regulatory -- or lack of
 20 regulatory risk?
 21 A. Maybe indirectly, but overall the SSIP rider
 22 shouldn't have much effect on risk. The reason being
 23 that the Company can simply file a rate case every
 24 single year, so we can all go through this together
 25 every year. Or it can have a limited rate adjustment

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1 to reflect the SSIP. So I don't think SSIP is really a
 2 rate issue -- I'm sorry, it's not really a risk issue,
 3 it's a regulatory administration issue.
 4 Q. So is it your position that riders in general
 5 do not reduce regulatory risk for utilities?
 6 A. To the extent they reduce regulatory lag, they
 7 can produce risk. But in this particular case, the
 8 Company files a projected test year, so I don't -- the
 9 projected test year is already taken away the
 10 regulatory lag.
 11 Q. So that would sort of mitigate --
 12 A. Yeah.
 13 Q. -- against SSIP being a reason to reduce
 14 regulatory lag. I know that's not the issue you were
 15 hired to testify about.
 16 A. Right. From the risk standpoint, I think the
 17 Company will recover its cost with this equipment,
 18 these major investments that it's making either with a
 19 projected test year and a full-blown rate case or a
 20 SSIP with a more limited review. But from investor
 21 standpoint, I think given the overall structure of the
 22 regulatory process here, they would expect that they
 23 would -- the Company can recover the cost.
 24 Q. Okay. Thanks. Appreciate that.
 25 MS. JEFFCOAT-SACCO: That's all I have.

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1 Oh, excuse me. Sorry, yeah, I should introduce
 2 Pat Fawn who is with me at the table which yesterday
 3 was Jerry, today as Pat Fawn. Anyway, he does have a
 4 question.
 5 BY MS. JEFFCOAT-SACCO:
 6 Q. Does the accumulative affect of the rider and
 7 the future test year, you know, go to mitigated risk
 8 further than your analysis might indicate?
 9 A. Well, the Company has a variety of riders
 10 already in place, but the -- I just don't see that the
 11 SSIP will mitigate risk any further. It essentially --
 12 I don't see that the Company's going to be unable to
 13 recover the cost of these investments or even suffer
 14 regulatory lag if it wants to file a rate case every
 15 year.
 16 Q. That's what we were asking though. The
 17 accumulative affect of both of those things, that they
 18 have a future test year and they won't have lag there,
 19 they are asking for a rider and they won't have lag
 20 there, does that not further reduce their regulatory
 21 risk for purposes of their return?
 22 A. One or the other of those, but not both. Once
 23 you have one, you don't get much in the way of reduced
 24 risk by adding the second one. So from a risk
 25 standpoint, the future test year and the ability to

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1 file every year means that the Company should recover
 2 its costs of investment. To my mind, the thing that
 3 recommends the SSIP is that you can have a smaller,
 4 less involved, less costly rate case or rate adjustment
 5 on a regular basis rather than to go through a very
 6 lengthy, expensive process every year such as this one.
 7 Q. So why does the Company have, in your opinion,
 8 without me having to go over there and read it, why
 9 does the Company have a slightly less than average
 10 regulatory risk?
 11 A. Because -- I think a couple of things that the
 12 Regulatory Research Associates cite to are the allowed
 13 rates return tend to be consistent with essentially
 14 what is typical elsewhere, they're not unusually low.
 15 And it does have things like future test year. In the
 16 case of MDU, it has a straight fixed variable rate
 17 design. So that more or less mitigates the variability
 18 of its earnings.
 19 Q. And what are some things the Company can have
 20 to have a larger -- more than slight reduced risk?
 21 What are other things, regulatory things out there that
 22 . . .
 23 A. Well, that's a good question because I look at
 24 the ratings and I look at some of the other states that
 25 have higher ratings, and I don't see that they

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1 necessarily have a whole lot that's different. So I
 2 just don't know, possibly higher allowed rates of
 3 return.
 4 MS. JEFFCOAT-SACCO: That's all I have.
 5 Thanks.
 6 MR. ARMSTRONG: Judge, could I -- I
 7 neglected to pass out the exhibit to the Commissioners.
 8 Can I pass that out in case they want it?
 9 THE COURT: Yes. You can do that now.
 10 Thank you. That's PSC --
 11 MR. ARMSTRONG: 28.
 12 THE COURT: -- 28.
 13 Okay. Questions from the Commissioners.
 14 Commissioner Kroshus.
 15
 16 EXAMINATION
 17 BY COMMISSIONER KROSHUS:
 18 Q. Well, good morning.
 19 A. Good morning.
 20 Q. I'm going to start on page number 7 of your
 21 slides, the size versus proxy companies of MDU North
 22 Dakota Gas?
 23 A. Was that the one?
 24 Q. Yes. Can you -- the others listed, is that
 25 just simply for their gas operations if they have

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1 other --
 2 A. That's their entire operation. Unfortunately,
 3 you know, if you calculate a dividend yield you have a
 4 publicly traded stock price that encompasses the entire
 5 operation. So some of those companies are pure natural
 6 gas, and others have other operations, but they had to
 7 have at least 65 percent of the operation natural gas
 8 distribution.
 9 Q. So it would be really hard to use that as a
 10 comparison anyway?
 11 A. That's one of the factors you have to consider.
 12 Q. Okay. On the -- it would be page 11 and 12 of
 13 the slides as well, you -- well, let me ask this first.
 14 You, I think -- but I don't want to -- if I repeat this
 15 correctly. The Value Line projections, you rely on
 16 those? You find them to be accurate, credible?
 17 A. Yes. I mean, they're widely used by investors
 18 and relied on by investors. They're one of the most
 19 widely used sources of this kind of information.
 20 Q. So if the Atmos case in Kentucky is not settled
 21 currently and they are seeking an allowed return on
 22 equity of 9.7 percent but then you see Value Line at
 23 11.5.
 24 A. Right. The Value Line is what they think the
 25 companies will actually earn, and the Atmos has other

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1 operations besides the Kentucky operation. In some
 2 cases I think Value Line expects certain utilities will
 3 have an opportunity to earn more than their allowed
 4 rate of return, and they expect -- and that I think is
 5 reflected in their projections.
 6 Q. So hopefully Kentucky regulators won't see this
 7 before they make their ruling?
 8 A. Well, they did make their ruling and came in at
 9 9.7.
 10 Q. Oh, I thought you had said earlier that none of
 11 these?
 12 A. Oh, yes. These were not settled, these were
 13 the actual -- the Commission made the decision. It was
 14 litigated and fought out among the parties and this is
 15 what Commissions set up.
 16 Q. Oh, all right. So you had talked quite a bit
 17 about -- well, yesterday we heard testimony about the
 18 downturn, the slow down -- the oil-related slow down in
 19 western North Dakota have a negative impact on the
 20 business. But can you just -- when you did your
 21 analysis were you basing that on a reduction in terms
 22 of volume or a reduction in meters? Because the meters
 23 haven't been taken out for all intents and purposes.
 24 A. I would be most concerned about number of
 25 meters. It's a -- essentially it's a long-term kind of

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1 risk that investors look at as possibility. It tends
 2 to be somewhat high in areas that depend on a single
 3 industry, particularly a boom and bust industry like
 4 the oil industry. So it's not inconceivable that the
 5 bottom would fall out of the oil market and you'd have
 6 a lot of the population that moved here suddenly the
 7 last few years moving away, and then you'd have meters
 8 with no customers.

9 Q. I think the wording stated slower growth, which
 10 doesn't necessarily mean reduced demand. Slower growth
 11 just means we're not seeing maybe double digit growth,
 12 but maybe it's two percent growth or four percent
 13 growth. It doesn't mean a decline, correct?

14 A. Well, a major bust like that probably would see
 15 a decline. I know that -- until the oil -- the recent
 16 oil boom for, I want to say, probably about seven
 17 decades, North Dakota had actually experienced
 18 declining population. So the idea that a major --
 19 really major oil bust could reverse what's happened in
 20 the last ten years is not inconceivable.

21 Q. So is it fair to say that the lower oil prices
 22 definitely had a negative impact?

23 A. That's correct.

24 Q. So now that oil prices have moved back up, it
 25 could have a positive impact; would that be fair?

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1 A. Well, for the Company, it means that if more
 2 people move in, the Company will have to invest more
 3 and build more mains and services, things like that.
 4 So it would have a positive impact. But the risk is
 5 what happens over 30 or 40 years, because with a gas
 6 distribution utility, you put fixed investments in
 7 place for 30 or 40 years. If the market goes bad here,
 8 it's not really economical to dig them up and take them
 9 to some other state. They're stuck. These are fixed,
 10 sunk assets. And so you kind of roll the dice with the
 11 economy that you're serving.

12 Q. Now, you had stated that higher interest rates
 13 will make utilities less attractive, less competitive
 14 with other fixed income investment opportunities,
 15 correct?

16 A. Yes.

17 Q. But aren't utility stocks also viewed as a safe
 18 haven from volatility in the market?

19 A. Generally speaking, yes. Yeah. So which is
 20 why the rate of return tends to be lower for utilities
 21 than for a lot of other companies.

22 Q. Do you think because of the smaller part of MDU
 23 in terms of the gas division that -- investors, I would
 24 have to think, are looking at MDU stock overall,
 25 they're not just looking at that one component. How do

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1 you think they weighed it compare to a pure play gas
 2 company that's publicly traded?

3 A. Probably that it -- well, I know that S&P
 4 indicates that they consider it to be less risky, the
 5 diversity of its operations means that it has lower
 6 risk than the individual operations.

7 Q. Right. And the reason I'm asking these
 8 questions, I'm just trying to weight the testimony in
 9 terms of, yes, but how do you appropriately weight it
 10 because it's mixed in with a -- under a larger entity.

11 A. Right.

12 Q. Which is good from a diversification
 13 standpoint.

14 And then the other part, too, is -- and not
 15 necessarily directly from your testimony, but there are
 16 instances where, you know, the overall -- are
 17 comparisons to other utilities are made, other
 18 industries are made, and then sometimes it's made in a
 19 good way, sometimes it's made in a bad way and kind of
 20 crisscrossing back and forth. And, you know, that's
 21 smart, it's how you make a case.

22 But did you cite -- and I was looking for it
 23 and now I can't track it down. Did you cite Fitch in
 24 your --

25 A. I think I did with regard to the effect of the

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1 tax act.

2 Q. Right. Okay. Correct. You had from the short
 3 and median term. But when I've looked at the actual --
 4 the brief from Fitch on impact of the TCJA, I'm just
 5 finding out that over the -- that it's just stated over
 6 the short term, and that over the long term that it's
 7 negligible at best. But that median term is very
 8 important because you got short term, median term, long
 9 term. I can't find where it states median term. I
 10 just see short term.

11 A. Yeah, and I don't know. I don't -- if I
 12 understand what you're talking about, the focus of
 13 Fitch was largely on both the tax coverage ratios, the
 14 fact that when you have a return on equity, say it's
 15 ten percent, you have to gross that up for taxes and
 16 the tax provides part of the cash that provides
 17 coverage and guarantee to the debt holders.

18 The other thing that is short to medium term is
 19 the results of excess accumulated deferred income
 20 taxes, which that's something once the companies go
 21 through the process of more or less refunding that to
 22 customers, then that won't be an issue anymore once
 23 they get through that period.

24 Q. Okay. And then finally, the Q1 earnings for
 25 2018 versus 2017 were 22 versus 19 cents. And I do

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1 recognize that the electric side was up, I believe, 3
2 percent and the gas side was down 1 percent. Based on
3 your analysis, do you think that gas will be slightly
4 down in terms of profits going forward in 2018?
5 **A. The MDU Resources --**
6 **Q. Or earnings, I should say?**
7 **A. I haven't done that analysis. I don't know.**
8 **COMMISSIONER KROSHUS: All right. No**
9 **other questions from me.**
10 **THE COURT: Chairman Christmann.**
11
12 **EXAMINATION**
13 **BY CHAIRMAN CHRISTMANN:**
14 **Q. Okay. I just want to make sure I understand a**
15 **couple of your slides, contemplating here in the days**
16 **ahead. On the results of cost of equity studies, did I**
17 **understand right that you felt the DCF analysis kind of**
18 **tends to be -- show as too low because the Fed**
19 **policies, correct?**
20 **A. At this time, yes.**
21 **Q. But you expect those policies are -- so why**
22 **should they be higher now, because of the Fed policies**
23 **of the last year or two years where they've edged**
24 **interest rates up, or are you basing it on your**
25 **expectations of future Fed policies?**

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1 **A. Now, at -- what's been happening for about the**
2 **last eight to ten years is still kind of an overhang in**
3 **the market. The Federal Reserve had more or less, I**
4 **guess you could call it printing money, but they bought**
5 **a lot of treasury bonds, and essentially they bought**
6 **about \$4 trillion worth of treasury bonds. And that \$4**
7 **trillion is still sitting there in the market driving**
8 **interest rates down. Their increase in interest rates**
9 **has been under the federal funds rate, which is the**
10 **interest rate that banks pay for short-term loans from**
11 **the Fed. But so far you haven't seen a major increase**
12 **in the longer term bond rates. A lot of people expect**
13 **them to start going up, but they haven't done so yet.**
14 **Q. And that's what your testimony is based on is**
15 **your expectations that they're going to go up?**
16 **A. Well, this part of the test -- yes, this part**
17 **of the testimony is based on the fact that --**
18 **Q. So it's not --**
19 **A. -- the market is currently depressed.**
20 **Q. It's not a fact out there that it's going to**
21 **change in the next year or two or three years, it's**
22 **just your expectation?**
23 **A. And the forecast of various forecasting groups**
24 **that publish these forecasts. I have data in there**
25 **from Blue Chip Economic Indicators, and what they do is**

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1 **they survey about 20 or 30 different major forecasting**
2 **houses, the banks and economic forecasting companies**
3 **that publish forecasts, and their overall expectation**
4 **is for a fairly dramatic increase in bond yields.**
5 **Q. Okay. And you find those forecasts reliable?**
6 **A. Almost all economic forecasts are -- they**
7 **rarely turn out to be correct in hindsight, but people**
8 **make their decisions based on those forecasts. And**
9 **they can come in too high or too low.**
10 **Q. Okay. Then the gas utility risk premiums**
11 **slide.**
12 **A. Yes.**
13 **Q. What years does this encompass?**
14 **A. 1992 to I think 2016 or '17.**
15 **Q. And is this all of the cases that happened in**
16 **those 25 years, or is this selected ones, or -- I don't**
17 **know what I'm seeing here.**
18 **A. Oh, that's all of the cases that Regulatory**
19 **Research Associates, they try to capture everybody, but**
20 **that's all of the cases that had a stated rate of**
21 **return in the decision. A lot of decisions have**
22 **black-box settlements and don't have a stated rate of**
23 **return.**
24 **Q. But of the publicized -- it's not a selected**
25 **group, it's all the ones that were available is what**

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1 you're saying?
2 **A. Yes, it's all of them.**
3 **Q. Okay. And you said this morning that of cities**
4 **that MDU Gas serves, Bismarck is by far the largest,**
5 **right?**
6 **A. That's correct.**
7 **Q. Are you familiar with Bismarck's growth rate in**
8 **recent years as opposed to maybe national averages?**
9 **A. I know it's been extremely rapid.**
10 **Q. Okay. And did you -- were you here yesterday**
11 **for the testimony when we heard about selling a couple**
12 **of office buildings in other, by this service territory**
13 **standards, more midsize communities, big profits, or at**
14 **least profits because they needed newer, bigger office**
15 **buildings in those towns?**
16 **A. Yes.**
17 **Q. And did you hear the testimony about needing to**
18 **buy modular homes because the new employees they needed**
19 **to hire couldn't find housing in those towns?**
20 **A. Yes.**
21 **Q. And so on slide 6, the relative risk factors,**
22 **are you saying that MDU Gas has had slower customer**
23 **growth than comparable companies you looked at? It**
24 **seems to me it would be pretty fast growing?**
25 **A. Well, at the time I did the testimony, it**

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1 had -- it had levelled out quite a bit. But by and
 2 large it was very rapid for a few years, then it
 3 levelled out, and we'll see if it comes back.

4 Q. But do you usually base these things on, like,
 5 a 12-month period or 24-month period, or more a sliding
 6 scale where you'd encompass five to ten years or some
 7 longer period of time?

8 A. Well, measuring financial market conditions,
 9 like, I do it on probably about a six-month period and
 10 what they are currently are. For measuring risk for an
 11 operation where when you put an investment in the
 12 ground it's -- you don't get to recover it totally for
 13 about 30 or 40 years. So when I look at risk, I look
 14 at long term, the risk assessment has to be for a long
 15 term.

16 Q. Okay. You used the term a couple times, the
 17 oil busts.

18 A. Umm-hmm.

19 Q. The slow down in the oil and gas activity in
 20 North Dakota in the last few years, would you
 21 characterize that as an oil bust as we've usually used
 22 the term in relation to, say, oil busts in the 80s or
 23 something like that?

24 A. Well, I think it was relatively moderate
 25 compared to the 80s. But part of my thinking on that

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1 is I actually saw it. I moved to Texas in the mid 80s
 2 in an area that had been rapidly growing, growing for
 3 15 percent a year. And when we moved there, we
 4 couldn't understand why every fifth house was empty.
 5 And then people explained that they lost their job,
 6 their mortgage was underwater and they walked away.
 7 And so I've seen it happen. It can happen. And
 8 investors are aware that it can happen.

9 Q. So that was in the 80s, but do you consider
 10 what happened in North Dakota in the last few years a
 11 real oil bust? And I guess the second part of the
 12 question, do you think that the oil and gas industry of
 13 the 21st century is still as vulnerable to boom and
 14 bust cycles as the oil and gas industry of the 20th
 15 century?

16 A. Absolutely. Like it or not, the oil industry
 17 in North Dakota is basically at the whim of Saudi
 18 Arabia and OPEC countries and whether they decide to be
 19 tight or, you know, open the spigots and pump oil out.

20 Q. You said, when I asked you about the cost of
 21 equity studies, that you rely a lot on -- or that you
 22 rely somewhat on forecasters. Have you looked at the
 23 North Dakota oil and gas division forecasts for oil and
 24 gas activity for the next 5 or 10 or 20 or 30 years?

25 A. No.

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1 Q. Okay. And then on slides 11 and 12, I just
 2 want to ask another question or two on what
 3 Commissioner Kroshus had asked about. The Value Line
 4 projected ROE for 11.5 percent that was decided at 9.7,
 5 did I understand you correctly that the Value Line
 6 projection contemplates other activities outside the
 7 regulated activity?

8 A. Possibly, but Atmos is mostly a large natural
 9 gas distribution holding company. So the 9.7 we saw
 10 was their Kentucky jurisdiction. But I think they're
 11 in at least a dozen different states.

12 Q. Similar to my question on the busier chart, are
 13 the seven companies that you list as having decision
 14 results in the first five months of this year, is that
 15 all of the decisions that are available for this year,
 16 or is it something that you selected?

17 A. No, this is all of the decisions this year in
 18 which it was a litigated case. I had somebody in my
 19 office download it last week.

20 Q. And then the seven companies that you chose on
 21 the Value Line projected ROEs, how did -- does Value
 22 Line, did they just do those companies, or did you
 23 choose those out of many?

24 A. They had about 10 or 11 companies, and I
 25 eliminated -- I think I eliminated one because it got

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1 less than 65 percent of its business from natural gas
 2 distribution, and I think I eliminated another one
 3 because it was involved in a merger at the time.

4 Q. So tell me why I should put much weight into at
 5 least slide 12 here since Value Line was looking at
 6 other things than the regulated part? And we are only
 7 dealing with the regulated part of MDU Gas company.

8 A. If you take the first one, I think Atmos is
 9 almost all natural gas distribution. I mean, it's
 10 almost all regulated.

11 Q. Well, but they -- Value Line projected it 11.5,
 12 it came in at 9.7. So that tells me Value Line
 13 probably isn't a very good indicator for me to base a
 14 decision on.

15 A. Well, I think Value Line is expecting some of
 16 those companies will earn more than their allowed rate
 17 of return. The 9.7 was for their Kentucky
 18 jurisdiction, but that's relatively small compared to
 19 the rest of their business. So I -- there are a
 20 variety of things that they take into consideration.
 21 Some of them may be allowed rates of returns that have
 22 been in place for a long period of time.

23 CHAIRMAN CHRISTMANN: No other questions.
 24 Thank you.
 25 THE COURT: Commissioner Fedorchak.

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1 COMMISSIONER FEDORCHAK: Thank you.

2

3 EXAMINATION

4 BY COMMISSIONER FEDORCHAK:

5 Q. So I have some of the similar lines of

6 questions, but a couple others that we haven't talked

7 about yet. So in my observation, it took a fair amount

8 of time for the allowed ROEs to adjust down when

9 interest rates were falling. And in fact, we still

10 have a company, a regulated utility, who has interest

11 rates set way back when pretty high, or an ROE rate

12 that still hasn't been adjusted.

13 A. Right.

14 Q. So why should be so quickly, even before the

15 interest rates are going up, be adjusting these back

16 up?

17 A. Well, the returns in my study are mostly based

18 on what we have currently. In some cases it's

19 forecasts. But I think one place where I use an

20 interest rate forecast, I give it about one-third

21 weight with what the current ones are, and that was

22 just projected out for about 18 months. But for the

23 most part, these are all based on current market

24 conditions, the numbers that are on the -- my results

25 tab.

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1 Q. I'm interested, too, in the risk factors, the

2 relative risk factors, on chart number 6. You have --

3 are these -- how are they weighted? Are they pretty

4 much equally weighted or --

5 A. No. Business risk is by far the most

6 important.

7 Q. Based on who? Whose opinion? Because I've

8 read from Moody's and others that perhaps regulatory

9 risk is most important. So who says that business risk

10 is the most important?

11 A. I think that's widely accepted as -- in

12 investment analysis. For utilities, the regulatory

13 risk is very important but so is the business risk.

14 The financial risk is interesting because it doesn't

15 stand by itself. What it does is if you borrow and you

16 have leverage, you take on a lot of debt, what you're

17 really doing is magnifying the business risk. So it's

18 -- business risk is crucial to financial risk.

19 Q. Okay. So if you were to weight these, what

20 would you -- how would you do that?

21 A. Well, I hadn't really thought of it in those

22 terms, but, you know, I would say business risk is

23 probably 60 percent; financial risk, which I said it's

24 very hard to separate that from business risk because

25 it mostly just multiplies business risk, but maybe 20

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1 percent; and regulatory risk 20 percent.

2 Q. Okay. Even for utilities? You acknowledge --

3 A. Yes.

4 Q. -- that for utilities the regulatory risk is

5 higher?

6 A. Well, when I'm doing my comparison between

7 utilities, one utility against another, business risk

8 is more important. It is important.

9 Q. So business risk, even with utilities compared

10 to each other, trumps the regulatory risk? It seems

11 like it would be the opposite. If they're both facing

12 regulatory risk, the regulatory factors would be more

13 important in those cases.

14 A. Both of them are very important.

15 Q. So 50-50? When you're comparing them?

16 A. Like I say -- I'm reluctant to give it a

17 percentage number because it depends on circumstances.

18 Q. Well, here's where I'm going, and I think

19 you've heard this from some of the others, too. What

20 you're asking here, or what you're basically -- your

21 conclusion is, your analysis comes out with a 9.5

22 percent ROE, but you're saying that MDU Utilities

23 should get 10 percent just because they're a risky

24 business?

25 A. Or riskier than those proxy companies, yes.

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1 Q. Okay. And the other risk factors which they

2 fare well on aren't given much consideration?

3 A. They are given consideration. But the most

4 important one is the business risk.

5 Q. Okay. In your opinion?

6 A. And the others, they're close to the average.

7 Q. And we're all comparing to the proxy companies?

8 A. Yes.

9 Q. Okay. So then I want to talk more about the

10 proxy company selection. In your testimony, you, on

11 page 17, kind of went through how you selected the

12 proxy companies and basically -- and you did that today

13 as well. You eliminated those that didn't have

14 investment grade, you eliminated those that don't pay

15 dividends, you eliminated those that don't have future

16 growth rate estimates provided by some agencies, those

17 that are going through mergers, acquisitions, et

18 cetera, and those that didn't derive at least 65

19 percent of their operating natural gas distributions

20 operations, et cetera.

21 So -- but yet you told Commissioner Kroshus

22 that these companies here, you didn't just consider the

23 utility -- you did for MDU Natural Gas, but the rest of

24 them you included their parent company as well. Is

25 that fair then? How can -- that's not an apples to

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<p>1 apples comparison.</p> <p>2 A. Well, that's part of the reason I have to do</p> <p>3 that risk analysis or risk adjustment. The parent</p> <p>4 company has publicly traded common stock that we use to</p> <p>5 calculate a dividend yield or growth rate or a beta for</p> <p>6 capital --</p> <p>7 Q. Which all include risk.</p> <p>8 A. Right. Right. And so --</p> <p>9 Q. So that dividend and those other calculations,</p> <p>10 the risk in that company is included in those factors,</p> <p>11 correct?</p> <p>12 A. Yes. Yes.</p> <p>13 Q. Yet you didn't include that with MDU?</p> <p>14 A. For the most part, these companies are very</p> <p>15 highly concentrated in natural gas distribution, either</p> <p>16 all or, you know, the vast majority of it. So you</p> <p>17 don't have a lot of diversity of types of businesses.</p> <p>18 You have some in some of the companies, but --</p> <p>19 Q. Which would that make them more or less risky</p> <p>20 based on your analysis in the Moody's chart?</p> <p>21 A. It could go either way. Sometimes diversity</p> <p>22 reduces the risk of the parent company. That's what</p> <p>23 S&P says about MDU Resources. Sometimes if it's</p> <p>24 very -- the other operation is a very risky operation,</p> <p>25 it would increase the risk. I don't think that that's</p>	<p>1 utilities for MDU.</p> <p>2 A. Right. And that's solely because there's not a</p> <p>3 publicly traded stock in the natural gas distribution</p> <p>4 operations in North Dakota. If that traded publicly,</p> <p>5 then it would be a much easier comparison.</p> <p>6 Unfortunately, the companies that we have the data on</p> <p>7 to do these analyses are large -- of necessity are</p> <p>8 publicly traded. They just --</p> <p>9 Q. Or you could have just included them as part of</p> <p>10 MDU Resources for the purpose of those two charts.</p> <p>11 A. Well, the risks of the North Dakota operations</p> <p>12 are pretty much on a stand-alone basis.</p> <p>13 Q. The risks. But the assets and the income as it</p> <p>14 relates to these other companies would have been more</p> <p>15 fairly represented in an apples to apples comparison if</p> <p>16 you would have included them as part of the parent</p> <p>17 company?</p> <p>18 A. Well, typically in regulation, you look -- you</p> <p>19 have to look at a company on a stand-alone basis,</p> <p>20 regardless of what other operations it has. The risks</p> <p>21 of North Dakota exist on a stand-alone basis. What --</p> <p>22 probably the best example of that would be -- we heard</p> <p>23 how the North Dakota operations benefit through sharing</p> <p>24 of resources with the parent company, but you've got</p> <p>25 eight or nine companies that all share Nicole's salary.</p>
<p>Page 418</p> <p>1 much of an issue with these particular companies.</p> <p>2 Q. Based on your chart number 9, it says that</p> <p>3 economic diversity is one of the things that Moody's</p> <p>4 looks at to assess risk. So then MDU Utilities'</p> <p>5 participation in MDU Resources should make it less</p> <p>6 risky?</p> <p>7 A. It makes MDU Resources less risky, but it</p> <p>8 doesn't make the North Dakota operation less risky, per</p> <p>9 se. Those operations kind of stand on their own. One</p> <p>10 example I like to use is if MDU were to spin those off,</p> <p>11 I don't think the cost of capital or allowed rate of</p> <p>12 return would change. Or if MDU were to sell those</p> <p>13 operations to an extremely risky company, I don't think</p> <p>14 the risk of the natural gas distribution operations</p> <p>15 here would change based on who owns it. It's based on</p> <p>16 what the nature of its service territory is and the</p> <p>17 economy and the climate and the investment risk of</p> <p>18 those assets.</p> <p>19 Q. I'm having trouble embracing the need to assess</p> <p>20 them a higher ROE forward based on risk as it --</p> <p>21 because of their comparison to these proxy companies,</p> <p>22 which to me isn't being presented in a way that is</p> <p>23 really fair because you're still -- you're including</p> <p>24 the assets and the income of the proxy companies as</p> <p>25 part of their parent companies and you're not for the</p>	<p>Page 420</p> <p>1 So you get efficiencies. But they're not sharing the</p> <p>2 risks.</p> <p>3 If Cascade Natural Gas, one of their</p> <p>4 subsidiaries, they have an earthquake that destroys</p> <p>5 their distribution system, they cannot come to you and</p> <p>6 say, you know, we also provide service in North Dakota,</p> <p>7 we want to recover our Cascade Natural Gas cost from</p> <p>8 rate payers in North Dakota. You wouldn't allow it.</p> <p>9 If you have a major oil bust, the Air Force base</p> <p>10 closes, and they're having trouble recovering the cost</p> <p>11 in North Dakota -- the cost of the distribution system</p> <p>12 in North Dakota, I can assure you the Washington</p> <p>13 Commission is not going to add that on to the rates of</p> <p>14 the Cascade rate payers. So you have to look at the</p> <p>15 risks on a stand-alone basis.</p> <p>16 Q. On your chart on page 11, two of those are</p> <p>17 included in your proxy group, but several of them</p> <p>18 aren't, like the Liberty and -- Liberty Utilities in</p> <p>19 New Hampshire, and the other in Missouri are smaller.</p> <p>20 How come you didn't include those?</p> <p>21 A. Right. Each of those is -- well, Liberty is</p> <p>22 not covered by Value Line, so I didn't have the same</p> <p>23 kind of forecast data on them. And that's true of all</p> <p>24 the ones on there that are not on there. I mean, if</p> <p>25 you look at Spire Missouri and Missouri Gas Energy,</p>

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1 down at the bottom, both of those are subsidiaries of
 2 Spire, but Spire owns gas -- and that's one of my proxy
 3 companies, but they also own Alabama Gas Company, so
 4 they have other operations. These are commission rate
 5 case decisions, just like this one, where if they -- if
 6 you reach a decision, Regulatory Research Associates
 7 would publish that decision as North Dakota Gas rather
 8 than the entire MDU Resources.

9 Q. Okay. So then my final question, the ROE is --
 10 how important is that for attracting capital? What
 11 other factors do they look at besides the allowed ROE?

12 A. Whether or not it's likely that they can
 13 achieve it.

14 Q. Okay. So those two factors?

15 A. Right. And, you know, if it's inadequate or if
 16 it's a great allowed ROE but it's unlikely they can
 17 achieve it, they won't be able to attract capital.

18 Q. And in your -- are you aware of MDU having had
 19 trouble attracting capital?

20 A. No.

21 Q. And are they paying higher interest rates or
 22 any sort of a penalty at all for not having a high
 23 enough ROE currently that you're aware of, or has that
 24 been a problem in the past?

25 A. Well, I'm not aware that it's been a problem,

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1 no.

2 Q. Okay. And so help me also understand the
 3 difference between 10 and 9.5 as it relates to an
 4 investment perspective.

5 A. Essentially investors decide where to put their
 6 money, and if they can get 10 percent elsewhere, they
 7 will put the money elsewhere. I think in MDU's case,
 8 they've got a large holding company, they have to
 9 decide, you know, where they put internal funds,
 10 whether they put it in North Dakota or they put it in
 11 some other operation or buy some other company. So
 12 they have to constantly weigh these kinds of decisions.

13 COMMISSIONER FEDORCHAK: Okay. That's it
 14 for me. Thanks.

15 THE COURT: Mr. Sanderson, redirect.

16 MR. SANDERSON: Judge, before we do this,
 17 our court reporter has been going for two hours, can we
 18 just take a short break?

19 THE COURT: Okay. We can take -- I want
 20 to finish up with Mr. Rubin before we break for lunch
 21 today. So let's try to be back in ten minutes at
 22 10:35.

23 (A break was taken at 10:25 a.m.)

24 THE COURT: Okay. We'll go back on the
 25 record. I just wanted to point out on the record that

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1 Mr. Rubin's flight leaves at 1:00, and so I want to
 2 really wrap up with him by noon. So if we can expedite
 3 finishing up with Mr. Gaske.

4 Is Mr. Gaske going to leave today or is he
 5 going to be around for a while?

6 MR. SANDERSON: He'll be around.

7 THE COURT: Okay. All right. Go ahead,
 8 Mr. Sanderson.

9 MR. SANDERSON: Thank you.

10

11 REDIRECT EXAMINATION

12 BY MR. SANDERSON:

13 Q. Dr. Gaske, I'd just like to just start on this
 14 issue. There's some concern or confusion regarding the
 15 proxy companies that were selected. First off, why
 16 these proxy companies that you selected? What's the
 17 driving factor for the selection?

18 A. These are the companies that have the publicly
 19 available stock prices and forecasts that we need to do
 20 the analysis.

21 Q. Okay. And selection of proxy companies is
 22 something that's done in every analysis similar to
 23 this, correct?

24 A. That's correct.

25 Q. And Advocacy Staff's expert, Mr. Griffing,

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1 selected the same proxy companies, correct?

2 A. Yeah, he had one additional one because Value
 3 Line started covering it after my testimony was filed.

4 Q. And FEA's expert, Mr. Gorman, selected these
 5 exact same proxy companies for the same reason you did,
 6 correct?

7 A. He had a few different -- he left at least one
 8 out because it was involved in a merger by the time he
 9 did his analysis.

10 Q. In a merger.

11 A. But yes, it's the same proxy companies.

12 Q. But just to be clear, these are not companies
 13 you cherry picked to support an ROE. These are the
 14 ones that had -- natural gas companies that had
 15 publicly available data?

16 A. Yes, this is a very standard process of
 17 selecting proxy companies.

18 Q. Okay. I want to get into the issue of the
 19 comparison of MDU natural gas utility, Montana-Dakota,
 20 versus using the MDU Resources as a whole. You're
 21 certainly aware that under the MDU Resources umbrella,
 22 a big part of is Knife River Construction, Construction
 23 Services, Inc. and WBI Energy that are not regulated
 24 utilities?

25 A. That's correct.

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<p>1 Q. Okay. And in fact, MDU Resources, its entire 2 umbrella, only 58 percent of it, the kind of assets 3 would be related to utilities; that's your 4 understanding?</p> <p>5 A. Yes.</p> <p>6 Q. Okay. But when we look at these other proxy 7 companies that you've identified, they're -- even the 8 ones with umbrella holdings are still utility 9 companies?</p> <p>10 A. Yes. They -- a couple of them have some 11 diversified operations, but those tend to be very 12 small. They're either pure utilities or tiny 13 diversified operations for the most part.</p> <p>14 Q. Could you just put your slide up with this bar 15 graph? Okay.</p> <p>16 And the team, as you're aware, was working on 17 this. But if under MDU Resources Group, if we just 18 pulled out the utility portion of that, it would 19 have -- it roughly -- the utilities would amount to 3.7 20 to 3.9 total assets in the millions, which would be 21 right in line with Northwest Natural Gas, New Jersey 22 Resources and South Jersey, but still on the very small 23 end of the proxy companies?</p> <p>24 A. Yes, but that's not what we're here to set a 25 rate of return for.</p>	<p>1 growth. And to the point of counsel's questions -- 2 Staff counsel's questions and the Commissioner's 3 question on that, I ask you to turn to page 17 of your 4 rebuttal testimony.</p> <p>5 A. I'm there.</p> <p>6 Q. And Dr. Gaske, you were asked can you give 7 citations to sources that support this risk 8 appropriated. And in the footnotes there, footnote 16, 9 17 and 18, you cite those. But specifically, the Annin 10 Equity and the Small-Stock Effect from 1995, could you 11 just explain how that impacts -- size impacts the risk 12 analysis?</p> <p>13 A. Well, all those sources are examples of studies 14 that go to the size and risk question. It's supported 15 by a very large literature in the financial economics. 16 But the Annin article that you point to was one that 17 was specific to public utilities and found that there 18 was a strong statistically significant difference in 19 the rate of return required by utilities based on their 20 size, smaller ones required a higher rate of return.</p> <p>21 Q. And let's talk about the risk impact of that 22 small size. And you use the example of the Minot Air 23 Force Base. But the six biggest gas customers from 24 Montana-Dakota, if the Tesoro refinery was shut down 25 for some reason, or the Bobcat plant that you provide</p>
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<p>1 Q. Certainly. So -- and just the point of -- so 2 if we break MDU Resources umbrella down to the various 3 utility companies, including the electricity and the 4 gas, we'd be more in line at the small.</p> <p>5 Now let's get into why that is not a fair 6 comparison. Could you just explain the Washington 7 analogy you made with Cascade?</p> <p>8 A. Well, each of the operations has to stand alone 9 based on its own risks. The stand-alone principle is 10 actually a very common principle in regulation and rate 11 making that no matter what kinds of affiliates, whether 12 they're riskier or less risky, you try to ignore that 13 in setting the rate of return for the company that 14 you're regulating and setting the rate for.</p> <p>15 The Cascade example that you asked about, I'll 16 just repeat what I said before is that if something 17 happens to the North Dakota Gas operations, it's nice 18 that they own Cascade, MDU Resources does, but the 19 investment in North Dakota will not be recovered from 20 the Cascade operations. So these operations from a 21 risk standpoint stand on their own.</p> <p>22 Q. Now, to Commissioner Fedorchak's questions of, 23 you know, why from a 9.5 ROE does a risk factor go up. 24 And a couple of the things you pointed out that affect 25 the risk factor were size, lack of diversity, lack of</p>	<p>1 gas to in winter, what effect due to size would that 2 have on Montana-Dakota's natural gas service and rates?</p> <p>3 A. Well, it would be detrimental, obviously. And 4 there are a lot of factors involved. But typically for 5 a utility if you have a few really large major 6 customers that shut down, you lose that business and 7 the cost would have to be recovered elsewhere. But 8 probably from a risk standpoint, as important is the 9 effect on the local economy, the people who work there 10 lose their jobs, the places they shop lose business, 11 and it can have a very negative effect.</p> <p>12 Q. And certainly with that question, certainly 13 does not mean anything to our wonderful friends and 14 customers at Tesoro or the Bobcat or the Air Force 15 Base. So it certainly could have that impact.</p> <p>16 But let's talk about this growth. And 17 Commissioner Christmann asked you some questions about 18 both. And there was some growth in the Bakken. But 19 let's talk about the growth of the system. Are you 20 aware, Dr. Gaske, that the last time Montana-Dakota 21 expanded to a new community with gas service was in the 22 1970s?</p> <p>23 A. That's my understanding, yes.</p> <p>24 Q. So when we're talking about risk factor and 25 growth, I mean, yes, there's some community sprawl</p>

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1 that's occurred in Bismarck and some other communities,
2 but as compared to the utility industry, you know,
3 nationwide, we're not seeing the growth into new
4 customer markets or new communities; is that fair?
5 **A. I'd say that's reasonable.**
6 **Q.** And so when you're talking about risk to
7 Montana-Dakota's North Dakota operations with respect
8 to growth, that would be what you're referring to?
9 **A. Well, I guess it's not a simple yes or no. I**
10 **mean, it's more complicated than that. It's --**
11 **Q.** Sure.
12 **A. -- how robust is the business.**
13 **Q.** And I didn't mean to certainly implicate that
14 that's the only consideration into growth.
15 **But just in conclusion, Dr. Gaske, in light of**
16 **all these questions, it's still your position that**
17 **based on the analysis and the risk factors posed by**
18 **Montana-Dakota's North Dakota Gas operation that the**
19 **risk factors call for an increase in the ROE to, in**
20 **your opinion, 10 percent?**
21 **A. Well, more than what's indicated by the DCF**
22 **analysis. But essentially what is indicated by the gas**
23 **utility risk premium analysis, which was 10 percent.**
24 **So -- and in that analysis, I don't have any adjustment**
25 **for size.**

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1 **Q.** Yep.
2 **A. I just note that relative to the DCF results**
3 **the median for the DCF results is lower than what I**
4 **believe is the cost of capital for the Montana-Dakota**
5 **North Dakota operations.**
6 **MR. SANDERSON:** Thank you, Dr. Gaske. I
7 have no further questions.
8 **THE COURT:** Mr. Armstrong.
9 **MR. ARMSTRONG:** Two quick questions.
10
11 **RECCROSS-EXAMINATION**
12 **BY MR. ARMSTRONG:**
13 **Q.** Commissioner Christmann was asking you about
14 the slide on page 12 of your slides, the Value Line
15 slide.
16 **A. Yes.**
17 **Q.** Are those projected ROEs based on book value or
18 market value?
19 **A. Book value.**
20 **Q.** And is a given dollar value returned higher
21 when expressed as a percentage of market value or book
22 value?
23 **A. It can depend on whether market value is above**
24 **or below book value.**
25 **Q.** Isn't book value typically higher?

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1 **A. No, the other -- the other way around.**
2 **Q.** You haven't done anything to compare book or
3 market value for that slide, have you?
4 **A. I'm aware of it for those companies, and**
5 **it's -- the market value is higher than book value.**
6 **MR. ARMSTRONG:** That's all the questions I
7 have.
8 **THE COURT:** Mr. Coffman?
9 **MR. COFFMAN:** Yes, just two clarifying
10 questions.
11
12 **RECCROSS-EXAMINATION**
13 **BY MR. COFFMAN:**
14 **Q.** And based on your slide 11, you show recent
15 commission determined ROEs. First, on the two
16 utilities you list for my home state of Missouri, are
17 those not the two utilities that are merged now?
18 **A. Yeah, they're separate -- they're separate**
19 **subsidiaries of Spire.**
20 **Q.** Or aren't they operating divisions of the same
21 utility now?
22 **A. Yes.**
23 **Q.** And isn't --
24 **A. The decisions were to set the rates for them**
25 **separately.**

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1 **Q.** But wasn't that the very same order that set
2 the same ROE for both there on February 21st?
3 **A. I haven't read the order. This was --**
4 **Q.** It was one order.
5 **A. This was reported by Regulatory Research**
6 **Associates. I guess it was two rate making cases.**
7 **Q.** In fact, it's now one utility. And you're
8 double counting it here, the highest number, isn't that
9 unfair? Slanting your number higher?
10 **A. I don't know if the rates were set separately**
11 **for the two companies. Certainly RRA lists them as a**
12 **separate set of rates. If they have a combined single**
13 **tariff now that they no longer have separate tariffs**
14 **and sets of rates, then you would be correct.**
15 **Q.** And although you make an adjustment based on
16 size, aren't there a couple of utilities here that are
17 smaller than MDU? I mean, MDU is not smaller than all
18 these utilities?
19 **A. The North Dakota operations, that I can't tell**
20 **you. I haven't analyzed size for the allowed rates of**
21 **return.**
22 **MR. COFFMAN:** Okay. Thank you. That's
23 all I have.
24 **THE COURT:** Major Unsicker.
25 **MAJOR UNSICKER:** No, sir.

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1 THE COURT: Ms. Jeffcoat-Sacco.
 2 MS. JEFFCOAT-SACCO: Nothing. Thank you.
 3 THE COURT: Okay. Thanks, Mr. Gaske, I
 4 think you can step down.
 5 Mr. Rubin, if you want to step up.
 6 MR. COFFMAN: I want to thank you for the
 7 accommodation to get Mr. Rubin on the stand.
 8 THE COURT: You're welcome.
 9 MR. COFFMAN: We call Scott Rubin. And we
 10 will be offering Exhibits AARP-43 and AARP-44. I mean,
 11 I can do that now or if you want me to lay foundation,
 12 I can. It's his PowerPoint slides and the NASUCA
 13 Resolution which have been distributed.
 14 MR. SANDERSON: No objection.
 15 THE COURT: Mr. Armstrong.
 16 MR. ARMSTRONG: No objection.
 17 THE COURT: Ms. Jeffcoat-Sacco.
 18 MS. JEFFCOAT-SACCO: No objection.
 19 THE COURT: Major.
 20 MAJOR UNSICKER: No objection.
 21 THE COURT: Okay. Exhibit AARP-33 and 34
 22 will be received.
 23 And please spell your name. Is it two Cs and
 24 -- two Ts in Scott?
 25 THE WITNESS: Yes, it's S-c-o-t-t,

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1 R-u-b-i-n.
 2 THE COURT: All right. Raise your right
 3 hand.
 4
 5 SCOTT RUBIN,
 6 duly sworn, was examined and testifies as follows:
 7
 8 THE WITNESS: Yes, I do.
 9 THE COURT: Thank you. Mr. Coffman.
 10 MR. COFFMAN: Thank you.
 11
 12 DIRECT EXAMINATION
 13 BY MR. COFFMAN:
 14 Q. Mr. Rubin, are you the same Scott Rubin that
 15 prepared direct and surrebuttal testimony in this
 16 matter and has already been admitted in the record as
 17 AARP-41 and AARP-42 respectively?
 18 A. Yes.
 19 Q. Do you have any minor corrections you need to
 20 make to those testimonies?
 21 A. Yes, there -- yeah, just a couple of minor
 22 corrections. In the direct testimony, page 31. On
 23 both lines 8 and 9, I'm not sure what I was thinking,
 24 but the abbreviation is wrong. Instead of CPH, it
 25 should be CFH, cubic feet per hour.

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1 On page 32 of the direct testimony, line 3, the
 2 third from the last word which is "reduce," should be
 3 "increase." The way it reads now just makes no sense.
 4 And in the surrebuttal testimony, AARP-42, page
 5 2, line 2 where I have 12-IN, the IN should be inch.
 6 And those are all the changes I have.
 7 Q. Okay. With those corrections, would your
 8 answers in Exhibit AARP-41 and 42 be the same today?
 9 A. Yes, they would.
 10 Q. Could you begin with briefly explaining your
 11 education and background?
 12 A. Sure, I'd be happy to. I earned my bachelor's
 13 degree from Penn State University, my law degree from
 14 George Washington University. For the past 35 years,
 15 my professional life has been devoted to trying to make
 16 the public utility industries more responsive to the
 17 needs of consumers. I began that work with the
 18 Pennsylvania Office of Consumer Advocate. After about
 19 ten years in government service, I started my own
 20 practice where I serve a wide range of clients,
 21 including public advocates, utility labor unions,
 22 citizens groups, government-owned utilities, small
 23 businesses, and government agencies. Over the years, I
 24 have testified before two congressional committees and
 25 as an expert witness in more than 175 utility

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1 commission and court cases and about 20 U.S. states and
 2 one Canadian province.
 3 AARP is one of my newer clients. They retained
 4 me just a little over a year ago to provide advice,
 5 analysis and expert testimony throughout the country on
 6 important utility-related issues of concern to its
 7 members.
 8 Q. Mr. Rubin, do you have a brief opening
 9 statement to summarize your testimony?
 10 A. Yes. And we have some slides to go with that,
 11 which I guess were just marked as AARP-43.
 12 Q. Please proceed.
 13 A. We'll see if I can do this. Okay. I hit the
 14 right button, which is always good.
 15 I'm pleased that AARP asked me to testify in
 16 this case because it raises four important and timely
 17 issues. First, as in every rate case, you must
 18 determine how to allocate any revenue increase among
 19 the customer classes. Fortunately, all of the parties
 20 agree on the class revenue allocation in this case
 21 though we may not agree on how we all reached that
 22 conclusion.
 23 MDU proposed that the residential class should
 24 be responsible for paying 58.9 percent of any revenue
 25 increase. And the firm general service class would pay

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1 the remaining 41.1 percent of any revenue increase.
2 The other customer classes, including the Air Force,
3 other large users and interruptible customers would not
4 see their rates change at all. I accepted MDU's
5 recommendation in my direct testimony. The Air Force's
6 expert witness, Mr. Gorman, reached the same conclusion
7 in his direct testimony. And as I understand it,
8 Staff's expert Mr. Pavlovic also recommended no change
9 in rates for any customer classes other than rates 60
10 and 70.

11 So on this first issue, the parties have made
12 your life easy. We agree with the Company's proposal,
13 even though we don't necessarily agree on how we
14 reached that conclusion.

15 The second important issue I discuss is the
16 design of rates for residential customers. MDU's cost
17 of service study shows that about 75 percent of all
18 residential costs are customer related. I disagreed
19 with that analysis and found that the correct number
20 would be between about 63 percent and 72 percent.
21 Nevertheless, all of the studies agree that no more
22 than 75 percent of residential costs are customer
23 related. Yet MDU has proposed that 100 percent of its
24 residential distribution revenues should be collected
25 through the customer charge. There is no support for

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1 such a result. The Company's study as well as my
2 revisions to the study all show that at least one
3 quarter of residential costs are related to customer's
4 demand for and use of natural gas.

5 MDU's actual billing data demonstrate the
6 fallacy of the Company's contention that each
7 residential customer should pay the same amount toward
8 system demand. On pages 29 and 30 of my direct
9 testimony, which we've highlighted here, I show that
10 the largest residential customers use more gas in ten
11 hours than the smallest residential customers use
12 during the entire peak month of January. It is
13 absolutely impossible to conclude that each residential
14 customer contributes the same amount to peak demand as
15 each other residential customer.

16 Now, I also recognize that moving to a strictly
17 cost-based residential rate design would reduce the
18 customer charge from its current level and impose a
19 significant per-therm usage charge. That change could
20 have a significant effect on larger residential
21 customers, especially during the winter. For that
22 reason, I have recommended no change in the residential
23 customer charge so that any increase in residential
24 revenues would be collected through a per-therm charge.
25 That would keep the customer charge above cost, but it

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1 would at least start moving toward rates that
2 accurately reflect the cost of serving residential
3 customers' demand for gas.

4 Now, third, I have raised a significant concern
5 about the Company's proposal to adopt a separate rate
6 adjustment mechanism for safety and integrity programs.
7 Let me be absolutely clear about one thing. The most
8 important responsibility of a gas utility is to ensure
9 that the system is safe. In recent years we have seen
10 in all too many places, from San Bruno, California to
11 Allentown, Pennsylvania, the devastation that results
12 when a utility neglect this fundamental responsibility.
13 And I use that word "neglect" intentionally. Both of
14 those disasters resulted from utility negligence.

15 I followed the Allentown disaster in 2011 very
16 closely, not just because I'm a utility geek like so
17 many of us in the room, but because I live about an
18 hour and a half from Allentown, I live in a 50 year-old
19 house, and I'm served by the same gas utility. The
20 Pennsylvania Public Utility Commission found that the
21 utility failed to comply with existing regulations and
22 safety standards in several critical respects,
23 including monitoring odorant levels, promptly
24 responding to leak complaints, and even conducting
25 basic inspection and maintenance that would have caused

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1 any reasonable utility to investigate subsurface
2 disturbances. As a result, the utility was fined
3 \$500,000, which was the maximum fine the PUC could levy
4 under the law that then existed, and to make numerous
5 operational changes.

6 In San Bruno, California, the utility's
7 negligence was even more blatant. A 30-inch
8 transmission main was not installed and maintained
9 property. The utility in that case was found to have
10 violated numerous existing safety standards. And the
11 California PUC ordered fines and bill credits totalling
12 in the hundreds of millions of dollars as well as
13 ordering the utility to make numerous operational
14 changes. A special rate-making mechanism would have
15 done absolutely nothing to prevent the utility's
16 negligence in those disasters.

17 So, too, MDU's proposal for a separate rate
18 mechanism is not needed to ensure the safety and
19 integrity of the system. Let's look at the facts. I
20 know there are a lot of numbers on the slide we put up.
21 This is from MDU's depreciation study, it's Exhibit
22 MDU-1, Schedule EMR-1. It gives us important
23 information about the age of the Company's
24 infrastructure. Table 5 of EMR-1, which I've excerpted
25 here shows that steel and plastic distribution mains

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1 have an average service life of between 47 and 62
2 years. Importantly, the study also tells us that these
3 mains have on average a remaining life of between 33
4 and 42 years. In other words, these are very
5 long-lived assets that on average have been in service
6 for only about one-third of their expected life.

7 So while of course there are always facilities
8 that need to be replaced, overall the Company's basic
9 infrastructure appears to have been kept up to date
10 without having a special rate mechanism in place.

11 Indeed, we heard Ms. Kivitso testify yesterday that if
12 the SSIP mechanism had been in place in 2015, there
13 would have been no change in the plant investment
14 decisions made by MDU over the last three years.

15 Similarly, Mr. Darras testified yesterday that the SSIP
16 operational plan and the special rate-making mechanism
17 are two separate things and one is not affected by the
18 other.

19 In a rate case like this one, you must look at
20 all aspects of the Company's operations, its capital
21 spending, the cost of raising capital, sales, customer
22 accounts, taxes, depreciation, and all other types of
23 expenses. I don't envy the work you have in front of
24 you. From that in-depth examination, you determine the
25 price that customers should pay because we cannot rely

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1 on a competitive market to set that price. You can not
2 look at just one part of a utility's operations and
3 determine how that should effect the price. Spending
4 on one program may increase, but spending on other
5 programs or computers or dozens of other things might
6 decrease by an offsetting amount, and that's the
7 fundamental problem with the Company's proposal. It
8 would change prices based on only one type of change,
9 ignoring all of the other changes that might occur at
10 the same time.

11 The importance of avoiding that type of
12 single-issue rate making was recognized by the National
13 Association of State Utility Consumer Advocates in a
14 2005 resolution that we have marked as AARP-44. I
15 agree with that resolution. And I recommend that you
16 deny MDU's request for a special rate adjustment
17 mechanism. As important as safety is, there is
18 absolutely no evidence that a special rate adjustment
19 is needed in order for MDU to maintain a safe system.

20 Finally, I have objected to MDU's proposal to
21 increase its return check charge from \$15 to \$40.
22 There is no support for this change. MDU's own data,
23 which we have up on the screen, shows that the current
24 \$15 charge is more than enough to collect the cost it
25 incurs when a customer sends a check or other payment

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1 that is dishonored by the bank. MDU's proposal would
2 be punitive, and there is no need to impose a punitive
3 charge to deter a customer from issuing a dishonored
4 payment. Frankly, banks take care of that for us, as I
5 discuss in my testimony.

6 Thank you again for the opportunity to be here
7 today and for taking me out of order. I look forward
8 to answering any questions that you, your Staff and the
9 parties may have for me.

10 THE COURT: Okay. Mr. Sanderson,
11 Cross-Examination?
12 MR. SANDERSON: Yes. Thank you, Your
13 Honor.

14 CROSS-EXAMINATION
15 BY MR. SANDERSON:
16 Q. Good morning, Mr. Rubin. My name is Paul
17 Sanderson, I represent Montana-Dakota Utilities in this
18 case.
19 A. Good morning.
20 Q. I'd like to follow up and ask you some
21 questions both on the testimony you gave here and also
22 the testimony you filed in this case. But just so
23 we're perfectly clear, you and AARP are in agreement
24 with the revenue allocation that it's reasonable
25

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1 assigning it to the residential and firm general
2 customers?
3 A. Yes.
4 Q. Okay. Now, one of the critical issues you
5 point out, and more so in your pre-filed testimony, was
6 the distribution system cost, the allocation of system
7 main costs. Do you recall that?
8 A. Yes.
9 Q. Okay. And Montana-Dakota in this case is
10 proposing 25 percent of those costs be allocated to
11 customer related and 75 percent allocated to demand.
12 You're aware that's the proposal?
13 A. Correct.
14 Q. And they're applying that under the minimum
15 systems method, correct?
16 A. Well, no. Montana-Dakota Utilities does not
17 have a supporting analysis that shows where that 25
18 percent came from. It appears to be a number that was
19 selected without the type of analysis that is typically
20 done in a minimum systems study.
21 Q. Okay. Well, you agree some jurisdictions have
22 adopted a minimum systems analysis?
23 A. That is true, but I'm not aware of any that
24 have arbitrarily selected a number like 25 percent.
25 Q. And let's disregard what Montana's --

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1 Montana-Dakota's 25 percent. You in fact did a minimum
 2 systems analysis in this case, correct?

3 **A. I did the best I could with the information**
 4 **available. A lot of it was not information specific to**
 5 **MDU, which is normally what I would expect to have.**

6 Q. Well, and you used some information and
 7 depreciation information from Nicor Gas in Illinois?

8 **A. Yes.**

9 Q. To form the basis of that. And then you found
 10 relying on that, that was a reliable source using Nicor
 11 Gas in Illinois to compare to the MDU system?

12 **A. I thought it was a reasonable proxy to use**
 13 **given the lack of specific information for MDU.**

14 Q. Okay. And just to not belabor this point, but
 15 so you took some information from Nicor Gas, did your
 16 own minimum systems method analysis, and you determined
 17 the customer cost would be 18.16 percent instead of the
 18 25 percent Montana-Dakota's proposing?

19 **A. Correct.**

20 Q. Okay. Now, AARP takes issue with the basic
 21 service charge in this case; am I correct on that
 22 point?

23 **A. Yes. But just to be clear, I'm an independent**
 24 **expert. You can ask my opinion. I don't speak for**
 25 **AARP. They will speak through their attorney who will**

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1 **file a brief, I assume. So I'm giving you my opinion**
 2 **that AARP has sponsored. And I prefer you phrase it**
 3 **that way rather than, "AARP says."**

4 Q. Well, and I respect you trying to qualify that,
 5 Mr. Rubin, but I'm not going to get to ask questions of
 6 AARP's attorney. The only person from AARP that I'm
 7 going to get to ask questions from in this case that
 8 they've identified is going to testify to these
 9 Commissioners is you. Are you saying you don't support
 10 AARP's position in this case?

11 **A. No, I'm saying that I have set forth my**
 12 **position which AARP has sponsored.**

13 Q. Okay.

14 **A. And I fully expect that counsel will support**
 15 **that position in briefs. I just get a little**
 16 **uncomfortable when someone suggests that I'm speaking**
 17 **for AARP. I happen to be a member, but I'm not an**
 18 **officer or spokesperson for the organization. I'm a**
 19 **utility rate-making expert, and that's why I'm here.**

20 Q. Okay. You recognize that this Commission
 21 adopted a straight fixed variable rate design
 22 implementing a flat basic service charge of 64 cents
 23 per day in Montana-Dakota's last rate case in 2015?

24 **A. I recognize that's what the Commission order**
 25 **says. I frankly don't think that's a straight fixed**

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1 **variable rate design, but we can explore that if we**
 2 **need to.**

3 Q. Well --

4 **A. But I agree that the Commission adopted the**
 5 **recovery of 100 percent of residential distribution**
 6 **costs through a customer charge.**

7 Q. Okay. And you're aware that that is how
 8 rates -- customers are paying those residential rates
 9 today?

10 **A. Yes.**

11 Q. Okay. And are you sitting here telling this
 12 Commission that they were wrong when they adopted that
 13 rate recovery mechanism in the 2015 case?

14 **A. I don't -- well, the answer is no. I don't**
 15 **know what information the Commission had before it at**
 16 **that time. Based on the information available to me in**
 17 **this case, that is not a correct way to set rates for**
 18 **the residential class.**

19 Q. Well, you're certainly aware, Mr. Rubin, that
 20 AARP intervened in that 2015 case?

21 **A. I believe AARP did not have a witness in that**
 22 **case.**

23 Q. Well, you're aware Mr. Coffman sat right where
 24 he's sitting now in 2015 in that case?

25 **A. I don't know where he sat, but I know he was**

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1 **present somewhere.**

2 Q. Okay. And you're aware that the AARP did not
 3 appeal the decision setting forth the straight fixed
 4 variable rate design that this Commission adopted in
 5 2015?

6 **A. I'm not aware of that one way or the other.**

7 Q. And one of the things you provided in your
 8 direct testimony is why this fixed cost is not
 9 appropriate is because approximately one percent of the
 10 cost to serve residential customers are energy related;
 11 was that your direct testimony?

12 **A. That is one of the pieces of information I**
 13 **relied on. There is much more to it than that.**

14 Q. Okay. Conversely then, you -- conversely to
 15 that, 99 percent of the residential cost would be
 16 fixed?

17 **A. I do not agree with that.**

18 Q. Okay. Is that not in your testimony on page 28
 19 and 29?

20 **A. Well, I discuss demand-related cost extensively**
 21 **in my testimony, and I do not consider demand-related**
 22 **cost to be fixed, as you use the term, unless we're**
 23 **looking at a very short time horizon. Typically in**
 24 **economics, and especially in public utility economics,**
 25 **we look at whether a cost is fixed or variable using a**

<p style="text-align: right;">Page 449</p> <p>1 fairly long term horizon. We don't set rates based on, 2 you know, what a variable cost is today. We look at 3 the expected life of facilities and at the turnover of 4 those facilities. So, you know, yes, obviously the 5 mains that are in the ground today are there, and that 6 investment is fixed. But that -- sorry, that 7 investment is sunk. 8 But in terms of economics, that doesn't make it 9 all a fixed cost. As those facilities need to be 10 replaced, and we've heard a lot yesterday about the 11 need for replacement, the sizing of those facilities 12 will depend very much on expectations about customer 13 demand. And whether you accept the Company's approach 14 that says 75 percent of the cost is demand related or 15 my approach that says, you know, 100 percent is demand 16 related, there's no question that customer demand 17 influences the size of those facilities each time a 18 replacement decision has to be made. 19 Q. And Mr. Rubin, let's get back to how you 20 determined -- your determination that these are not all 21 fixed costs according to what MDU is asserting in this 22 case. And I want to turn to page 31 of your direct 23 testimony. 24 A. Yes, I'm there. 25 Q. And in your direct testimony, you note that</p>	<p style="text-align: right;">Page 451</p> <p>1 cost to serve the customers is demonstrably false. 2 This is one easy way to demonstrate it. Those large 3 customers in the residential class require meters that 4 are five times more expensive than the typical meter. 5 That's not the only thing that's required to serve 6 them. But it's an easy example to use to show the 7 problem with ignoring that different customers have 8 different level of demand and that has a real cost 9 consequence to it. 10 Q. And the analogy you're just using there that 11 you're trying to explain to this Commission why they 12 were wrong in 2015 and the logic behind it is because 13 29 of 94,000 residential customers would require a 14 slightly more expensive meter, so you're saying then 15 the cost to serve the customers is different. That's 16 the leap in logic you're trying to make with 29 out of 17 94,000 customers? 18 MR. COFFMAN: Objection; I don't hear a 19 question in that. 20 THE COURT: Yeah, it's argumentative. 21 Sustained. 22 BY MR. SANDERSON: 23 Q. Let's move, Mr. Rubin, to the SSIP issue that 24 you talked about. And I'll just refer to your slide 7. 25 A. Yes.</p>
<p style="text-align: right;">Page 450</p> <p>1 Montana-Dakota has 29 residential customers that would 2 require a larger meter. 3 A. Yes. 4 Q. Okay. 5 A. Well, at least 29. I -- it may be more than 6 that. 7 Q. So at least 29. And therefore you make the 8 logical conclusion in the next paragraph, since those 9 29 largest residential customers would need a slightly 10 bigger meter, therefore not all customer costs to serve 11 the customers is the same. 12 A. Well, the way you described it sounds a little 13 silly. 14 Q. Well, I agree. 15 A. It's an example. 16 Q. Okay. 17 A. It's an example of the type of cost that we can 18 very easily demonstrate as demand related. The reason 19 those 29 or more residential customers have larger and 20 more expensive meters and regulators is because they 21 use a lot of gas. 22 Q. Yep. And certainly Mr. Rubin -- 23 A. If I could finish. And to simply assume that 24 every residential customer is the same and that the 25 demand for gas and the use of gas have no effect on the</p>	<p style="text-align: right;">Page 452</p> <p>1 Q. One of the things you have on there is that the 2 typical life -- I'm looking at the box on the right -- 3 the typical life of plastic pipe is 47 to 62 years. 4 A. No, the typical life of plastic is 47 years, 5 and of steel is 62 years. 6 Q. Okay. So you on behalf of AARP are telling 7 this Commission that the typical life of plastic pipe 8 is 47 years? 9 A. No, sir. That's what your depreciation study 10 says. 11 Q. Okay. And you're aware, the SSIP program is 12 not proposing to replace all plastic pipe in the 13 system? 14 A. Correct. 15 Q. Montana-Dakota's SSIP has targeted pre-1970 16 Aldyl A plastic pipe that's been in the ground in 17 excess of 50 years? 18 A. I didn't -- I'm not sure I heard pre-1970 19 during the testimony yesterday. I heard 19 -- I 20 thought I heard 1971 to 1983 as the years being 21 discussed. 22 Q. Roughly in the range of 50 year-old plastic 23 pipe that -- that was comprised of Aldyl A material. 24 That's what you heard? 25 A. Well, what I heard -- again, I can tell you</p>

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1 what I heard yesterday that may not be strictly
 2 accurate. But what I heard was that there was some
 3 testing and investigation going on and some of the pipe
 4 was from the early 1970s that the Company thinks is
 5 Aldyl A, and some was from the early 1980s that the
 6 Company's not sure what the material is. So just to be
 7 clear, that's what I heard. I don't know what the
 8 actual facts are.

9 Q. And what you did testify to here today, Mr.
 10 Rubin, is that AARP's position is the most important
 11 factor in natural gas supply is public safety. You
 12 agree with that?

13 A. That is my position. Again, just to be clear
 14 about that distinction. I'm speaking -- I'm giving you
 15 my opinion. I hope AARP agrees with me or I won't be
 16 working for them much longer. But you're getting my
 17 opinion.

18 Q. Okay. One of the things you do agree with is
 19 the general utility rate principle of gradualism?

20 A. Yes.

21 Q. Okay. Changes in rates should be made slowly
 22 so that customers' expectations are not violated?

23 A. Yes.

24 Q. Okay. Now, you mention the Allentown,
 25 Pennsylvania explosion. You said it's in your home

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1 state and your hometown?

2 A. Well, in my --

3 Q. Well, in proximity to your hometown?

4 A. Yes.

5 Q. Okay. Following the Allentown, Pennsylvania
 6 explosion -- and behind you, Mr. Rubin, is -- and I'll
 7 just give you a copy. This is Staff Advocacy exhibit
 8 KRP-1, it's attached to Mr. Pavlovic's testimony that's
 9 already been admitted in this case.

10 But in your home state of Pennsylvania, Mr.
 11 Rubin, following the Allentown explosion, since then,
 12 there's been nine Public Service Commission orders
 13 approving rate recovery mechanisms in Pennsylvania.
 14 And I'll refer to your page 57 of 78 of this exhibit.

15 A. Sorry, I haven't counted them. Yes, I'm very
 16 familiar with the use of those mechanisms in
 17 Pennsylvania. And frankly, that's one of the reasons
 18 I'm opposed to them is because I've seen the effect
 19 they haven't had on safety.

20 Q. Okay. And so you're critical of the
 21 Pennsylvania Public Service Commission adoption in nine
 22 different dockets of the similar SSIP recovery
 23 mechanism?

24 A. Well, first, there's some very big differences
 25 between what's been done in Pennsylvania and what MDU

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1 is proposing here.

2 Q. And that wasn't my question, Mr. Rubin.

3 A. Well, you said similar to the SSIP. And there
 4 are some very critical differences between the
 5 Pennsylvania distribution system improvement charge and
 6 MDU's proposal. If you like, I can discuss them,
 7 otherwise, I just can't answer the question the way you
 8 asked it.

9 Q. Fair enough. And the exhibit in front that the
 10 Commission has contains four pages outlining those
 11 programs and what's being recovered. Do you see that
 12 on pages 57 through 60 of this exhibit?

13 A. Yes, that's a summary of several orders that
 14 have been issued by the Pennsylvania Public Utility
 15 Commission. The very first bullet in that list
 16 summarizes the authorizing legislation that set some
 17 important limits on the use of those charges and
 18 authorized the Commission to use them in the first
 19 place.

20 Q. Now, Mr. Rubin, I'd ask you to turn to page 29
 21 of 78 of this exhibit.

22 A. Yes, I have that.

23 Q. And if you look at section 5.1, it says, "40
 24 states and the District of Columbia have initiated some
 25 type of pipeline replacement acceleration program."

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1 So 39 states -- and they're all identified in
 2 the table we just saw. Thirty-nine states have adopted
 3 pipeline acceleration program mechanisms similar to
 4 what MD -- Montana-Dakota is proposing in this case?

5 A. You -- I don't have independent knowledge of
 6 the number. What you read is what it says here.

7 Q. Okay. Are you critical of those 39 Public
 8 Service Commissions for adopting program acceleration
 9 for pipe replacement?

10 A. There's a difference between an accelerated
 11 replacement program, which is basically the SSIP
 12 program we heard Mr. Darras discuss, and a separate
 13 rate recovery mechanism. Those are two very different
 14 things. So I absolutely do not object to an
 15 accelerated replacement program where it is needed for
 16 public safety. I have some very fundamental problems
 17 with separate rate recovery mechanisms outside of a
 18 rate case where all aspects of a utilities operations
 19 can be examined.

20 Q. And one of -- well, you're aware not only AARP,
 21 but other consumer protection groups have opposed these
 22 programs in other states. You're aware of that?

23 A. Yes.

24 Q. And in fact, Mr. Coffman and AARP introduced a
 25 resolution opposing these type of mechanisms that was

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1 adopted in 2005?
 2 **A. Correct.**
 3 Q. And yet still 39 other Public Service
 4 Commissions have adopted some sort of recovery
 5 mechanism?
 6 **A. Well, what you just read to me -- and I have**
 7 **not read this entire document. But what you read to me**
 8 **says that the states have initiated some type of**
 9 **pipeline replacement acceleration program. It does not**
 10 **say that all of those states have adopted an**
 11 **accelerated cost recovery mechanism. Those are two**
 12 **very different things.**
 13 Q. Well, one of the -- as I mentioned before, one
 14 of the comparisons you made in your direct testimony
 15 was to Nicor in Illinois, Northern Illinois Gas
 16 Company; you recall that?
 17 **A. Yes.**
 18 Q. I'll turn you again to the table, page 41 of
 19 that. And in your -- or are you aware that in 2014,
 20 Nicor Gas filed for an infrastructure replacement
 21 surcharge with the Illinois Commission which plan
 22 called for 171 million in spending in each of the next
 23 three years beginning in 2015. Were you aware of that?
 24 **A. Yes, I believe, I was participating in that**
 25 **case.**

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1 Q. Okay. Well, then that's great, Mr. Rubin,
 2 because as we see under bullet point number two was
 3 part of the -- the following -- it says, "The following
 4 projects are eligible for recovery, including pre-1973
 5 DuPont Aldyl A polyethylene plastic pipe?"
 6 **A. Correct.**
 7 Q. Okay. So at least the Illinois Commission in
 8 Nicor Gas has recognized that Aldyl A plastic pipe
 9 posed safety concern and promotes a mechanism to
 10 replace and fund it?
 11 **A. I'm sorry, there were several parts to that**
 12 **question, and I -- just, I lost you because I was**
 13 **thinking about the first part and you were giving me**
 14 **additional parts. So if you could either break it down**
 15 **or just state it again and I'll try to pay closer**
 16 **attention.**
 17 Q. Certainly. My question was very simply, in the
 18 2014 Nicor case, the Illinois Industrial Commission
 19 recognized the need for replacement of Aldyl A pipe and
 20 implemented a recovery mechanism for that?
 21 MR. COFFMAN: Your Honor, I'm not sure
 22 that's a question.
 23 THE COURT: I think it's a question, but
 24 it's still compound. I think you need to break it down
 25 into two parts, because I think he's making a

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1 distinction between the accelerated recovery program
 2 for pipe and the funding mechanism.
 3 BY MR. SANDERSON:
 4 Q. Are you aware there was a funding mechanism
 5 that called for 171 million surcharge for spending in
 6 the three years beginning in 2015?
 7 **A. Yes.**
 8 Q. Okay. And are you aware the funding surcharge
 9 included replacement of pre-1973 Aldyl A plastic pipe?
 10 **A. Yes.**
 11 Q. Okay. One of the things with respect to -- I
 12 know you don't agree with the SSIP recovery mechanism,
 13 Mr. Rubin. But if adopted, you agree to the proposed
 14 cost allocation amongst customers in Montana-Dakota's
 15 tariff?
 16 **A. Well, I had some real concerns about the tariff**
 17 **language, and I -- because in several respects it was**
 18 **unclear what it meant. I interpreted that tariff**
 19 **language to allocate costs to basically on a**
 20 **per-customer basis, which I thought was grossly unfair**
 21 **and not consistent with the cost of service study. The**
 22 **Company clarified its intention in its rebuttal**
 23 **testimony that it would be essentially allocated and**
 24 **proportioned to distribution revenues, so to each**
 25 **customer class in that proportion. And based on that**

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1 **understanding, I accept that allocation method. I**
 2 **think some changes are required in the tariff language**
 3 **that was proposed to reflect that now mutual**
 4 **understanding.**
 5 Q. Okay. Fair enough. Still, in the context of
 6 your testimony that the most important factor is public
 7 safety, AARP is not here testifying that the 2018
 8 service main replacement project should not be
 9 recovered in this case; is that correct?
 10 **A. Well, again, I'm going to distinguish between**
 11 **AARP and myself.**
 12 Q. Yep.
 13 **A. I have not taken a position on those 2018**
 14 **projects. I understand the Company has claimed them.**
 15 **I understand the Staff experts have disagreed with the**
 16 **recovery of those and base rates at the present time.**
 17 **I do not know if AARP will take a position on that in**
 18 **its brief, but I have not taken a position.**
 19 Q. You're not taking a position, and you have not
 20 seen any pre-filed testimony on behalf of AARP where
 21 they challenge the 2018 projects?
 22 **A. Correct.**
 23 MR. SANDERSON: Okay. Mr. Rubin, I have
 24 no further questions. Thank you.
 25 THE WITNESS: Thank you.

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1 THE COURT: Mr. Armstrong?
 2 MR. ARMSTRONG: No questions.
 3 THE COURT: Let's go to Major Unsicker
 4 next.
 5 MAJOR UNSICKER: No questions, sir.
 6 THE COURT: Ms. Jeffcoat-Sacco.
 7
 8 CROSS-EXAMINATION
 9 BY MS. JEFFCOAT-SACCO:
 10 Q. I just want to know how long you've lived in
 11 Bloomsburg. I'm from the neighborhood.
 12 A. Oh, well, right up the road. Well, we've lived
 13 there about 11 years. We've lived in that part of the
 14 state for, gosh, 33 years or so.
 15 THE COURT: Okay. Cut the chitchat, we
 16 want to get you out of here.
 17 Okay. Commissioner Kroshus.
 18 THE WITNESS: I'll just say it's always
 19 good to meet a homey, you know.
 20
 21 EXAMINATION
 22 BY COMMISSIONER KROSHUS:
 23 Q. I'm from Fargo originally. Not exactly a
 24 homey.
 25 Do you think MDU could get to -- really the

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1 projects that we're talking about for the SSIP to get
 2 that rolling, do you think they could get
 3 representative samples just through the regular course
 4 of replacement projects?
 5 A. I don't know. I'm not an operational person.
 6 Q. But you have -- on the Pennsylvania District
 7 improvement charge, could you just summarize what the
 8 difference is between that, as you had mentioned
 9 earlier, and the SSIP?
 10 A. Sure, I'd be happy to. The first -- and I
 11 think probably the most important difference there was
 12 separate legislation specifically authorizing that type
 13 of charge. The legislation came about a year, or I
 14 think it was less than a year, after the Allentown
 15 explosion. So understandably the legislators were
 16 concerned. And Pennsylvania had had that type of
 17 mechanism for water utilities for many years. So the
 18 legislature expanded that to specifically include
 19 natural gas and electric and actually waste water
 20 utilities. So that's the first major difference.
 21 The second is that the legislation has a number
 22 of consumer protections in it, including requirements
 23 that the work be performed by utility employees. If
 24 it's not performed by utility employees, then it has to
 25 be inspected by qualified utility personnel because one

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1 of the problems with the Allentown explosion is that
 2 some work had been done nearby by outside contractors
 3 who were not qualified to do the work. The work was
 4 not properly inspected by the utility, it caused some
 5 integrity problems with the distribution system, and
 6 there was some surface disturbance, on and on. So
 7 that's a very important protection that was put in
 8 there for consumers and for safety.
 9 Another very important consumer protection was
 10 a limit on how large that surcharge could be. Off the
 11 top of my head, I believe the limit was set at five
 12 percent of distribution revenues. So there was
 13 essentially a cap on how long the utility could use the
 14 surcharge before it would have to come in and file for
 15 a full rate case where everything was looked at and
 16 synchronized the way we're doing in this case.
 17 There's several other pieces to it. I
 18 certainly haven't memorized the entire legislation.
 19 But those are some of the most important differences
 20 between the surcharge that's used in Pennsylvania and
 21 what MDU has proposed here.
 22 Q. Okay. Just to go back. So the accelerated
 23 program for pipe replacement that has been referred to
 24 as occurring in, I thought it was 37 states yesterday
 25 and 39 today, but high 30s, do you think this program

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1 is consistent -- the program being proposed, do you
 2 think it's being -- it's consistent with those 37 or 39
 3 other states?
 4 A. Are we -- we're separating the program from the
 5 cost recovery mechanism? Sorry, I just wasn't clear
 6 about what you were asking.
 7 Q. The cost recovery mechanism.
 8 A. Okay. The cost recovery mechanism, I don't
 9 know how many states have that. It's probably in the
 10 30s somewhere. I don't think it's all of the states
 11 that have an accelerated replacement program. And I
 12 can't pretend to be familiar with all of the ins and
 13 outs of each of those cost recovery mechanisms. I have
 14 worked in some states in addition to Pennsylvania that
 15 have them, and typically there are limits on how large
 16 the surcharge can be. So it may be capped as a
 17 percentage of revenues or as a percentage of plant
 18 investment or some way to limit the growth in the
 19 surcharge before a utility must come in and file a full
 20 rate case to make sure that all the costs are, you
 21 know, basically back in sync so that we know the cost
 22 charge to customers are reasonable.
 23 I know in Illinois, which has had a mechanism
 24 for several years, as counsel mentioned, one of the
 25 utilities there came under a Commission investigation

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1 because of its failure to properly plan and supervise
2 the work that was being performed, and the Commission
3 found it was millions of dollars of wasted spending and
4 ordered a number of changes in the program. So the
5 need for Commission oversight is critically important
6 with these programs, as well as limits on how large
7 these surcharges can grow to make sure that, you know,
8 you continue to have an in-depth examination of the
9 utilities cost.

10 Q. Do you think San Bruno, which has been brought
11 up several times, do you think that's a good example?
12 Because San Bruno was really more about improper
13 installation.

14 A. I think it's a horrible example. You know,
15 what -- the only good thing that came out of the San
16 Bruno disaster was that it made people pay more
17 attention to buried infrastructure. That's it. It's
18 not a good case study for anything. First, it was a
19 large transmission main which, I mean, I think everyone
20 was dumbfounded that the utility there exercised such
21 lax control over such a critical facility. You're
22 talking about a 30-inch gas transmission main. You
23 know, calling it a bomb doesn't even do it justice. If
24 that isn't installed and maintained properly, it's a
25 disaster. And any gas utility with facilities that

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1 size knows that the most important thing they have to
2 do is continual inspection, maintenance, monitoring and
3 so on of facilities that large.

4 So, yeah, I don't -- and so San Bruno was not
5 distribution facilities, it was not aging
6 infrastructure or any of the legitimate concerns we
7 heard Mr. Darras discuss yesterday. It was just flat
8 out utility negligence, cost it was eight people their
9 lives and caused tremendous damage.

10 Q. All right. And then finally, your top concern
11 is with low-income households, correct, and the impact
12 that increasing basic -- or overweighting, I guess,
13 from what -- that's my interpretation, to really put it
14 in simple terms, overweighting the cost of the bill.

15 A. Sure. And not necessarily low income. I would
16 say lower-use customers. You know, I don't know the
17 income levels of every AARP member in MDU's service
18 area. I expect there are thousands of them. But, you
19 know, we know that retirees and especially one and
20 two-person households tend to use less natural gas than
21 a more typical size family. And it's those households,
22 the lower-use households that are really disadvantaged
23 by loading all of the cost into a customer charge,
24 especially when so much of the cost is related to the
25 demand for natural gas. So those customers, you know,

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1 who might use, say, 60 dekatherms per year, instead of
2 the 90 dekatherms that an average customer uses end up
3 subsidizing those larger-use customers, and that's
4 something we try to avoid in determining a fair rate
5 design.

6 COMMISSIONER KROSHUS: All right. Thank
7 you.

8 THE WITNESS: Thank you.
9 THE COURT: Chairman Christmann.

10 EXAMINATION
11 BY CHAIRMAN CHRISTMANN:
12 Q. I thought your comment about the 60 dekatherm
13 user probably is a better example than what you
14 included in your written testimony. I'm on page 29.
15 You highlighted -- this is your original testimony.
16 A. Yes, I have it.
17 Q. You highlighted the extreme examples from the
18 residential class. Well, first of all, my first
19 question is does 91 dekatherms per year sound like
20 correct to you as the average residential usage?
21 A. It is MDU's average, but only 30 percent of its
22 residential customers use that amount of gas or more.
23 The average is very heavily affected by some very large
24 users in the residential class. I discuss that --
25

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1 sorry, I can't pull up the exact page while I'm talking
2 to you, but a page or two later than that I show that
3 the median residential customer uses about 72
4 dekatherms per year. So half the customers use less
5 than that and half use more. And I would consider that
6 to be a more typical residential customer. That
7 average is -- I mean, it's mathematically accurate, but
8 it doesn't really reflect where most residential
9 households are.

10 Q. Okay. And I find the 72 part helpful, too.
11 But getting to this page, and let's start with
12 the ones that bring the average way up. About a tenth
13 of a percent that use 365 dekatherms a year, do you
14 think those are really what we think of as a real
15 residence, or do you think that that is some kind of a
16 business that doesn't fall into another category so
17 they wind up taking residential service?
18 A. I honestly don't know what they are. I can
19 speculate. I mean, it could be extremely large homes.
20 It could be somebody running some kind of home-based
21 business. It could be -- I don't know if farms are
22 allowed in the residential class.
23 Q. I was just going to ask you, do you think farms
24 that happen to be close enough to get natural gas and
25 use natural gas for grain drying fall into a

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1 residential?

2 A. I haven't looked at that -- at those conditions
3 in the Company's tariff. Some utilities allow farms in
4 their residential class, and some do not.

5 Q. I'll follow up more with them, but I wanted to
6 ask you while you were here. And then my other
7 question --

8 A. Second -- and if I could just -- it could also
9 be multi-unit buildings that are master meters or that
10 are heated through one meter and then the other units
11 have individual meters for, you know, cooking or
12 clothes drying. So I just don't know the specifics.
13 But certainly if somebody's using, you know, 300
14 dekatherms per year, that is very unusual for a typical
15 residence.

16 Q. And then on the other extreme you kind of made
17 your case by highlighting about one percent of
18 customers that use 12 dekatherms percent or less. In
19 North Dakota do you think it's very conceivable that
20 that is one of what you just recently talked about as
21 one or two-person households that would use that little
22 gas, or do you think that that's more likely things
23 like campsites or summer lake cottages or little craft
24 shops or something like that?

25 A. Well, again, I would just be speculating. I

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1 mean, from my experience I have seen that kind of usage
2 in, for example, a multi-unit building where heat and
3 hot water are provided centrally through a different
4 meter but then each unity has a separate gas meter for
5 some cooking. So this could be somebody who's only
6 using gas for cooking, you know, in a building that's
7 being heated through a different meter. I don't know.
8 But that's an example of where I've seen usage that
9 low. I think the kind of seasonal usage you're
10 discussing is another example of that. You know,
11 someone who, you know, just uses gas a few months in
12 the summer at a vacation home.

13 Q. In which case it might be the wealthiest people
14 that are benefitting most from what you're trying to
15 accomplish?

16 A. It could be, but I -- if we ignore those two --
17 well, let me talk about the extremes. At that high
18 extreme, somebody's using 300 dekatherms per year, that
19 is not a low income household. I'll absolutely
20 guarantee that. Because they couldn't afford it. So,
21 you know, are they being advantaged by the current rate
22 structure? Absolutely. Is that advantage going to
23 low-income households? Not a chance.

24 When we get into the middle and, you know, we
25 look at 50 dekatherms or 70 dekatherms versus the 90

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1 average, those lower-use customers are likely to be
2 either in small buildings, small housing units because
3 space heating is so much of the usage of natural gas,
4 or they're going to be one or two-person households
5 where there just isn't that much hot water use or that
6 much cooking and you dry one load of clothes a week and
7 that kind of thing. And as I showed from some of the
8 survey data, you know, one or two-person retiree
9 household is likely to use closer to 60 dekatherms per
10 year in this part of the country.

11 So, you know, I think we're at those two
12 extremes. We don't know exactly what we have. But
13 when we get in the middle, 40 -- I'd say like 40 up to
14 100 dekatherms, we've got a pretty good idea, those are
15 typical residential households, different sizes,
16 different number of people in the households. And at
17 the lower end of the scale, those customers are being
18 asked to subsidize those at the higher end of the
19 scale.

20 Q. I wasn't going to go here to save you time, but
21 you not stopping with your answer forces me to ask one
22 more question.

23 A. I know.

24 Q. The very large users, if in fact those are
25 categorized as residential, but if they are farms or

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1 some other type of small business, you just said they
2 are absolutely not low income. Do you acknowledge that
3 there can be things like farms that have a lot of
4 dollars that come in and go out but are really low
5 income?

6 A. Oh, sure. Yeah. I may have -- sorry, when I
7 think of low income, I'm thinking of a low-income
8 resident not a business that's owned by a low-income
9 family or group of families. So you're absolutely
10 right.

11 Q. I'll explore with the Company some more on --

12 THE COURT: I once had a juror tell me his
13 farm was a not for profit operation.

14 CHAIRMAN CHRISTMANN: No other questions.
15 Happy anniversary.

16 THE WITNESS: Thank you.

17 THE COURT: Commissioner Fedorchak.

18 COMMISSIONER FEDORCHAK: I've got ten
19 minutes, so I'll keep it brief. Try to.

20 EXAMINATION

21 BY COMMISSIONER FEDORCHAK:

22 Q. Can you -- so the Company -- your position is,
23 and on behalf of AARP, as hired by AARP, so you agree
24 with the revenue requirement, you don't have an issue

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1 with the revenue requirement?

2 A. No, I would not say that. I have not raised

3 any issues with the revenue requirement. I do not know

4 what Mr. Coffman -- what positions Mr. Coffman might

5 support in his briefs.

6 Q. And the signing to the firm and residential,

7 you agree with that?

8 A. Yes.

9 Q. You just said that earlier.

10 A. Yes.

11 Q. So can you restate your position on the rate

12 design as it relates to customer and demand? How do

13 you want it to be?

14 A. Sure. What I've recommended is that MDU's

15 existing residential customer charge should not be

16 changed in this case so that any increase in revenue

17 from the residential class should come from a

18 volumetric or per-therm charge.

19 Q. Okay. Talking -- so I have a little bit of

20 hard time distinguishing your position on the safety.

21 You said safety is number one priority, yet in the

22 slide number 7 --

23 A. We've lost the slides, but I have it in front

24 of me.

25 Q. It's the aging infrastructure table, the facts.

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1 You seem to be questioning the need to replace the

2 plastic and steel pipe, that that might be the

3 vintage -- replacing the vintage steel and plastic pipe

4 isn't needed because this is the typical life. That's

5 how I read your position. Is that accurate?

6 A. No. And if that's the impression you got, I

7 apologize. What I was suggesting was that there's a

8 lot of pipe out there, some of it has to be replaced.

9 The Company has been doing that for many years without

10 a special rate mechanism in place. It will continue to

11 do that with or without a special rate mechanism.

12 It's -- you know, if this showed that, you know, 90

13 percent of the pipe was reaching the end of its useful

14 life, I mean, that would raise a whole host of

15 questions, but it would also create a level of urgency

16 that I don't think is there right now.

17 This shows to me that, you know, the Company

18 has been maintaining its system apparently in a safe

19 manner over time. It adds pipe, you know, it maintains

20 and repairs what's there. So that for the pipe that's

21 in place, about -- on average, about two-thirds of its

22 useful life still remains. So we're not looking at

23 some, you know, massive or extraordinary program. Is

24 there a problem with Aldyl A? Yes. You know, that

25 seems to be what the safety folks tell us. And the

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1 Company needs to investigate further to see how big of

2 a problem it has.

3 Q. So you're saying that the -- if the Company had

4 to replace all of its steel and plastic mains, then you

5 might see the need for something more specific in terms

6 of track or a way to recovery that. But you don't see

7 that here. It's smaller amounts, so you think it can

8 be done incrementally like they have been doing over

9 the years?

10 A. Yes.

11 Q. And so -- but yet you do recognize -- because

12 you just said it -- that there is a problem with the

13 Aldyl A?

14 A. Again, I'm not an expert on that. I try to

15 keep up with what's happening. That's what the safety

16 regulators, you know, at the we say PHMSA, the Pipeline

17 and Hazardous Material Safety Administration of the

18 U.S. Department of Transportation, they've highlighted

19 a potential problem with that pipe, and I have no

20 reason to disagree with that.

21 Q. So the Commission should take action with the

22 Company to address that safety concern in an effective

23 way?

24 A. I would say that the Commission should make

25 sure the Company's doing its job and keeping on top of

Page 476

1 that information, studying its system, making sure it

2 knows what it has and developing reasonable plans to

3 eliminate a potential safety hazard.

4 Q. Okay. And would you agree that the -- if those

5 issues are determined to be -- warrant more action than

6 the standard approach being more proactive and

7 systematic, the Commission should do that with the

8 Company, take a more proactive and systematic approach,

9 and addressing the safety concerns of the system?

10 A. If that is warranted, absolutely. As I -- you

11 know, I go back to what I said at the beginning of my

12 presentation that nothing is more important than

13 safety. And if the Company is not doing it, then you

14 need to make sure that they do it.

15 Q. And is it your position on behalf -- on behalf

16 of the AARP who has hired you that you're not

17 questioning the safety concerns that have been raised

18 here?

19 A. Correct.

20 Q. Okay. Are there any changes to the tracker

21 that you would recommend that would make it more

22 acceptable, or a tracker type device that would help

23 focus resources on improving the safety of the system?

24 A. Boy, that's a hard question because I have yet

25 to meet a tracker that I like because they are very --

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1 they're very utility focused. They're basically trying
2 to relieve the utility's investors of the job of
3 providing capital, but they still want to earn a return
4 on it.

5 So as I view most trackers, they effectively
6 turn the utility's customers into forced investors in
7 the system rather than waiting for a rate case and
8 investors bearing the cost of capital during that time
9 and earning what I consider to be very high returns on
10 that invested capital. They're trying to almost
11 instantly recover, or in some cases pre-recover that
12 investment from customers. So customers are being
13 forced to invest in the system without receiving the
14 same returns that an investor does and the same
15 interest in the utility that an investor does.

16 So I have some very fundamental problems with
17 trackers. It's hard for me to come up with one that I
18 would say is acceptable.

19 Q. Okay.

20 A. Some are less bad than others.

21 Q. Have you -- since you follow this nationwide
22 and deal in a lot of different states, have you seen
23 cases where these types of gas replacement mechanisms,
24 recovery mechanisms, gas pipe replacement recovery
25 mechanisms have resulted in exorbitant rates for

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1 customers?

2 A. Yes. I referred to a situation in Illinois
3 with Peoples Natural Gas company, where rates were
4 increasing -- I don't remember exact numbers -- but
5 pretty significantly each year. And a lot of that
6 increase was found to have been the result of the
7 Company's mismanagement. So customers were not getting
8 value for that. If anybody had taken a look at it
9 sooner, they would have found imprudence and the cost
10 would not have been allowed and rates. So there were
11 just a lot of problems there.

12 That kind of highlighted to me the benefits of
13 the more traditional approach to rate making where the
14 utility makes the investment and then has to come in
15 and prove that it acted prudently and that the
16 investment is used and useful in serving customers
17 before it's allowed to receive any money.

18 COMMISSIONER FEDORCHAK: Okay. That
19 concludes my questions. Thank you.

20 THE COURT: Okay. Mr. Coffman, redirect?
21 MR. COFFMAN: Yes.

22
23 REDIRECT EXAMINATION

24 BY MR. COFFMAN:
25 Q. Mr. Rubin, following up on those concerns, have

Page 479

1 you also seen situations where states have adopted
2 infrastructure surcharges that led to, even without
3 allegations of imprudence or waste, still led the
4 utility to reach an over-earnings situation?

5 A. Yes. And that's -- I'm glad you mentioned that
6 because that's one of the other protections that's in
7 the Pennsylvania statute, which requires the Commission
8 to monitor the utility's earnings, I believe it's
9 quarterly. And if the utility is earning in excess of
10 its allowed return, the surcharge is automatically
11 reset to zero and the utility cannot use the surcharge
12 again until following a full rate case.

13 So, yes, there have been instances where even
14 though a utility is earning in excess of its allowed
15 return, it still has the surcharges in place that, you
16 know, bump up customers rates even higher.

17 Q. And in some of these other kind of piecemeal
18 surcharge mechanisms, are there some jurisdictions that
19 have adopted a requirement that they can only go on for
20 a certain period of time before the utility has to
21 initiate a rate case?

22 A. Yes. Either --

23 Q. A full rate case audit?

24 A. Yes, I think there's some jurisdictions that do
25 it based on time. There are others that do it based on

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1 the amount of dollars or the percentage of revenues.
2 But it is not uncommon to have some limit on the
3 surcharge that effectively requires a full rate case
4 like this one to be filed.

5 Q. And that was my next example I wanted to ask
6 you about, rate caps, which I guess may be same thing,
7 but are there various types of rate caps that have been
8 attempted or implemented by other jurisdictions in
9 infrastructure surcharges?

10 A. Yes, and they're just different ways of trying
11 to keep the surcharges fairly short term, I'd say
12 typically probably around three years or so, at which
13 point the utility would need to file a new rate case
14 where everything is looked at and put back in sync.

15 Q. And based on the SSIP proposal in this case and
16 the tariff that has been recommended by the utility,
17 are any of those type of consumer protections included?

18 A. No.

19 MR. COFFMAN: Okay. I think that's all I
20 have.

21 THE COURT: Mr. Sanderson.
22 MR. SANDERSON: Yeah, briefly.

23
24 RECROSS-EXAMINATION

25 BY MR. SANDERSON:

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1 Q. Mr. Rubin, has the AARP, or have you attempted
 2 to look in North Dakota at where the average one or
 3 two-bedroom or lower-income homes are located?
 4 A. I didn't look at bedrooms or income. I do
 5 have -- sorry, I'm looking at the exhibits in my direct
 6 testimony because I don't remember the exhibit number.
 7 But I did have one that looked at -- sorry, I believe
 8 I -- yes, it's SJR-11 looked at one-person households
 9 age 65 or older by county within the counties that MDU
 10 served. Now, I recognize you don't serve 100 percent
 11 of every one of those counties, but generally that's
 12 one type of geographic distribution that I did look at.
 13 Q. Okay. And for example in Burleigh County,
 14 let's just take the 563 one-person older households,
 15 have you attempted to or have you ever done or looked
 16 at any study in North Dakota where geographically those
 17 homes are located?
 18 A. No.
 19 Q. Are you aware of AARP ever doing that on -- in
 20 any other states?
 21 A. I can't speak for studies AARP may have done
 22 elsewhere. In other states, I have used this type of
 23 information and sometimes we have the data to break it
 24 down further. But usually you can't get extremely
 25 granular with this kind of information. The census

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1 data is based on samples. And once you get down below
 2 the county level, you usually -- you know, except in
 3 very large cities, you don't have a large enough sample
 4 to really make conclusions about, you know, how many
 5 customers of a very specific type you might have.
 6 Q. And I think kind of where I'm going with this,
 7 Mr. Rubin, have you attempted to -- or done anything to
 8 look at how many of AARP's low-income customers would
 9 be located in low-pressure systems in Bismarck, in
 10 Dickinson, in Minot or other towns in North Dakota?
 11 A. I do not know.
 12 Q. Okay. I just want to follow up. One of the
 13 things in response to Mr. -- Commissioner Kroshus's
 14 questions was regarding legislation. You mentioned
 15 some states have adopted legislation for these recovery
 16 mechanisms?
 17 A. Yes.
 18 Q. Have you attempted to determine how many states
 19 have adopted legislation?
 20 A. No.
 21 Q. I just quickly went through the 39 states and
 22 the District of Columbia that were listed in Exhibit
 23 KRP-1, and that's, again for the record, the Department
 24 of Energy January 2017 study, and I found that only 15
 25 of those mechanisms were --

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1 MR. COFFMAN: Objection; this appears to
 2 be testimony not a question.
 3 THE COURT: Sustained.
 4 BY MR. SANDERSON:
 5 Q. Is it your position that in North Dakota
 6 this -- that the North Dakota legislature would be in a
 7 better position than the Public Service Commission to
 8 determine pipeline safety or -- and pipeline recovery?
 9 A. I do not have an opinion about that one way or
 10 the other. Certainly within the legislature's province
 11 to weigh in on this if they see feet. In the absence
 12 of that, if the Commission has the authority -- again,
 13 I have no opinion on that, I don't know if they do or
 14 they don't. But if the Commission has the authority to
 15 do it without specific enabling legislation, then, you
 16 know, that's up to the Commission to decide.
 17 Q. Are you aware that the majority of mechanism --
 18 recovery mechanisms for these type of programs have
 19 been put in through Public Service Commissions and not
 20 legislation?
 21 A. I do not know that.
 22 MR. SANDERSON: Mr. Rubin, I have no
 23 further questions, thank you.
 24 THE COURT: Mr. Armstrong.
 25 MR. ARMSTRONG: No questions.

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1 THE COURT: Major Unsicker.
 2 MAJOR UNSICKER: No questions, sir.
 3 THE COURT: Ms. Jeffcoat-Sacco.
 4 MS. JEFFCOAT-SACCO: No questions.
 5 THE COURT: Okay. Fair well, safe travels
 6 and happy anniversary.
 7 THE WITNESS: Thank you.
 8 THE COURT: I hope you make it.
 9 (A break was taken at 12:08 p.m.)
 10 THE COURT: Okay. Back on the record.
 11 Slightly after 1:00. We're going to return to MDU's
 12 case in chief here. Mr. Sanderson.
 13 MR. SANDERSON: Thank you, Judge.
 14 Montana-Dakota would call Jordan Hatzenbuhler.
 15 THE COURT: Mr. Hatzenbuhler, spell your
 16 first and last name for the record, please?
 17 THE WITNESS: J-o-r-d-a-n,
 18 H-a-t-z-e-n-b-u-h-l-e-r.
 19 THE COURT: Okay. Raise your right hand,
 20 please.
 21
 22 JORDAN HATZENBUHLER,
 23 duly sworn, was examined and testifies as follows:
 24
 25 THE WITNESS: I do.

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1 THE COURT: Thank you. Mr. Sanderson.
2 MR. SANDERSON: Thank you.
3
4 DIRECT EXAMINATION
5 BY MR. SANDERSON:
6 Q. Mr. Hatzenbuhler, can you please state your
7 full name and business address?
8 A. My name is Jordan Hatzenbuhler. My business
9 address is 400 North Fourth Street in Bismarck, North
10 Dakota.
11 Q. And whom are you employed by?
12 A. I'm employed by Montana-Dakota Utilities
13 Company.
14 Q. And was your position with the Company?
15 A. I am a senior regulatory analyst.
16 Q. And can you briefly describe what you do in
17 that role?
18 A. My primarily duties, particularly in relation
19 to rate cases such as this, are the preparation of
20 embedded class cost of service studies, the development
21 of rate design, the allocation of the revenue
22 requirement, and additionally I prepare miscellaneous
23 other filings on behalf of the Company.
24 Q. And could you briefly give a brief background
25 on your education and work experience?

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1 A. Yes. I have a bachelor's of science degree in
2 accounting from the University of North Dakota. I'm
3 also a CPA. I have worked for the MDU Resources group
4 of companies for just under eight years, in my current
5 role for about three years.
6 Q. And have you testified in other proceedings
7 before state regulatory bodies?
8 A. Yes, I have.
9 Q. And are you familiar with Montana-Dakota's
10 application for a natural gas rate increase in this
11 case?
12 A. Yes, I am.
13 Q. And could you briefly describe your involvement
14 in the application?
15 A. As I mentioned previously, I prepared the
16 Company's embedded class cost of service study. I
17 developed the allocation of the revenue increase, as
18 well as the development of the rate design.
19 Q. And did you also submit pre-filed direct and
20 rebuttal testimony?
21 A. Yes, I did.
22 Q. And if asked the same questions, would your
23 answers remain the same?
24 A. Yes, they would.
25 Q. Have you also prepared PowerPoint slides

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1 regarding your areas of testimony today?
2 A. I have.
3 Q. And as you move along in your presentation,
4 feel free to use those.
5 First off, could you just explain the affect
6 the recent tax act had on your calculations?
7 A. Yes. As seen on the slide, the tax reform had
8 a substantial impact on our request in this proceeding.
9 It was mentioned a number of times yesterday, but as
10 seen here, the revenue shortfall or ask was decreased
11 over 2 million, about \$2.3 million, nearly a 40 percent
12 reduction in the ask overall.
13 So instead of a proposed overall increase in
14 rates of 5.4 percent, we're now looking at a 3.3
15 percent overall increase. And for the residential
16 class, we've gone from a 5.9 percent as filed increase
17 down to a 3.6 percent increase. Again, a meaningful
18 benefit to our customers as a result of that tax
19 reform. And I'd just like to note that any numbers
20 that I use going forward are going to reflect the
21 adjustments that were taken into account with regard to
22 the tax reform.
23 Q. And now could you describe the purpose or
24 explain the purpose of conducting a class cost of
25 service study?

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1 A. Yes. The class study serves a number of
2 purposes. First and foremost, it provides a basis for
3 measuring the rate of return provided by each rate
4 class. From there, it serves as a guide for allocating
5 the revenue increase to the rate classes as well as
6 guiding the rate designs applicable to each customer
7 class.
8 Q. And can you explain the Company's embedded
9 class cost of service study and the results used in
10 this case?
11 A. Yes. As seen on this slide, the results of the
12 embedded class study indicate that the rate of return
13 provided by the residential class and the firm general
14 class as a whole are under returning, they're not
15 yielding the authorized rate of return while the
16 remaining classes, Air Force and the interruptible
17 classes, are all exceeding the authorized return. So
18 what it means is that the residential class and the
19 small classes are not providing enough dollars to cover
20 the cost to serve them while the remaining classes are.
21 Q. Can you explain how the Company determined what
22 costs should be allocated to each customer class?
23 A. Yes. In determining what cost should be
24 allocated to each customer class, it's basically a
25 three-step process to complete an embedded class cost

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1 of service study. The first step would be to
 2 functionalize and classify the revenue requirement --
 3 the entire revenue requirement as cost -- when you
 4 functionalize it, you do so into costs that are either
 5 production or transmission or distribution in nature.
 6 In a case like this one for a distribution gas utility,
 7 this step is very simple as all costs are
 8 functionalized as distribution costs.

9 From there, we classify those costs into three
 10 buckets, essentially. We have customer related, demand
 11 related, and energy related costs. So customer costs
 12 are going to be those that vary with the level of
 13 customers. Energy costs would be those that vary with
 14 the level of energy consumption. And demand cost would
 15 be those that vary with the demand imposed by the
 16 customer.

17 Q. And in this case, AARP and Staff have asserted
 18 in their testimony that distribution should be
 19 allocated as a 100 percent demand related cost. Do you
 20 agree with this position?

21 A. In a distribution case like this one, the
 22 classification of distribution mains is a primary cost
 23 driver, and as such it's often a contested area as
 24 there are multiple ways to allocate the cost. I do not
 25 agree with the recommendation of allocating mains as

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1 100 percent demand for one overriding reason, and that
 2 is this it ignores that there are two primary drivers
 3 or cost causers for that investment and that is the
 4 fact that there are in fact customers that are joining
 5 the system and they have the associated demand on the
 6 system. And to allocate 100 percent on demand ignores
 7 that first fact that it takes customers to have a
 8 demand.

9 Q. And one of the things we know is the revenue
 10 allocation between the classes is not in dispute with
 11 AARP or Staff in this case.

12 A. That is correct. It's an important thing to
 13 note. As was mentioned by Mr. Rubin, we may not have
 14 got there in the same way, had differing views
 15 regarding the allocation of mains or other methodology
 16 issues, but everybody agrees that what the Company
 17 proposed in terms of the allocation of the revenue
 18 increase is appropriate and reasonable.

19 Q. Can you explain the total revenue effect of the
 20 proposed gas rate change?

21 A. Yes. So as seen on the slide here, the total
 22 revenue effect in this case is a proposed increase of
 23 approximately \$3.6 million or 3.3 percent over current
 24 rates. As you can see in the proposed increase column
 25 there, about \$2.1 million has been allocated to the

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1 residential class with about just under 1.5 million
 2 allocated to the firm general class. So that increase
 3 to the residential class represents approximately 3.6
 4 percent.

5 And then on the far right of the slide, you can
 6 see what the results are in terms of what each class is
 7 returning in terms of a rate of return on rate base
 8 both before the increase that's proposed as well as
 9 after. So in the top right corner, you can see that
 10 after the increase residential class, we're moving it
 11 towards costs because it ends up with a rate of return
 12 at 5.7 percent, but still below the requested ROR of
 13 7.5 roughly.

14 Q. And can you explain how the proposed increase
 15 will be allocated to the customers and the affect it
 16 will have on the typical residential customer bill?

17 A. Yes. Again, the increase has been allocated to
 18 the residential and firm classes. Residential
 19 customers currently have a simple two-part rate that
 20 was just adopted and approved by the Commission less
 21 than three years ago. They pay a customer -- customers
 22 pay a one fixed rate to have access to North American
 23 gas fields, they're inexpensive. And then they have
 24 one variable rate for the cost of gas that's actually
 25 used. It's very simple to understand, and we think

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1 it's worked well.

2 The increase will be applied entirely to that
 3 fixed charge, and it will amount to about \$1.82 per
 4 month as proposed. And so that increase will be the
 5 same whether you're a low-use customer for any reason
 6 or a high-use customer. With that increase,
 7 approximately 60 percent of the bill remains volumetric
 8 thus maintaining the incentive to conserve or to
 9 achieve efficiencies that ultimately conserve your
 10 energy and the desired price signal of use less, pay
 11 less, use more, pay more.

12 And just for reference, one DK, one dekatherm
 13 saved over the course of the year results in a saving
 14 of \$4 just due to that cost of gas, commodity cost. So
 15 that's how the increase will be applied to the
 16 residential class.

17 The firm class will receive an increase in
 18 their customer charges. Again, the cost of service
 19 study was used as a guide to bring those more in line
 20 with the cost to serve them. And the remaining needed
 21 increase will be picked up through the volumetric
 22 energy charge. And the monthly increases are shown
 23 there on the slide for both the small and firm classes.

24 Additionally, using the class study as a guide,
 25 we increased the customer charges for both the small

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1 and large IT classes. Now, if you recall on the
2 previous slide here, there was no allocated increase to
3 small interruptible or large interruptible, but you'll
4 see that in the proposed increase there's very small
5 amounts, negative \$171 for small IT, \$139 for large IT.
6 So the reason that there's that marginal increase and
7 decrease is that we adjusted the base of service
8 charges for those classes, but to remain revenue
9 neutral, their energy charges were reduced. So it's
10 just due to rounding that there's a couple hundred
11 dollars for each of those. So those are all of the
12 proposed changes to rates.

13 And this next slide here is just a detailed
14 look at the proposed residential typical or average
15 bill by month for a 91DK average residential customer.
16 As you can see, it shows the total increase of just
17 under \$22 for a year, comes out to about \$1.82 a month.
18 And you'll see that the cost of gas, those columns are
19 not changing, it's strictly into the basic service
20 charge columns.

21 Q. And you mentioned in MDU's last natural gas
22 rate case, this Commission approved a straight fixed
23 variable rate design for the residential rate class.
24 Can you just explain the benefits of this rate design?
25 A. Yes, there are a number of benefits to the

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1 customer specifically with regard to this rate design.
2 The first one I have listed here is a big one that was
3 realized this past winter. We had substantially -- a
4 substantially colder heating season this past winter.
5 And the straight fixed variable design kind of
6 mitigates automatically to an extent the impact of that
7 abnormal weather without the need of some other
8 mechanism to normalize like we had in the past. So
9 that's an important one not only to the customer but
10 then it also has a benefit to the Company of providing
11 some stability in terms of our revenues in
12 circumstances where weather is very abnormal.

13 Along those lines, it provides for a more
14 stable bill with a greater portion of the bill being
15 fixed for the customer so they have a better idea of
16 what to expect while also maintaining the incentive to
17 conserve with roughly, as I said, 60 percent of the
18 bill remaining volumetric.

19 To Chairman Christmann's point yesterday
20 regarding customers that may have a gas service to a
21 lake cabin that is used only seasonally or infrequently
22 or customers that take gas service strictly for a gas
23 fireplace or a fire pit outside or geothermal customers
24 that we serve as the backup energy source for them
25 during times of peak, under a rate design that recovers

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1 the fixed cost to serve those customers through
2 volumetric charges, there are obvious subsidies that
3 take place at the expense of the other customers. The
4 current rate design addresses these issues just by
5 default automatically.

6 Lastly, it appropriately allows fixed costs to
7 be recovered through a fixed charge.

8 Q. Mr. Hatzenbuhler, I have no further questions.
9 Thank you.

10 MR. SANDERSON: At this time, Judge, we'd
11 offer MDU Exhibit 15, the PowerPoint slides of this
12 presentation.

13 THE COURT: Any objection?
14 MR. ARMSTRONG: No objection.
15 MR. COFFMAN: No objection.
16 MAJOR UNSICKER: No objection.
17 MS. JEFFCOAT-SACCO: No objection.
18 THE COURT: Okay. MDU-15 is received.
19 Mr. Armstrong.
20 MR. ARMSTRONG: No questions.
21 THE COURT: Mr. Coffman.
22 MR. COFFMAN: Yes, I have a couple. Thank
23 you.
24
25 CROSS-EXAMINATION

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1 BY MR. COFFMAN:
2 Q. Good afternoon, Mr. Hatzenbuhler. Let me just
3 start by asking you questions based on your slides
4 here.
5 A. Okay.
6 Q. Could you go to slide 11 where you show in the
7 proposed residential changes.
8 A. I have different slide numbers up here. Is it
9 this one?
10 Q. There you go. Now, this slide shows the
11 average residential customer, I assume?
12 A. That's correct.
13 Q. Okay. Did you review Mr. Rubin's testimony?
14 A. I did.
15 Q. And do you agree with him that only about 30
16 percent of residential customers use 90 dekatherms or
17 more on an annual basis?
18 A. Yes, that appeared correct.
19 Q. Okay. And you understand the difference
20 between the mean and the median?
21 A. Yes.
22 Q. And so if we're talking about the median
23 residential customer, they may use something closer to
24 72 dekatherms?
25 A. Okay.

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1 Q. Would you agree with that?

2 A. Yes.

3 Q. Okay. Now, back on slide 9, you said that even

4 under your proposal, 60 percent of a residential bill

5 is variable. And by saying that, I assume you were

6 referring to the cost of gas, the commodity cost of the

7 gas; is that right?

8 A. Correct.

9 Q. Okay. And so is 60 percent a percentage -- is

10 that based on the 91 dekatherm mean customer?

11 A. That is correct. So if you look at -- again, I

12 don't know -- I have this as slide 8 in my slide deck,

13 but to get to the approximately, I think it comes out

14 to 59 percent, that approximate number, you just simply

15 take the \$365 shown for the cost of gas into the \$622

16 total.

17 Q. Just using your numbers here, I got 58.7

18 percent. That's in the ballpark, right?

19 A. Approximately 60 percent, yes.

20 Q. So what's the percentage of the bill that's

21 variable for a typical customer or a median customer

22 using 72 dekatherms a year?

23 A. You just -- I don't have a calculator in front

24 of me. It's -- it would be slightly less.

25 Q. Well, let me tell you, I did it and then ask

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1 you if you think that's correct. I looked at the five

2 dekatherms for the month of May and what is there for

3 the cost of gas, and I took that and just assumed, you

4 know, multiplied the 5 times 12, got 60 dekatherms, and

5 multiplied that by the \$4.011 and got -- I came up with

6 about \$365 a year. Does that sound right?

7 A. I don't know where you're getting 60

8 dekatherms. You just spoke to 72 for a median

9 customer. So you want to be using 72DK.

10 Q. So if we added one more dekatherm to five, we

11 get six. We took the calculations for the month of May

12 and we added one more, made it 6 times 12, that would

13 be 72. Does that sound -- can we get to it that way?

14 A. Okay.

15 Q. So based on my calculations, a typical

16 residential customer would really only -- would only

17 control 52 percent of their bill or 52 point --

18 A. Like I said, without a calculator up here that

19 --

20 Q. Does that sound right?

21 A. -- sounds reasonable.

22 Q. So it's not -- so for the typical customer,

23 it's not quite as high as 60 percent that a customer

24 controls?

25 A. For a 72 dekatherm-per-year customer, it's not

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1 as high as a 91 dekatherm-per-year. I don't know if

2 you can call either of them typical necessarily. Each

3 of them falls into a different consumption level.

4 Q. Okay. And if we look at the effect of your

5 proposal on an even lower-use residential customer, say

6 that uses 48 dekatherms a year, would you agree that

7 that would -- that that lower-use customer would only

8 control maybe 42 percent of their bill?

9 A. I would agree as the annual consumption

10 decreases, the portion of the bill that will be fixed

11 will also -- or will be volumetric will also decrease.

12 But I would add that somebody that uses 48 dekatherms a

13 year has a much lower bill than somebody that uses 91

14 dekatherms in a year.

15 Q. And I would agree with your statement that if

16 you use more, you pay more. But isn't it true that the

17 more that -- the greater portion of the bill that is

18 fixed, the less control that a customer has and the

19 less savings that they would have for using less?

20 A. I would agree.

21 Q. Okay. And back to the cost of service study

22 that you were a part of with regards to the rate design

23 within the residential class, would you acknowledge

24 that that study showed that only 75 percent of the

25 residential costs are customer based?

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1 A. 75 percent sounds correct in terms of costs

2 that were customer related. With the remaining -- with

3 the exception of probably less than one percent being

4 demand related. I mean, less than one percent energy

5 related, the remaining 24 something being demand

6 related. The point is that the demand-related costs

7 are still fixed in nature just as the customer-related

8 costs are.

9 Q. And that's a difference of opinion between you

10 and other witnesses in the case, correct?

11 A. Yes.

12 Q. But -- so your opinion is that demand costs are

13 fixed and do not vary between customers?

14 A. Well, I'd like to step back one second. I

15 don't feel it's an opinion of mine. The costs are

16 fixed. Those demand-related costs are largely the

17 portion of the mains, the investment in the

18 distribution mains that are in the ground. As Mr.

19 Rubin said, those are sunk costs, fixed costs, whatever

20 you like to say. They don't vary with residential

21 consumption. They are fixed costs.

22 Q. But Mr. Hatzenbuhler, won't the size of the

23 pipe that's needed to be sunk differ based on the

24 demand?

25 A. I'd argue no. If we have a new subdivision

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1 going in, each home is going to be served with the same
 2 service. It's not going to matter whether one of them
 3 chooses to just have a fire pit or one of them chooses
 4 to heat a three-stall garage to 80 degrees in January.
 5 Q. But you're including in your cost a charge to
 6 the residential class pipes that are further up the
 7 distribution chain. Those are going to be bigger or
 8 smaller depending on the demand and usage, correct?
 9 A. The cost -- the investment in the mains is
 10 driven by demand, yes. I don't think you can
 11 categorically say that there's enough spread between
 12 the demand -- there's not enough difference between the
 13 residential class's customers to justify building a
 14 rate design around those specific high-use customers
 15 that may drive the demand higher in your opinion.
 16 Q. Have you performed any analysis to prove that,
 17 what that variation is?
 18 A. No, I do not have an analysis for that.
 19 Q. So -- but you do acknowledge that also energy
 20 component to residential costs, delivery of costs, as
 21 well as the demand in customer cost, correct?
 22 A. Three cents.
 23 Q. And so is your proposal here to apply all of
 24 this rate increase into another fixed increase for
 25 customers, is that just based on taking your cost study

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1 and just rounding it up to 100 percent?
 2 A. It's based on my belief that the costs being
 3 recovered are fixed in nature. And in the absence of
 4 having demand meters where we would have the ability to
 5 charge a demand rate to residential customers for those
 6 demand-related costs, you have to choose another way of
 7 collecting those dollars. And I believe it is a much
 8 more appropriate manner to do that through the fixed
 9 charge because they're fixed costs in nature than it is
 10 to collect those through volumetric charge that we
 11 currently don't have in place today. It would be
 12 taking a step backwards to revert back to adding a
 13 volumetric charge that we just went away from less than
 14 three years ago. Our system did not change in the last
 15 three years, and the composition of the residential
 16 class didn't change in the last three years to make the
 17 decision to go to straight fixed variable pricing
 18 imprudent at this time compared to 2015.
 19 Q. Well, there are differences of opinion about
 20 whether MDU has a straight fixed variable rate design?
 21 A. Okay.
 22 Q. You acknowledge that, that there's a definition
 23 of what that terms means?
 24 A. Mr. Rubin said he didn't agree that it was
 25 straight fixed variable, but . . .

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1 Q. Tell me, what is the point of doing a cost of
 2 service study if you aren't going to recognize
 3 different classifying costs in these three different
 4 buckets if you're not going to acknowledge that in the
 5 rate design?
 6 A. It is acknowledged in the rate design because
 7 what the cost service study indicates is that the costs
 8 being recovered are fixed in nature, and then it's a
 9 choice of -- a matter of decision making on how you're
 10 going to recover them.
 11 Q. So you believe even the energy portion of rates
 12 is fixed for residential customers?
 13 A. I believe the energy portion of rates is
 14 diminimus at three cents. I think it would be quite
 15 inappropriate to add a charge to recover that.
 16 Q. So what is the point of even analyzing the cost
 17 to serve the residential class?
 18 A. The embedded class cost of service study
 19 doesn't just guide rate design, it also guided the
 20 revenue allocation -- or the increase -- you know, the
 21 allocation of the increase.
 22 Q. So in your opinion is the class cost of service
 23 study only for the purpose of class allocation, or is
 24 it also used to guide rate design in each class?
 25 A. As I stated before, it's used as a guide for

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1 both. It gives you the answer for the first for the
 2 return by class, and then it serves as a guide for the
 3 rate design process.
 4 Q. And there's many important factors that the
 5 Commission should take into account other than the cost
 6 of service study when setting rates?
 7 A. Correct.
 8 Q. And is one of those factors that the Commission
 9 should consider whether or not the rates encourage
 10 conservation?
 11 A. That is for the Commission to decide. I would
 12 argue that our current rates do allow for conservation
 13 to continue occurring. In our last case, for instance,
 14 which was just under three years ago, the average
 15 residential use annually was 94 dekatherms. Today it's
 16 91. And in that whole interim period we've had a fixed
 17 charge -- we've had the straight fixed variable or
 18 fixed charge rate. So conservation or efficiency has
 19 still happened in those last three years. So I would
 20 argue that this rate design has not done anything to
 21 impede conservation or efficiency efforts on behalf of
 22 our customers.
 23 Q. But you do acknowledge that the greater -- the
 24 fixed part of the bill is the less incentive for energy
 25 efficiency and conservation?

<p style="text-align: right;">Page 505</p> <p>1 A. Yes.</p> <p>2 Q. It's just not -- there's some incentive, it's</p> <p>3 just not as great as it could have been?</p> <p>4 A. Correct. If it was 100 percent volumetric, of</p> <p>5 course there's going to be more benefit to</p> <p>6 conservation.</p> <p>7 Q. How would you rank the importance of the</p> <p>8 different principles of rate design when setting</p> <p>9 residential rates? With the cost of service being one</p> <p>10 and the various other factors?</p> <p>11 A. I think it's a balance that you take a look and</p> <p>12 you want to have gradualism, which I think gets back to</p> <p>13 the -- one of the key benefits of our SSIP. That would</p> <p>14 be a primary benefit in terms of rate structure there.</p> <p>15 You want equitable rates. And I think there's no more</p> <p>16 equitable rate for residential rate class than the</p> <p>17 current rate structure that we have because the cost to</p> <p>18 serve each of these customers is essentially the same</p> <p>19 with the exception of a handful of outliers. So</p> <p>20 charging them each the same because the cost the same</p> <p>21 to serve them is equitable. It's efficient for the</p> <p>22 Company to collect our revenues. It's not dependent on</p> <p>23 outside forces such as weather. So I think it's a</p> <p>24 balance of various principles.</p> <p>25 Q. Is public acceptance an important rate design</p>	<p style="text-align: right;">Page 507</p> <p>1 the cost of service towards just an absolute fixed fee?</p> <p>2 A. I'd say moving towards cost of service with the</p> <p>3 exception of we don't have demand meters. So a</p> <p>4 perfectly fair or perfect world for -- would be there</p> <p>5 would be demand meters and we would have a fixed charge</p> <p>6 of covering the customer charge indicated by the class</p> <p>7 cost of service study and then a demand charge for the</p> <p>8 demand component. In the absence of a demand meter for</p> <p>9 each of our residential customers, which we do not</p> <p>10 have, you have to choose how are you going to collect</p> <p>11 that component of cost. And I believe, as I've said,</p> <p>12 that it makes more sense to collect them through the</p> <p>13 fixed charge than to initiate a volumetric charge.</p> <p>14 Q. Are you aware of utilities that has implemented</p> <p>15 demand meters and have you had the opportunity to</p> <p>16 review the data --</p> <p>17 A. No.</p> <p>18 Q. -- that has been collected?</p> <p>19 A. I'm not aware of specifics, and I haven't</p> <p>20 reviewed data, no.</p> <p>21 Q. Would you be surprised if those utilities found</p> <p>22 a great deal of variability in demand amongst</p> <p>23 residential customers?</p> <p>24 A. I can't speak to the results that they've</p> <p>25 found.</p>
<p style="text-align: right;">Page 506</p> <p>1 factor that should be considered by the Commission?</p> <p>2 A. Yes.</p> <p>3 Q. Are you familiar with other similar utilities</p> <p>4 and the rate designs that have been approved for the</p> <p>5 residential class?</p> <p>6 A. Yes. Well, generally.</p> <p>7 Q. And would it be fair to say that most LDCs,</p> <p>8 local natural gas delivery companies, have some</p> <p>9 component in the delivery cost that is fixed as well as</p> <p>10 a component that is variable?</p> <p>11 A. Yes, I believe different LDC here in North</p> <p>12 Dakota has straight fixed variable pricing, just like</p> <p>13 us.</p> <p>14 Q. But if you looked at LDCs in the country or</p> <p>15 even in the region, wouldn't this utility be on the far</p> <p>16 extreme in applying 100 percent of the delivery cost</p> <p>17 into a fixed fee?</p> <p>18 A. I can't speak to it because I don't know the</p> <p>19 rate designs at other utilities. But if we are, I</p> <p>20 would say we're not at the far extreme, I'd say we're</p> <p>21 at the forefront of rate design evolution and that this</p> <p>22 is what makes sense and this is where this Commission</p> <p>23 in North Dakota went three years ago prudently.</p> <p>24 Q. And so when you say moving forward or being on</p> <p>25 the forefront, you're talking about moving away from</p>	<p style="text-align: right;">Page 508</p> <p>1 Q. I understand.</p> <p>2 MR. COFFMAN: That's all I have. Thank</p> <p>3 you.</p> <p>4 THE COURT: Major Unsicker?</p> <p>5 MAJOR UNSICKER: No, sir.</p> <p>6 THE COURT: Ms. Jeffcoat-Sacco?</p> <p>7 MS. JEFFCOAT-SACCO: No questions.</p> <p>8 THE COURT: Okay. Commissioners.</p> <p>9 Commissioner Kroshus.</p> <p>10</p> <p>11 EXAMINATION</p> <p>12 BY COMMISSIONER KROSHUS:</p> <p>13 Q. Good afternoon, Jordan.</p> <p>14 A. Good afternoon.</p> <p>15 Q. The energy conservation, energy efficiencies</p> <p>16 and conservation approach where residential homeowners</p> <p>17 can control their utility bill, their gas bill to some</p> <p>18 extent, do you think that comes at the price of comfort</p> <p>19 for some that can't afford to put new windows in, can't</p> <p>20 upgrade the furnace, et cetera? You know, they're</p> <p>21 really strapped and where do they go?</p> <p>22 A. I think the people that are in a position such</p> <p>23 as that, that are truly that strapped likely qualify</p> <p>24 for the assistance program, and they're not going to be</p> <p>25 paying -- if they qualify and take advantage of that</p>

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1 program, they're not going to be paying full boat. So
2 I can't speak specifically. I haven't had to make a
3 decision for myself where I sacrifice comfort to save
4 on my utility bill. But I hope it's not something
5 that's commonly occurring.

6 Q. Do you know what percentage of MDU's customers
7 receive assistance?

8 A. Not off the top of my head, but I know we could
9 get that very quickly for you.

10 Q. Do you think it would cover the majority if not
11 all of the most extreme cases?

12 A. I would like to believe that the program was
13 built in a way that it was intended to cover those that
14 truly needed the assistance. So I would say yes.

15 Q. Do you ever see a scenario where residential
16 would be broken from our -- not just residential,
17 whether it's the biggest home in Bismarck or it's the
18 tiniest home, and assuming income would be
19 proportionate, do you think there's an argument to be
20 made ever to have a different type of residential
21 classification or a breakdown within that group?

22 A. Bifurcated residential class, I guess you'd --

23 Q. Yeah.

24 A. Based on demographic type information of income
25 and age and so forth? We don't have -- I don't think

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1 it would be feasible as we don't have the information
2 on a customer-by-customer basis of their income and,
3 you know, the characteristics of their home. I can
4 just speak from personal relations of mine, I know of,
5 you know, a young mother of one over in Mandan that
6 uses much, much more than average energy and living in
7 a very inefficient trailer in Mandan, and then I also
8 know of people that have a second home that use the
9 cabin on, you know, six, seven weekends. So what the
10 AARP is proposing is a volumetric charge that would
11 hurt single mother of one and subsidize second
12 homeowner that doesn't use it much. So I believe the
13 rate structure we have in place is most equitable. And
14 I don't know that there would be a way to split the
15 class based on income or other demographic factors.

16 Q. It would be challenging?

17 A. Yes.

18 COMMISSIONER KROSHUS: No other questions
19 from me.

20 THE COURT: Chairman Christmann.

21 EXAMINATION

22 BY CHAIRMAN CHRISTMANN:

23 Q. As I thought throughout this case, and actually
24 before, too, in the case a few years ago, sometimes I'm

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1 confused, too, by how to properly evaluate the mean
2 average versus the median average. In a fairly simple
3 way, and I'm not saying it has to be a certain
4 particular guideline, but can you provide us something
5 that breaks down the amount of usage into more than
6 just the two extremes and what one of those two -- or
7 each of those two averages are? And for example,
8 here's what I'm thinking of, like, what percentage of
9 your customers use 40 to 60, 60 to 80, 80 to 100 and
10 100 to 120, or something similar if you already have
11 something done?

12 A. I could either -- I don't have it available
13 here. We could create something like that. Mr. Rubin
14 actually did that in his direct testimony. It's -- and
15 Scott J. Rubin 7 I believe is his -- if you'd like to
16 take a quick look to save us the time of --

17 Q. What -- this is on his direct testimony?

18 A. Exhibit SJR-7.

19 Q. Okay. I'm looking at it now.

20 A. So you'll want to look at the -- the all
21 customers would be the --

22 Q. So what does that mean in the low ten percent?

23 A. So down below, the number of accounts in the
24 sample is roughly 76,000, and we provide -- the reason
25 I'm pointing to this is we provided the data, and I

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1 confirmed its accuracy. But it's 76,000 instead of
2 96,000 because when you scrub the file which has over a
3 million rows, there are customers that have, you know,
4 only two months or three months of bills, and then
5 there's other customers doing billing adjustments or
6 whatever happens that has maybe 14 or 15 months. So I
7 believe what he did here is scrubbed the data for
8 customer -- or accounts that have between 9 and 13 or 9
9 and 14 months or bills. So it's a more accurate
10 representation of the whole data set. So when the ten
11 percent decile, he's got the consumption 39.16, you can
12 do the quick math of each of those deciles has 7600
13 customers. So there's 7600 customers that use
14 approximately 40 or less dekatherms in a year. And
15 then the next bucket has another 7600 customers.

16 Q. Oh, okay. While you finish on your second time
17 around, maybe I'll think of some other questions.

18 Sorry I missed that before. I appreciate you pointing
19 it out. And I believe that takes care of the request
20 that --

21 THE COURT: Commissioner Fedorchak.

22 CHAIRMAN CHRISTMANN: Oh, I have some
23 other questions.

24 THE COURT: Oh, I'm sorry.

25 BY CHAIRMAN CHRISTMANN:

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1 Q. You had provided some examples like where you
2 are backup to ground source --

3 A. Yes.

4 Q. -- heat or cabins or things like that of what
5 might be some of those extraordinarily low-usage
6 customers which doesn't necessarily mean that it is
7 being paid by a one or two-person household nor that
8 they're low income. It just means that it's an
9 occasional use thing, correct?

10 A. That is absolutely correct.

11 Q. And then let's talk about the extraordinarily
12 high-volume usages. And in previous questions of Mr.
13 Rubin, I kind of speculated that could those possibly
14 be farms or other small businesses. Is that something
15 that occurs out there, or do those not fall into
16 residential classes?

17 A. I can confirm it should not be small
18 businesses. I believe we do an annual, or probably
19 more often, scrub to make sure customers are in the
20 correct customer class or served under the right rate.
21 But I do -- when I evaluate this data, I -- the ones
22 that seem really high, I do pull them up on our
23 customer service and billing software just to see, is
24 this really -- are there homes out there that use this
25 much gas, and the handful that I looked at really

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1 were -- it is possible for a home in Bismarck, Mandan
2 to use 250, 300 dekatherms in a year. Some people have
3 heated outdoor pools and that sort of thing. But it
4 won't be grain dryers. I believe you had mentioned or
5 asked if it was potentially that. Those are served
6 under the small interruptible, a separate grade. So it
7 might be farmhouses, but it won't be the grain dryers
8 specifically.

9 Q. Okay. Thanks for clarifying that for me.

10 And then one of my -- I feel like a big part of
11 the whole case is being mischaracterized here a little
12 bit, and maybe it's just me that's feeling that way.
13 I'm on your very first slide, I believe, the Tax Cuts
14 and Job Act impact.

15 A. Okay.

16 Q. Is there any disagreement with the Company that
17 the 2.287 or almost \$2.288 million is the actual net
18 impact of that for the Company?

19 A. I'm aware of no disagreement that that was the
20 benefit of the tax reform.

21 Q. Okay. And is there disagreement that that
22 should be returned to the consumers?

23 A. Not from the Company's standpoint.

24 Q. So when we talk about this as a proposed
25 increase, the \$3.575 million, that's the proposed

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1 increase for the consumers. But if we were to deny
2 that and say everything just stays the same, the
3 Company is actually getting almost a \$3 million
4 increase, correct? Because you are then not giving
5 that money back to them.

6 A. No, you would have to take into consideration
7 that we are not earning our authorized rate of return
8 at the moment. So there's not money to refund. If --
9 what this was saying is that pretax reform, we needed a
10 \$5.9 million increase to get up to our authorized rate
11 of -- or our requested rate of return in this case. So
12 as a result of the reform, 2.3 million was trimmed off
13 of that because of the effect the tax rate had on the
14 edicts in the case itself.

15 So if you were to go into a hypothetical
16 situation where at the time of filing we were earning
17 exactly as authorized as -- or as requested or
18 authorized in this case and then tax reform happened,
19 then we would have been in a position where it would
20 have been right or needed to refund \$2.3 million to the
21 customer. But as it stands today, we don't -- we
22 haven't earned an excess because we're not earning our
23 authorized return right now.

24 Q. But your authorized return isn't a guaranteed
25 return.

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1 A. I agree. It's an allowed.

2 Q. And so if we're -- if there had been no tax
3 reform and we just denied everything in this case, you
4 would continue on making about the rate that you've
5 been making in recent -- until the interim rates were
6 adopted, correct?

7 A. Well, we would continue under -- earning less
8 than authorized.

9 Q. And so if now nothing changed except for the
10 tax cuts, that gives you almost \$3 million more toward
11 earning your rate of return, correct?

12 A. It gets you closer. You're going to earn a
13 higher rate of return. And I guess I could point to my
14 embedded study. As filed, it showed that we were
15 returning -- I'll have to look at it --

16 Q. Maybe ask you a different way. In order to get
17 to the rate of return that you would like, you still
18 need 5.8 million more dollars, but we only need to
19 raise rates \$3.6 million because you're going to use
20 the 2.3 that would -- that should go back to the
21 taxpayers, but you're going to skip that step?

22 A. It's now baked into reducing an increase
23 instead of -- yes.

24 Q. So the -- I don't remember whose testimony it
25 was yesterday, Travis's reconciliation chart that

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<p>1 totals up to the difference -- or I guess that's the 2 difference between Staff and the Company. But the 3 bottom line, you're asking still to get to the 5.6 by 4 -- some by increase in rates and a little less than 5 half by using that tax refund -- or not refund, but tax 6 reduction?</p>	<p>1 Q. -- 91 dekatherm customer. If you were to take 2 the 72 dekatherm customer and apply a -- and to -- 3 let's see, how do I want to state this -- calculate it 4 the way the AARP is proposing, what would the 5 difference in their bill be? Have we seen that?</p>
<p>7 A. Yes, the tax reform had the effect of helping 8 us offset the needed dollar increase. So I mean, 9 customers really are -- it's actual dollars that 10 they're -- that the tax reform is saving them by 11 requiring less of an increase.</p>	<p>6 A. I can tell you. 7 Q. Okay. 8 A. Okay. So if you were to -- 9 Q. The average increase, I should say. 10 A. If you were to pose a volumetric charge for the 11 full increase input and have no change to the fixed 12 charge, that's what you're getting at, correct?</p>
<p>12 Q. And so it's actually -- the consumers are not 13 getting that tax refund back necessarily, it's staying 14 with the Company, but it is offsetting a potential 15 increase that would have otherwise been requested?</p>	<p>13 Q. Yep. 14 A. So that volumetric charge would be 24 cents a 15 dekatherm. And I can quickly walk through how that -- 16 so on this slide here, what you'd do -- it's just this 17 number divided by the dekatherms for the residential 18 class is the way it would work out. So it would be 19 .239 dollars.</p>
<p>16 A. I think I'd have to defer to a different 17 Company witness to further the discussion because I 18 don't think I'm quite following.</p>	<p>20 Q. Cents. Right? 21 A. 23.9 cents. 22 Q. 23.9 cents per dekatherm? 23 A. Correct. So then -- 24 Q. That would be your volumetric charge? 25 A. Yep. So you'd simply take that times 72</p>
<p>19 Q. Okay. Thank you. 20 THE COURT: Okay. Now Commissioner 21 Fedorchak.</p>	<p>20 Q. Cents. Right? 21 A. 23.9 cents. 22 Q. 23.9 cents per dekatherm? 23 A. Correct. So then -- 24 Q. That would be your volumetric charge? 25 A. Yep. So you'd simply take that times 72</p>
<p>23 EXAMINATION 24 BY COMMISSIONER FEDORCHAK: 25 Q. Okay. Well, Randy has me thoroughly confused.</p>	<p>20 Q. Cents. Right? 21 A. 23.9 cents. 22 Q. 23.9 cents per dekatherm? 23 A. Correct. So then -- 24 Q. That would be your volumetric charge? 25 A. Yep. So you'd simply take that times 72</p>
Page 518	Page 520
<p>1 So on the taxes, so I viewed it -- since we're talking 2 about that, and I need to just explore this with you, 3 and if somebody else needs to come up and straighten it 4 out. But I viewed the taxes as -- so on your revenue 5 deficiency, if you were going to need this much 6 revenue, you included in that what the tax rate would 7 be on those revenues. So with the lower tax rate, you 8 just need to collect less. So you're not -- you're not 9 collecting that from the customers. So why would we -- 10 and that's why we reduced the interim rate because 11 we're not just collecting that now either?</p>	<p>1 dekatherms. And I don't have a calculator, but -- 2 Q. Here, I'll give it to you and you can use mine. 3 THE COURT: There's a big one. It 4 sometimes gets a little tricky putting calculators in 5 front of witnesses. 6 THE WITNESS: I'm an accountant. 7 So that's going to give you a \$17.21 increase 8 for the year. And what you're going to compare that to 9 is the \$21.78 that occurs under existing rate design. 10 BY COMMISSIONER FEDORCHAK: 11 Q. So if I did my math right on my iPhone, it's 12 \$1.43 month increase versus what you guys have 13 calculated as a \$1.82; is that --</p>
<p>12 A. I'd like to defer to -- I mean, Travis is 13 likely our best witness if we can get him.</p>	<p>14 A. Yep. 15 Q. Okay. So \$4.57 total. \$4.57 per year 16 difference if we did it that way for the bulk of the 17 customers is what we'd be looking at? 18 A. Correct. And again, we don't -- we can't 19 categorically say who those 72 dekatherm or 60 20 dekatherm customers are. They could be me or -- I know 21 my grandpa used 80 in 2017 and he lives in a 950 square 22 foot house by himself in Mandan. So I can't say who's 23 using what. 24 Q. Right. Well, I have to believe that since the 25 AARP has used that 72 dekatherm and is bringing that</p>
<p>14 Q. Okay. Then -- Randy, you made me forget my 15 questions. Hold on.</p>	<p>14 A. Yep. 15 Q. Okay. So \$4.57 total. \$4.57 per year 16 difference if we did it that way for the bulk of the 17 customers is what we'd be looking at? 18 A. Correct. And again, we don't -- we can't 19 categorically say who those 72 dekatherm or 60 20 dekatherm customers are. They could be me or -- I know 21 my grandpa used 80 in 2017 and he lives in a 950 square 22 foot house by himself in Mandan. So I can't say who's 23 using what. 24 Q. Right. Well, I have to believe that since the 25 AARP has used that 72 dekatherm and is bringing that</p>
<p>16 Oh, so back to the median user, the 72 17 dekatherm per year.</p>	<p>14 A. Yep. 15 Q. Okay. So \$4.57 total. \$4.57 per year 16 difference if we did it that way for the bulk of the 17 customers is what we'd be looking at? 18 A. Correct. And again, we don't -- we can't 19 categorically say who those 72 dekatherm or 60 20 dekatherm customers are. They could be me or -- I know 21 my grandpa used 80 in 2017 and he lives in a 950 square 22 foot house by himself in Mandan. So I can't say who's 23 using what. 24 Q. Right. Well, I have to believe that since the 25 AARP has used that 72 dekatherm and is bringing that</p>
<p>18 A. Yes.</p>	<p>14 A. Yep. 15 Q. Okay. So \$4.57 total. \$4.57 per year 16 difference if we did it that way for the bulk of the 17 customers is what we'd be looking at? 18 A. Correct. And again, we don't -- we can't 19 categorically say who those 72 dekatherm or 60 20 dekatherm customers are. They could be me or -- I know 21 my grandpa used 80 in 2017 and he lives in a 950 square 22 foot house by himself in Mandan. So I can't say who's 23 using what. 24 Q. Right. Well, I have to believe that since the 25 AARP has used that 72 dekatherm and is bringing that</p>
<p>19 Q. And maybe this is in here, maybe you guys have 20 already talked about it and I just didn't catch it, but 21 so if you were to take the \$1.82 average customer 22 increase per month, correct?</p>	<p>14 A. Yep. 15 Q. Okay. So \$4.57 total. \$4.57 per year 16 difference if we did it that way for the bulk of the 17 customers is what we'd be looking at? 18 A. Correct. And again, we don't -- we can't 19 categorically say who those 72 dekatherm or 60 20 dekatherm customers are. They could be me or -- I know 21 my grandpa used 80 in 2017 and he lives in a 950 square 22 foot house by himself in Mandan. So I can't say who's 23 using what. 24 Q. Right. Well, I have to believe that since the 25 AARP has used that 72 dekatherm and is bringing that</p>
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<p>24 Q. If you were to -- is that based on the 90 --</p>	<p>14 A. Yep. 15 Q. Okay. So \$4.57 total. \$4.57 per year 16 difference if we did it that way for the bulk of the 17 customers is what we'd be looking at? 18 A. Correct. And again, we don't -- we can't 19 categorically say who those 72 dekatherm or 60 20 dekatherm customers are. They could be me or -- I know 21 my grandpa used 80 in 2017 and he lives in a 950 square 22 foot house by himself in Mandan. So I can't say who's 23 using what. 24 Q. Right. Well, I have to believe that since the 25 AARP has used that 72 dekatherm and is bringing that</p>
<p>25 A. 91 dekatherms.</p>	<p>14 A. Yep. 15 Q. Okay. So \$4.57 total. \$4.57 per year 16 difference if we did it that way for the bulk of the 17 customers is what we'd be looking at? 18 A. Correct. And again, we don't -- we can't 19 categorically say who those 72 dekatherm or 60 20 dekatherm customers are. They could be me or -- I know 21 my grandpa used 80 in 2017 and he lives in a 950 square 22 foot house by himself in Mandan. So I can't say who's 23 using what. 24 Q. Right. Well, I have to believe that since the 25 AARP has used that 72 dekatherm and is bringing that</p>

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1 forward that they believe that represents who they're
 2 representing more fairly than the 91.
 3 **A. It seems so.**
 4 Q. That's the conclusion I'm making from that, the
 5 fact that they're using that.
 6 COMMISSIONER FEDORCHAK: Okay. That is
 7 helpful. Thank you. That is all my questions.
 8 THE COURT: Okay. Back to you, Mr.
 9 Sanderson.
 10 MR. SANDERSON: Thank you.
 11
 12 REDIRECT EXAMINATION
 13 BY MR. SANDERSON:
 14 Q. Jordan, I don't want to get too far down this,
 15 but just with respect to the tax, you're aware the --
 16 your understanding is the Company's tax rate went from
 17 35 percent to 21 percent as a result of the recent tax
 18 act?
 19 **A. That's correct.**
 20 Q. Okay. And that means the Company's going to
 21 pay less in taxes as an expense and those savings are
 22 passed on to the customers?
 23 **A. That is correct.**
 24 Q. Okay.
 25 MR. SANDERSON: I have nothing further.

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1 Thank you.
 2 THE COURT: Mr. Armstrong?
 3 MR. ARMSTRONG: No questions.
 4 THE COURT: Mr. Coffman?
 5 MR. COFFMAN: No questions.
 6 THE COURT: Major Unsicker.
 7 MAJOR UNSICKER: No questions.
 8 THE COURT: Ms. Jeffcoat-Sacco.
 9 MS. JEFFCOAT-SACCO: No questions.
 10 THE COURT: Okay. Thank you. You can
 11 step down. Let's go with your next witness.
 12 MR. SANDERSON: Thank you, Judge.
 13 Montana-Dakota would call Stephanie Bosch.
 14 THE COURT: Ms. Bosch, please spell your
 15 first and last name for the record.
 16 THE WITNESS: S-t-e-p-h-a-n-i-e,
 17 B-o-s-c-h.
 18 THE COURT: Okay. Raise your right hand.
 19
 20 STEPHANIE BOSCH,
 21 duly sworn, was examined and testifies as follows:
 22
 23 THE WITNESS: I do.
 24 THE COURT: Thank you.
 25 MR. SANDERSON: Judge, before we begin,

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1 just for the record, I have that MDU -- all MDU
 2 Exhibits 1 through 16 have now -- oh, 1 through 15 have
 3 been admitted; is that --
 4 THE COURT: Yes.
 5 MR. SANDERSON: And 16 is Ms. Bosch's
 6 PowerPoint slides.
 7 THE COURT: Yep.
 8 MR. SANDERSON: Okay.
 9
 10 DIRECT EXAMINATION
 11 BY MR. SANDERSON:
 12 Q. Good afternoon, Ms. Bosch. Could you please
 13 state your full name and business address?
 14 **A. Stephanie Bosch, 400 North Fourth Street,
 15 Bismarck, North Dakota.**
 16 Q. And whom are you employed by?
 17 **A. Montana-Dakota Utilities.**
 18 Q. And what is your position with the Company?
 19 **A. I'm a manager in the regulatory affairs
 20 department.**
 21 Q. And can you briefly describe your
 22 responsibilities with the Company in that role?
 23 **A. Sure. My primarily responsibilities include
 24 the proper application of the Company's gas and
 25 electric rates and the Company's billing system as well**

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1 **as other tariffs.**
 2 Q. Could you provide the Commission with just a
 3 general overview of your educational background and
 4 work experience?
 5 **A. Sure. I have a bachelor of business and public
 6 administration from the University of North Dakota.**
 7 Q. And have you testified in other proceedings
 8 before state regulatory bodies?
 9 **A. I have.**
 10 Q. Okay. And you're familiar with
 11 Montana-Dakota's application in the present case?
 12 **A. I am.**
 13 Q. And could you describe your involvement in this
 14 case with the application?
 15 **A. I was responsible for the development of the
 16 revenues as well as the tariffs.**
 17 Q. In addition, did you submit pre-filed testimony
 18 in this proceeding?
 19 **A. I did.**
 20 Q. And if asked the same questions as your
 21 pre-filed, would your answers remain the same?
 22 **A. They would.**
 23 Q. Okay. And you've also prepared a PowerPoint
 24 presentation -- or PowerPoint to go along with your
 25 testimony today?

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1 **A. I have.**
 2 **Q. Okay. I want to start with the SSIP, the**
 3 **Systems Safety and Integrity Program. Can you explain**
 4 **the new rate structure as designated as rate 94?**
 5 **A. Sure. Consistent with the Company's other**
 6 **electric riders, the Company has outlined on the tariff**
 7 **the applicability, the development of the revenue**
 8 **requirement and the rate within the context of a**
 9 **tariff.**
 10 **Q. Can you explain how the SSIP cost will be**
 11 **allocated to the customer classes?**
 12 **A. Sure. The allocation of costs in the rider**
 13 **will maintain the rate design and allocation within the**
 14 **rider of that approved in this case.**
 15 **Q. In addition, your testimony covers rate 74, the**
 16 **proposed firm general contracted demand service rate.**
 17 **Could you just describe that tariff?**
 18 **A. Sure. It's a new tariff that would be**
 19 **available to nonresidential customers for -- customers**
 20 **who currently have a natural gas stand-by generator or**
 21 **customers who qualify under the interruptible service**
 22 **tariff but want to take firm service.**
 23 **Q. And as part of your pre-filed testimony, you**
 24 **had identified a number of additional changes the**
 25 **Company's proposing to modify it's natural gas tariffs**

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1 and other rates. Could you briefly outline those
 2 changes that are being proposed in this case?
 3 **A. Sure. Many of the changes that are proposed**
 4 **within the tariffs are not new change -- or not a new**
 5 **practice or policy, but rather we're including them now**
 6 **as a point of reference for both the Company and the**
 7 **customer. A couple that I want to call out that are**
 8 **changes are we are requesting to revise the**
 9 **nonresidential seasonal reconnection charge to reduce**
 10 **the seasonal reconnection charge to reflect a**
 11 **customer's distribution revenues collected while in**
 12 **service if the customers used while in service is**
 13 **greater than the class average. We're requesting a**
 14 **minimum of a \$30 charge in the event of unauthorized**
 15 **use of service as well as to increase the return check**
 16 **charge.**
 17 **Q. And Ms. Bosch, finally, the Company has**
 18 **proposed to increase the return check charge, and**
 19 **you're aware Advocacy Staff and AARP opposes that. Can**
 20 **you explain the rationale for the Company's proposed**
 21 **increase in the return check charge?**
 22 **A. The Company requested an increase in the return**
 23 **check charges that is the level that was recently**
 24 **authorized in the Company's North Dakota electric**
 25 **operations implemented last August.**

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1 **Q. With that, I have no further questions.**
 2 **MR. SANDERSON: Your Honor, we would offer**
 3 **MDU Exhibit 16 at this time.**
 4 **THE COURT: Mr. Armstrong?**
 5 **MR. ARMSTRONG: No objection.**
 6 **THE COURT: Mr. Coffman? Any objection to**
 7 **Number 16?**
 8 **MR. COFFMAN: No, Your Honor.**
 9 **THE COURT: Major Unsicker.**
 10 **MAJOR UNSICKER: No objection.**
 11 **THE COURT: Ms. Jeffcoat-Sacco.**
 12 **MS. JEFFCOAT-SACCO: No objection.**
 13 **THE COURT: Okay. MDU-16 is received.**
 14 **Mr. Armstrong.**
 15 **MR. ARMSTRONG: Thank you.**
 16
 17 **CROSS-EXAMINATION**
 18 **BY MR. ARMSTRONG:**
 19 **Q. Ms. Bosch, attached to your direct testimony is**
 20 **the proposed SSIP tariff, correct?**
 21 **A. Correct.**
 22 **Q. And that's the rate 94 tariff?**
 23 **A. Correct.**
 24 **Q. You would agree with me there's no -- I don't**
 25 **know, maybe it will be on a tariff, but there's no**

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1 expiration date for it; is that correct?
 2 **A. That's correct.**
 3 **Q. And you -- have you been sitting in the hearing**
 4 **room today and yesterday?**
 5 **A. I have.**
 6 **Q. And you've heard a lot of talk about early**
 7 **vintage steel pipe and early vintage plastic pipe?**
 8 **A. Yes.**
 9 **Q. Is that referenced anywhere in the tariff?**
 10 **A. No.**
 11 **Q. So the tariff is broader than EVSP and EVPP?**
 12 **A. I would say it doesn't include anything**
 13 **specific to the type of pipe being replaced, that's**
 14 **correct.**
 15 **Q. It says it's a tariff for anything that is**
 16 **safety related; is that fair?**
 17 **A. I would say yes, that's fair.**
 18 **Q. Couldn't any pipeline replacement be argued to**
 19 **be safety related?**
 20 **A. Yes.**
 21 **Q. So this could -- this could involve every**
 22 **single one of the Company's replacement projects?**
 23 **A. I think it was proposed with respect to the**
 24 **safety program that Mr. Darras talked about.**
 25 **Q. When this was proposed -- and I still am trying**

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1 to understand that a little bit, so if you don't know,
2 please let me know. But this was proposed in your
3 direct testimony in July, correct?
4 **A. Correct.**
5 Q. And then we talked about the program and the
6 study with Mr. Darras yesterday, but the document
7 attached to his testimony wasn't prepared until January
8 of 2018.
9 **A. That's what he said, yes.**
10 Q. Okay. How can you have the tariff prepared
11 before the program or the study?
12 **A. The tariff was proposed to recover the specific**
13 **projects that the Company had intended to --**
14 Q. Which projects are those?
15 **A. I -- I don't have an answer for that.**
16 Q. And I know in your rebuttal testimony, you
17 agreed to some language changes --
18 **A. Right, yes.**
19 Q. If this is adopted, you agreed to some
20 suggested language changes?
21 **A. Yes.**
22 Q. It just hasn't been rewritten or anything,
23 correct?
24 **A. Correct.**
25 Q. And you said the Company is still seeking \$40

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1 on returned check fee; is that correct?
2 **A. Correct.**
3 Q. And you agree with me that's not cost based?
4 **A. I agree.**
5 MR. ARMSTRONG: That's all the questions I
6 have. Thank you.
7 THE COURT: Mr. Coffman?
8 MR. COFFMAN: Yes. Thank you.
9
10 CROSS-EXAMINATION
11 BY MR. COFFMAN:
12 Q. Good afternoon, Ms. Bosch.
13 **A. Good afternoon.**
14 Q. So do you think that the cost of service study
15 is important in setting various, you know,
16 miscellaneous fees and such?
17 **A. The cost of service study for miscellaneous**
18 **fees?**
19 Q. Yes.
20 **A. I think it's a guide for rates, the tariff**
21 **rates.**
22 Q. But not the fees?
23 **A. I would not agree with that, no.**
24 Q. Well -- okay. So you think a cost of service
25 study should have no impact on things such as late

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1 payment fees or return check fees?
2 **A. I think it's a guide for the setting of rates,**
3 **not late payment charges or return check charges, no.**
4 Q. You don't consider those to be rates?
5 **A. I guess I distinguish between rates such as**
6 **those used to serve customers versus different types of**
7 **charges such as late payment charges or return check**
8 **charges.**
9 Q. So if -- and what is the cost to the Company
10 when a check is returned?
11 **A. It was on Mr. Rubin's presentation this morning**
12 **as \$3.**
13 Q. \$2.90?
14 **A. Something like that, yes.**
15 Q. I know people like to round up. So you believe
16 that these -- that this fee should, I guess, serve a
17 social purpose to deter people from writing a bad check
18 to the utility company?
19 **A. I think it -- I proposed it as such a level**
20 **that it would deter, I believe.**
21 Q. And how do you know that it would be a
22 deterrent? Have you done any behavioral studies or
23 read any behavioral studies about the sensitivity level
24 to --
25 **A. I have not done any specific studies. I think**

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1 **when you look at a return check charge, they continue**
2 **to increase each year. I also --**
3 Q. And if I can ask a clarifying question there,
4 when you the return, are you talking about bank return
5 charge fees or are you talking about utility?
6 **A. It's the return check charges on -- that we**
7 **have.**
8 Q. And when you say that they continue to go up,
9 are you referring to North Dakota or are you referring
10 --
11 **A. Yes.**
12 Q. You're not referring nationally?
13 **A. No.**
14 Q. So how did you pick that number of \$40?
15 **A. It was consistent with that approved for North**
16 **Dakota Electric.**
17 Q. Do you know why that number was picked for
18 North Dakota Electric?
19 **A. It was consistent with that approved in our**
20 **South Dakota operations.**
21 Q. And do you know how that number got picked by
22 South Dakota?
23 **A. It is the maximum allowed under the law in**
24 **South Dakota.**
25 Q. Oh, my gosh. Okay. So is there any other

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1 basis for that number, other than it's the maximum
 2 allowed by South Dakota law?
 3 **A. No. It was consistent, and that's why I**
 4 **proposed it here as well.**
 5 Q. Do you know anyone that's accidentally bounced
 6 a check?
 7 **A. I have.**
 8 Q. Have you done it?
 9 **A. I personally have done it, yes.**
 10 Q. And what were the circumstances? Did you
 11 intentionally write a bad check?
 12 MR. SANDERSON: Objection; relevance,
 13 Judge.
 14 THE COURT: Yeah. Sustained. I think we
 15 get the point.
 16 BY MR. COFFMAN:
 17 Q. Would you agree with me that most often when
 18 someone bounces a check it's because they get paid on
 19 Friday, their bill is due Wednesday and they think
 20 there will be enough time to make that, and they don't
 21 realize that the bank holds on to the money for a
 22 while, puts a hold on that?
 23 **A. I don't agree with you.**
 24 Q. What -- why do you think that someone might
 25 write a bad check?

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1 **A. I think there are a number of reasons why**
 2 **someone could write a bad check. Your example being**
 3 **one of them, yes, I believe there may be a**
 4 **misunderstanding of float time for checks. But there**
 5 **are other reasons, I believe, for customers writing a**
 6 **bad check.**
 7 Q. What are some other reasons?
 8 **A. There could be such things such as they change**
 9 **to an ACH and they didn't realize it's a quicker**
 10 **turnaround and the check is in the mail. I do believe**
 11 **there are customers who it bides them a couple more**
 12 **days of service, so they realize that and will write**
 13 **the check.**
 14 Q. And what are the bank fees for a returned check
 15 in this region?
 16 **A. They vary. I don't know the range. I could --**
 17 **I would speculate at the range.**
 18 Q. What would you speculate?
 19 MR. SANDERSON: Objection; calls for
 20 speculation.
 21 MR. COFFMAN: Okay. Withdrawn.
 22 THE COURT: Yeah, unless you can lay a
 23 foundation.
 24 BY MR. COFFMAN:
 25 Q. In your opinion, the fees charged by banks for

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1 bouncing a check are not a sufficient deterrent?
 2 **A. I don't believe so.**
 3 Q. Isn't it true that over the last few years the
 4 amount of uncollectibles has actually been decreasing
 5 for the utility company?
 6 **A. I believe that's testimony I heard yesterday,**
 7 **yes.**
 8 Q. And that's without any punitive fees to
 9 encourage more prompt payment, right?
 10 **A. We have a return check charge in place today.**
 11 Q. Of \$15?
 12 **A. Yes.**
 13 Q. But you still don't think that that's
 14 sufficient to deter behavior?
 15 **A. I think we continue to see return check charges**
 16 **increase, and so . . .**
 17 Q. So you're just following the pack? I mean,
 18 it's not -- this recommendation is not based on any
 19 quantification other than what, I guess, South Dakota
 20 or other utilities in North Dakota have done?
 21 **A. Right. I did not do any studies to -- for the**
 22 **\$40.**
 23 Q. And if this fee is increased to \$40, how will a
 24 customer know about it, that fee?
 25 **A. We do bill inserts as well as on the back of**

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1 the bill, it does disclose that there is a return check
 2 charge. It doesn't disclose the amount, but it does
 3 state on the back of the bill that there is such a
 4 charge. We also do annual inserts that not only talk
 5 about the rates but also do include things as return
 6 check charge.
 7 Q. So can you explain to how it would serve as a
 8 deterrent to increase this fee from 15 to \$40 if
 9 customers don't know?
 10 **A. I would say customers have the -- are aware**
 11 **through the bill inserts.**
 12 Q. And how often is that put in the bill?
 13 **A. The back of the bill is there every month, and**
 14 **the insert is annual.**
 15 Q. But didn't you just say that it doesn't claim
 16 the amount?
 17 **A. No, it does not.**
 18 Q. Well, so that part of the bill isn't going to
 19 change for this increase?
 20 **A. No.**
 21 Q. If it increases to \$40?
 22 **A. No.**
 23 Q. Well then how is the increase from \$15 to \$40
 24 to serve as a deterrent if the customer doesn't know?
 25 **A. The customer will be notified with their first**

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1 bill.
2 Q. And what will that -- what form will that
3 notice take?
4 A. It will be a bill insert in the customer's
5 bill.
6 Q. And it will be a one-time -- so, like, the
7 month after rates go into effect they'll receive an
8 insert that says the fee has gone up to \$40; is that
9 how it works?
10 A. No, inserts are not included on rates every
11 month. It's an annual insert after that.
12 Q. Okay. So it will be an annual notification?
13 A. Correct.
14 Q. But it's to your belief that the customers will
15 look at that and at least some customers will say,
16 well, I guess I'm not going to write a bad check
17 because the fee has gone up even more?
18 MR. SANDERSON: Objection; calls for
19 speculation.
20 MR. COFFMAN: I'm just trying to get to
21 what the real basis for this number is.
22 MR. SANDERSON: Well, asking her what do
23 customers expecting when they get a bill, she has no
24 idea. It's speculation.
25 THE COURT: Yeah. Sustained.

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1 MR. COFFMAN: All right. That's all I
2 have. Thank you.
3 THE COURT: Okay. Major.
4 MAJOR UNSICKER: No questions, sir.
5 THE COURT: Ms. Jeffcoat-Sacco.
6
7 CROSS-EXAMINATION
8 BY MS. JEFFCOAT-SACCO:
9 Q. Well, I just wanted to follow up. We're
10 talking speculation here about charges going up, but
11 twice you said to Mr. Coffman that returned check
12 charges continue to go up, that you're seeing them go
13 up. Was that a misstatement of charges or what charges
14 are you seeing that are going up?
15 A. There's a work paper that shows all the
16 different types of miscellaneous revenue, and it has
17 the three years, 2014, '15 and '16. And when you look
18 at that work paper, it shows those dollars in total for
19 North Dakota Gas are going up.
20 Q. So charges --
21 A. It's the total collected under gas --
22 Q. The total revenue is going up for returned
23 checks?
24 A. -- yes.
25 MS. JEFFCOAT-SACCO: Okay. Thank you.

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1 That's all I have.
2 THE COURT: Okay. Commissioners.
3 Commissioner Kroshus.
4
5 EXAMINATION
6 BY COMMISSIONER KROSHUS:
7 Q. How many NSF's do you deal with a year?
8 A. I don't have that number readily in front of
9 me.
10 Q. Would you say it's consistent with, I shouldn't
11 say necessarily industry average, but just what any
12 other business might experience? I'm just trying to
13 decide how significant of an issue is this for you.
14 A. I would only be speculating on that. I don't
15 know.
16 Q. Okay. Can I get that information?
17 A. The number of NSF's? Yes. Do you have a
18 specific --
19 Q. As a percentage of total number of bills that
20 went out and -- to see the total number of bills that
21 actually were sent.
22 A. And I can get you that.
23 Q. And I'm assuming that also if someone doesn't
24 have sufficient funds and they're automatic payment,
25 that that also considered nonsufficient funds as well?

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1 A. Correct.
2 Q. Okay. And then on the -- going to the SSIP
3 language, and counsel covered it, but I just want to be
4 clear again. The language is very broad as was stated,
5 and it says costs to be recovered under the Systems
6 Safety and Integrity Program, adjustment mechanism may
7 include operation and maintenance expenditures,
8 depreciation taxes and the current return, et cetera on
9 project cost during construction. So it's -- was the
10 intent that you've -- that the specifics have been laid
11 out in terms of if it were approved this is where the
12 money would go this time, and then having to come
13 before the Commission for pre-approval on future
14 projects that it would be controlled that way? Because
15 it is rather open-ended.
16 A. The tariff was -- I guess can you repeat your
17 question?
18 Q. Well, the language is very broad. I'm just
19 wondering, to counsel's point, how do we really know
20 where the money will go.
21 A. I think as mentioned by previous Company
22 witnesses, we had talked about filing in March a plan
23 that would specify the types of projects that would be
24 included in that coming year.
25 Q. Okay. So projects moving forward would be --

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1 **A. Right. Correct.**
2 Q. -- put in front. Okay. And then how would you
3 explain this to customers?
4 **A. The SSIP?**
5 Q. Right. Right. Without causing alarm.
6 **A. I would say we're taking a proactive approach.**
7 **This isn't a mistake, as our witnesses have testified**
8 **to, but that it is a proactive approach to prevent any**
9 **future issues going forward.**
10 Q. Do you expect that will be challenging for
11 customers to understand that it's not a problem but we
12 have to move quicker on it which --
13 **A. I don't think it is. I think customers**
14 **understand safety, and they realize the importance of**
15 **it. And so I don't think it would be a call for alarm.**
16 Q. Okay. Thank you. No other questions. I told
17 you two, and I think that was three.
18 THE COURT: Chairman Christmann.
19
20 EXAMINATION
21 BY CHAIRMAN CHRISTMANN:
22 Q. You are a manager of regulatory affairs for
23 both electric and gas, correct?
24 **A. Correct.**
25 Q. And do you see a higher percentage of bills

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1 coming back with NSF checks in communities where you
2 have both electric and gas service and presumably a
3 higher bill than in the -- for the customers only that
4 have electric service?
5 **A. I don't have that information, and I would only**
6 **be speculating if it's skewed one way or the other**
7 **based on the community served. I don't know.**
8 **CHAIRMAN CHRISTMANN: No other questions.**
9 **Thank you.**
10 THE COURT: Commissioner Fedorchak.
11
12 EXAMINATION
13 BY COMMISSIONER FEDORCHAK:
14 Q. Thanks, Stephanie. So on the increased fee to
15 \$40 for NSF checks, has the increase on the electric
16 side resulted in a decrease in the number of NSF
17 checks, that had the effect of being a deterrent, I
18 guess?
19 **A. I haven't pulled any recent data. When I last**
20 **looked at it, it was maybe through September, so I**
21 **think that was too new to be able to determine if that**
22 **was.**
23 Q. Since you're providing some follow up to
24 Commissioner Kroshus, maybe you could add that, those
25 numbers since -- you know, since the increase on the

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1 electric side, what has been the effect so we can get a
2 sense if your goal in raising it is working or not?
3 **A. Okay.**
4 MR. SANDERSON: Commissioner, just for
5 clarification on that, do you want some period before?
6 COMMISSIONER FEDORCHAK: Sure.
7 MR. SANDERSON: And maybe on both those --
8 and just the parameters you're looking for us so we can
9 make sure we fully answer.
10 COMMISSIONER FEDORCHAK: I guess I don't
11 know what would be a fair number of years for before,
12 maybe a trend from the previous couple years prior to
13 increasing it to \$40, and then as much data as you can
14 since you've implemented the increase.
15 MR. SANDERSON: Thank you.
16 THE COURT: My question is can we possibly
17 get that by tomorrow like the other one?
18 MR. SANDERSON: We certainly are going to
19 have some additional information that's been requested
20 tomorrow, and we will do everything we can to get that
21 information along with the other information that's
22 been requested in this hearing by tomorrow.
23 THE COURT: Okay. Sorry to interrupt.
24 BY COMMISSIONER FEDORCHAK:
25 Q. Now, back to the tariff. Looking at the tariff

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1 language for the SSIP, and it looks like it's pretty
2 comparable to other rider language where you say you'll
3 come to us with a list of -- here's how I'm
4 understanding it. You'll come to us with a list of
5 projects in March, you'll go about your business doing
6 those things, we'll evaluate those, and we'll say come
7 to a decision on yeah, those look prudent or not, throw
8 out the ones that we don't like or think aren't
9 prudent, come up with a final amount, and then anything
10 that isn't covered Nicole yesterday said would probably
11 be brought forward in a rate case.
12 You will also in your filing go back and look
13 at what you've proposed the year before and collected
14 and trued up based on actual expenses so there might be
15 an overcharge that's taken off any future charge; is
16 that how this is --
17 **A. Yes, that's correct.**
18 Q. And the projects will be aligned, I guess
19 that's where the vagueness really comes in terms of how
20 much detail we're going to get on those projects and
21 the need and all of that. You also said you wouldn't
22 object to a filing fee being required as part of this
23 tariff?
24 **A. That's correct. We would not object to a**
25 **filing fee.**

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1 Q. Okay. Anything else you want to add to changes
2 that the Company's considering or bring -- might bring
3 forward as a result of discussions so far?

4 A. I think I would add that the Company's willing
5 to work with the Commission to address any concerns
6 that they might have with the current tariff as
7 written. If -- you had mentioned vagueness. So if
8 there's something we can include in here that
9 clarifies. We typically don't like to get as specific
10 as maybe the type of pipe because, as Mr. Darras
11 mentioned, there's things that change, they're focused
12 on these. But if something else -- and I would say
13 speculating, something else comes up that warrants
14 looking at, we don't want to get too specific in a
15 tariff necessarily.

16 Q. We would have an opportunity during our
17 discussion with you to evaluate the types?

18 A. Yes.

19 Q. And say we don't think this belongs in here,
20 it's not a safety-related improvement?

21 A. Right. It would follow the same of any of our
22 other riders.

23 Q. Do you typically include -- is it typically
24 something that you'd include in a tariff to have like
25 an end date?

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1 A. We haven't typically included end dates for
2 things other than maybe a pilot kind of a program.

3 Q. Okay. And then the infrastructure surcharges
4 that were discussed by Mr. Rubin, I believe. That's
5 not language that we've used. Is it the same thing as
6 this? Is that basically a surcharge or is that some
7 other type of design and mechanism, tool?

8 A. I think you can use surcharge, rider, tracker
9 interchangeably.

10 Q. Okay. Just wanted to confirm that I wasn't
11 missing something there.

12 And how about including in this that after a
13 certain amount of dollars spent everything above needs
14 to come into for the general rate case? Is that
15 something that would be spelled out in the tariff?

16 A. I would repeat my earlier suggestion or comment
17 that the Company's willing to work with the Commission
18 to address their concerns.

19 COMMISSIONER FEDORCHAK: Okay. All right.
20 Thank you. I have no more questions.

21 THE COURT: Chairman Christmann has
22 another question.

23 CHAIRMAN CHRISTMANN: A couple of them,
24 Your Honor. I'm pretty tired of this NSF thing, too.
25 But it seems too obvious to not ask, but I didn't think

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1 of it until Commissioner Fedorchak was talking.

2

3 EXAMINATION

4 BY CHAIRMAN CHRISTMANN:

5 Q. So in a town like Hazen where there's no
6 natural gas service, an NSF check would be charged a
7 \$40 fee because it's electric, correct?

8 A. Correct.

9 Q. And in a town like Jamestown where someone else
10 provides electricity, an NSF currently would be charged
11 \$15?

12 A. Correct.

13 Q. So what's an NSF fee for a bad check in
14 Bismarck for a customer that has both?

15 A. They would be assessed a return check charge
16 for both.

17 Q. So one check bounces and they would get a check
18 then for \$55?

19 A. Correct.

20 Q. Hmm. Okay. I'll be real cautious. And if
21 there's just not enough to go around, I guess I'll make
22 sure and bounce the one from Hazen.

23 THE COURT: Mr. Sanderson, redirect.
24 MR. SANDERSON: Thank you, just briefly.
25

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1 REDIRECT EXAMINATION

2 BY MR. SANDERSON:

3 Q. Ms. Bosch, rate 94, is it entitled a Systems
4 Safety and Integrity Program Adjustment Mechanism?

5 A. Correct.

6 Q. And it certainly, as proposed, was only to
7 address the SSIP programs that have been identified in
8 the Company's SSIP program?

9 A. Correct.

10 Q. Now, you were asked a question by counsel --
11 Mr. Darras was -- when he introduced -- and in his
12 rebuttal, he was talking about the March revision to
13 the SSIP program; do you recall that?

14 A. I do.

15 Q. With the original filing in this case, there --
16 Mr. Darras originally filed an SSIP program to go along
17 with this tariff; you're aware of that?

18 A. Yes.

19 Q. And it was a part of his exhibits. But then
20 what we've been talking about was the revised in March
21 of '18?

22 A. Correct.

23 Q. Okay. I just wanted to clarify that.
24 One of the things you indicated, Mrs. Bosch, is
25 that you'd certainly -- the Company has always been and

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1 will continue to work with the Commission to develop a
2 rate and tariff system that they think is appropriate
3 for this. That was your testimony?
4 **A. Yes.**
5 Q. Now, in your rebuttal testimony, you also
6 indicated in response to concerns that Advocacy Staff
7 and AARP pointed out was some issues that the Company
8 was open to revising the tariff to address some of the
9 concerns they have?
10 **A. Correct.**
11 Q. And in addition, is the Company today still
12 willing to work not only with the Commission, but with
13 Staff and AARP to try to revise this to a tariff that
14 promotes the idea of customer safety in North Dakota
15 for the natural gas pipeline replacement and
16 improvement?
17 **A. Yes.**
18 MR. SANDERSON: I have no further
19 questions. Thank you.
20 THE COURT: Mr. Armstrong.
21 MR. ARMSTRONG: Nothing that's not
22 obvious. No questions.
23 THE COURT: Mr. Coffman.
24 MR. COFFMAN: No questions.
25 THE COURT: Major.

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1 MAJOR UNSICKER: No questions.
2 THE COURT: Ms. Jeffcoat-Sacco.
3 MS. JEFFCOAT-SACCO: No questions.
4 THE COURT: Okay. Let's take a ten-minute
5 break here.
6 MR. SANDERSON: Judge, before we go and
7 maybe to help this, at this time just for the record,
8 Montana-Dakota has presented their witnesses and is
9 resting their case in chief.
10 THE COURT: Okay. All right. We got that
11 on the record? Okay. Off the record.
12 (A break was taken at 2:30 p.m.)
13 THE COURT: All right. We'll go back on
14 the record here, about 2:40 something.
15 Mr. Armstrong.
16 MR. ARMSTRONG: Thank you, Your Honor.
17 Call Karl Pavlovic.
18 THE COURT: Mr. Pavlovic, please spell
19 your first and last name for the record.
20 THE WITNESS: First name Karl, K-a-r-l;
21 last name Pavlovic, P-a-v-l-o-v-i-c.
22 THE COURT: Okay. Raise your right hand,
23 please.
24
25 KARL PAVLOVIC,

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1 duly sworn, was examined and testifies as follows:
2
3 THE WITNESS: I do.
4 THE COURT: Thank you. Mr. Armstrong.
5 MR. ARMSTRONG: Thank you.
6
7 DIRECT EXAMINATION
8 BY MR. ARMSTRONG:
9 Q. Are you the same Karl Pavlovic who submitted
10 direct and surrebuttal testimony in this case marked as
11 Exhibits PSC-20 and 21?
12 **A. Yes, I am.**
13 Q. Prior to the hearing, have you reviewed your
14 testimony?
15 **A. Yes.**
16 Q. And if I were to ask you the same questions
17 today, would you provide the same answers?
18 **A. Yes.**
19 Q. Do you have any further explanations you wish
20 to make regarding your testimony?
21 **A. Yes, I do, in light of the continuing**
22 **discussion about what exactly are the 2018 SSIP**
23 **projects.**
24 In its original filing, MDU listed six SSIP
25 projects for 2018. There were three low-pressure

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1 system replacement projects in New Salem, Taylor, and
2 Bismark/Mandan, and three Aldyl A plastic pipe
3 replacement projects in Barlow, Cleveland and Eldridge.
4 MDU estimated the investment cost of these six 2018
5 projects to be \$5.6 million, which is included in the
6 2018 base rate revenue requirement.
7 Mr. Darras's rebuttal testimony lists ten SSIP
8 projects for 2018. There are four early vintage
9 plastic steel replacement projects in Fairview,
10 Gladstone, New Salem and Taylor. And there are six
11 early vintage plastic pipe replacement projects in
12 Fairview, Gladstone, New Salem, Barlow, Cleveland and
13 Eldridge.
14 In both my direct and surrebuttal testimony, I
15 refer to the original six 2018 SSIP projects because
16 those six projects are the projects corresponding to
17 the 5.6 million investment cost that is MDU's base rate
18 revenue requirement, and it is the reasonableness,
19 necessity and prudence of that \$5.6 million that I
20 address in both my direct testimony and my surrebuttal
21 testimony.
22 In that connection, I also note that according
23 to the SSIP cost documents that MDU provided in
24 response to Advocacy Staff's request 2.5, the total
25 investment cost of the revised list of ten SSIP

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1 projects is approximately \$7.4 million.
2 Q. Thank you. Could you briefly summarize your
3 testimony and recommendations for the Commission?
4 A. Yes. In my testimony, I find that MDU's
5 revised SSIP plan as presented in Exhibit PCD-2 does
6 not refine replacement performance metrics, does not
7 demonstrate a customer benefit, and does not
8 demonstrate that the SSIP is the least cost option for
9 achieving that benefit. But most important, MDU has
10 not demonstrated that the replacement of the 2018 SSIP
11 facilities is reasonable, necessary and prudent.
12 My recommendation to the Commission is that the
13 2018 SSIP projects be excluded from MDU's 2018 base
14 rate revenue requirement as not having been shown to be
15 reasonable, necessary, and prudent.
16 Q. Have you been present in the hearing room since
17 the beginning of the hearing?
18 A. Yes, I have.
19 Q. Have you listened to the testimony before you?
20 A. Yes, I have.
21 Q. Has any of the testimony changed your opinions
22 or recommendations from your pre-filed testimony?
23 A. No, it has not.
24 Q. In the course of preparing your testimony in
25 this case, did you attempt to obtain all information

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1 supporting the 2018 projects through data requests and
2 even a Webex visit with MDU?
3 A. Yes, I did.
4 Q. What did you find to be missing that you would
5 view as necessary to support the 2018 projects?
6 A. What I found to be missing is information
7 concerning the type, vintage, characteristics and
8 condition of the specific pipe segments in the 2018
9 SSIP projects. As Ms. Kivitso and Mr. Darras noted
10 several times in testimony yesterday, that information
11 is missing because MDU does not have it.
12 Q. Thank you. And as far as any other issues,
13 we'll rely on your pre-filed testimony. I'll tender
14 you for cross-examination.
15 THE COURT: Mr. Sanderson.
16 MR. SANDERSON: Thank you, Your Honor.
17
18 CROSS-EXAMINATION
19 BY MR. SANDERSON:
20 Q. Good afternoon, Mr. Pavlovic. My name is Paul
21 Sanderson, I represent Montana-Dakota in this case. I
22 want to just ask you just a few questions, and maybe
23 start with some of the things we agree with.
24 You had no issues with Montana-Dakota's
25 depreciation studies that they used as part of this

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1 application?
2 A. That's correct.
3 Q. And you had no issues with the allocation of
4 rates -- of the rate increase to the various classes,
5 correct?
6 A. No.
7 Q. Okay.
8 A. Or rather, yes, I have no issues.
9 Q. Okay. I thought I knew what you were saying
10 there. But thank you for clarifying.
11 There's some talk about MDU's use of the --
12 this minimum systems approach to allocate the cost of
13 mains. You found that their minimum systems -- the
14 Company's minimum system approach resulted in just and
15 reasonable rates?
16 A. The rates being proposed by the Company are not
17 mathematically driven by the two different approaches
18 to the cost study. I don't agree with the use of the
19 minimum system. I don't think that is what makes the
20 proposed rates reasonable and just.
21 Q. And I think we're agreeing on this. The
22 results that MDU reached using what they claim is the
23 minimum systems approach you believe result in just and
24 reasonable rates?
25 A. Looking at the proposed revenue requirement

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1 distribution and the approach that the Company proposes
2 to distribute the revenue requirements for each class
3 to the various rate elements, I find that to be just
4 and reasonable.
5 Q. Okay. Thank you. Now, I want to get into this
6 basic service charge that you've heard testimony here
7 the last couple days. You're aware, and as part of
8 your direct testimony, you addressed that -- and are
9 aware that the Company is using a straight fixed
10 variable rate design where the -- the costs are
11 implemented to customers on a basic service charge?
12 A. The distribution?
13 Q. Yeah.
14 A. There is a basic service charge that is used to
15 recover costs.
16 Q. And you have no concerns regarding this rate
17 design principle?
18 A. No, I have no concerns with the rate design
19 principle.
20 Q. And Advocacy Staff is not joining AARP and Mr.
21 Rubin's opposition to this basic service charge
22 implementation in this case?
23 A. No.
24 Q. And Advocacy Staff is not taking issue with
25 this Commission's decisions in 2015 to adopt that form

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1 of charge to the customers in a basic service charge?
2 **A. No, Staff is not either.**
3 Q. Okay. Let's get to the 2018 main replacement
4 projects. And just so we're clear, you referenced Mr.
5 Darras's SSIP program and the revised copy dated March
6 15, 2018?
7 **A. Exhibit PCD --**
8 Q. PCD-2.
9 **A. Yes.**
10 Q. Okay. And you said it identifies six early
11 vintage plastic pipe projects. You referenced that?
12 **A. Yes.**
13 Q. Okay. And those six are Gladstone, Fairview,
14 New Salem, Eldridge, Barlow and Cleveland? Those are
15 the communities? And I'll refer you to page 9 of 18.
16 **A. Yeah, I can look at page 9. I can look at --**
17 **what I wrote down if any of them was complicated enough**
18 **that I want to look at, I wrote down.**
19 **The six vintage plastic -- early vintage**
20 **plastic pipe replacement projects are Fairview,**
21 **Gladstone, New Salem, Barlow, Cleveland, and Eldridge.**
22 Q. And then you said Montana-Dakota and Mr. Darras
23 included four early vintage steel pipe projects,
24 correct?
25 **A. That's correct.**

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1 Q. And those four are Fairview, Gladstone, New
2 Salem and Taylor?
3 **A. That's correct.**
4 Q. Okay. So three of those four are communities
5 where the early vintage steel and early vintage plastic
6 pipe will be replaced?
7 **A. Apparently, yes.**
8 Q. Okay. And you're aware that the Company has
9 requested approximately \$5.6 million revenue request
10 for these 2018 projects?
11 **A. No, my understanding is that the request --**
12 **that the Company estimates \$5.6 million for the**
13 **original six projects, three early vintage**
14 **steel replacement -- well, they're not early vintage**
15 **steel replacement, they were denominated low-pressure**
16 **system replacement projects. And that was in New**
17 **Salem, Taylor, and Bismarck/Mandan. And then there**
18 **were three Aldyl A plastic pipe replacement projects,**
19 **and they were in Barlow, Cleveland and Eldridge.**
20 Q. And you're talking --
21 **A. And these numbers in these projects are listed**
22 **in Attachment C to MDU's response to Staff's data**
23 **request 2.5.**
24 Q. And you're referring to what was originally
25 proposed?

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1 **A. Yeah, because it's my understanding that those**
2 **are the projects that are in the revenue requirement.**
3 Q. And then those -- some of these projects were
4 revised by Mr. Darras to include the seven he sat and
5 testified to yesterday?
6 **A. Effectively what was done -- let me refer to**
7 **another piece of paper that I've prepared, unless I've**
8 **lost it. Let's take a look at Mr. Darras's Exhibit**
9 **PCD-2, if I can find it. I'm looking at page 10 of**
10 **PCD-2.**
11 Q. Certainly.
12 **A. This is what I understand Mr. Darras to have**
13 **testified to yesterday. It's what he testified to in**
14 **his surrebuttal testimony. As near as I can tell,**
15 **effectively what has happened here is that the original**
16 **six projects, the Aldyl A replacement projects in**
17 **Barlow, Cleveland and Eldridge, have been relabeled**
18 **early vintage plastic replacements. The**
19 **Bismarck/Mandan low-pressure system replacement project**
20 **has been moved out of 2018, and the Mandan project has**
21 **been placed in 2019. The Dickinson low-pressure -- is**
22 **it Dickinson? This gets confusing.**
23 Q. And I think -- Mr. Pavlovic --
24 **A. Essentially what has happened is that the**
25 **Bismarck/Mandan has been moved out of the 2018 time**

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1 **frame and the Gladstone has been added for steel**
2 **replacement. And New Salem -- and Fairview as well.**
3 **And New Salem and Taylor are no longer low-pressure**
4 **system replacements, they've been turned into two**
5 **projects I presume because the low-pressure system in**
6 **New Salem and Taylor consists of both cathodically**
7 **protected steel and plastic. And that's how you end up**
8 **with more projects.**
9 Q. Certainly. And my question was very simply,
10 Mr. Pavlovic, you heard Mr. Darras testify to the seven
11 projects that he's seeking in the 2018 main and system
12 line replacement projects?
13 **A. Right.**
14 Q. Okay. And the dollars from the original
15 filing, the 5.6 million, has not changed at any point
16 in time, correct?
17 **A. Well, MDU hasn't changed it.**
18 Q. Certainly. And you are also aware, Mr.
19 Pavlovic, that as part of this project, the Company
20 proposed in 2019 coming back in front of this
21 Commission to true up the 2018 costs to make sure they
22 accurately reflect what was being put in the ground in
23 2018. You're aware of that?
24 **A. Yes, I'm aware of that.**
25 Q. Okay. Now, let's talk about this. Your

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1 testimony, as I understand it, is all of the costs of
 2 these seven 2018 projects that Mr. Darras identified
 3 should be disallowed by this Commission?
 4 **A. They should be disallowed for recovery through**
 5 **base rates.**
 6 Q. Okay. And your rationale for disallowing these
 7 seven projects is they are not reasonable, they are not
 8 necessary, and they are not prudent?
 9 **A. No justification has been provided for doing**
 10 **this, other than that MDU wants to change out its**
 11 **low-pressure systems and it wants to replace all its**
 12 **Aldyl A pipe.**
 13 Q. Okay. And they've explained to you their
 14 rationale for doing that is a safety concern. You're
 15 aware of that?
 16 **A. Yes, I'm aware of that. I'm also aware that**
 17 **they have presented no evidence suggesting that the**
 18 **low-pressure systems constitute a high risk threat to**
 19 **their system.**
 20 Q. Okay. Let's talk about -- you also -- you're
 21 also aware with respect to the plastic pipe projects,
 22 you're aware of the 5.6 million, only a small portion
 23 of these costs, roughly 15 percent, go to replacement
 24 of plastic pipes in the towns of Eldridge, Barlow and
 25 Cleveland. You heard that testimony?

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1 **A. Yes, I did hear that testimony.**
 2 Q. And you also heard the testimony that the
 3 Company intends to take 35 samples from Eldridge, which
 4 they believe is mainly 1971 pipe, from Barlow, which is
 5 mainly 1981 pipe, and from Cleveland, that is mainly
 6 unknown vintage plastic pipe, and submit it to
 7 third-party testing. You heard that testimony?
 8 **A. Yes, I heard that as part of the replacement,**
 9 **they are intending to test certain portions of the**
 10 **system.**
 11 Q. And those costs of testing are included in the
 12 roughly \$800,000 worth of replacement of plastic pipe,
 13 correct?
 14 **A. I heard Mr. Darras testify to that effect.**
 15 Q. And it's your opinion then that Montana-Dakota
 16 testing these early vintage plastic pipes as part of
 17 these projects would not be reasonable, necessary, and
 18 prudent as a natural gas operator in the state of North
 19 Dakota?
 20 **A. Testing the system does not require replacement**
 21 **of the system.**
 22 Q. I'm just saying the test -- you want to throw
 23 out all the testing costs as not being necessary,
 24 prudent and reasonable, correct?
 25 **A. No. I want the cost thrown out -- well, let's**

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1 not be too colloquial. I think that the cost of the
 2 replacement should be excluded. And then if MDU feels
 3 that this testing program is an appropriate expenditure
 4 and is justified by safety concerns, then they should
 5 spend those dollars.
 6 Q. Well --
 7 **A. Whether they should be recovered through base**
 8 **rates or through the SSIP program is a different**
 9 **question.**
 10 Q. Well, let's talk about your opinions, Mr.
 11 Pavlovic. Could you explain to this Commission why the
 12 2018 project in Cleveland needs to be thrown out but
 13 you have no issues with the 2017 replacement project in
 14 Richardton?
 15 **A. Was the 2017 project done under the SSIP?**
 16 Q. It absolutely was. It was identified under the
 17 program as early vintage steel and plastic pipe. Why
 18 does the Advocacy Staff not have an issue --
 19 **A. Is there a document?**
 20 Q. My question --
 21 **A. No, you're asking me to answer your**
 22 **hypothetical question assuming that this project in**
 23 **Richardton was in fact designed and undertaken under**
 24 **the SSIP, a program that, as I understand it, wasn't in**
 25 **existence then.**

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1 Q. My question, Mr. Pavlovic, was simply can you
 2 explain why Advocacy Staff has an issue with the
 3 Cleveland replacement project of early vintage steel
 4 and early vintage plastic in 2018 but you're not
 5 seeking exclusion or disallowance of the Company's main
 6 and system replacement of early vintage steel and early
 7 vintage plastic pipe in Richardton in 2017?
 8 **A. If that replacement was undertaken as the**
 9 **normal operations of MDU and not as a result of a**
 10 **safety concern, which hasn't been demonstrated, then it**
 11 **belongs in rate base.**
 12 Q. Okay. Explain why the Advocacy Staff and you
 13 have no issue with the Bismarck 13th Street project
 14 that was replacing early vintage steel and early
 15 vintage plastic pipe in 2017?
 16 **A. I don't know anything about that project.**
 17 Q. Well, it's included in the 2017 rate base.
 18 **A. As I said, I don't know anything about that**
 19 **project.**
 20 Q. Well, Montana-Dakota in 2015 spent
 21 approximately \$2 million in main and system replacement
 22 projects, and the Advocacy Staff and you are not taking
 23 any issue or seeking any disallowance of any of the
 24 2015 projects, correct?
 25 **A. I would say at this point I'm assuming that it**

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1 was -- that that was a prudent replacement, that it
 2 wasn't undertaken -- or that it was undertaken because
 3 in fact there was an existing demonstrable threat to
 4 safety on that particular portion of the system.
 5 Q. Can you explain what projects were done in 2015
 6 on replacement?
 7 A. No, I didn't examine those.
 8 Q. Okay. In 2016, the Company spent and is
 9 seeking a recovery of approximately 1.6 million in its
 10 rate base for 2016 projects. Did you examine those to
 11 determine their reasonableness, necessary and prudent
 12 evaluation?
 13 A. No, I was only examining the projects that were
 14 listed as SSIP projects.
 15 Q. And it was implied in some questioning earlier
 16 in this hearing to Ms. Kivitso and Mr. Darras that
 17 Advocacy Staff has never had an issue at any time
 18 before with the Company's replacement projects, but now
 19 that the Company is trying to formulate a detailed plan
 20 to address these concerns in an SSIP, all of a sudden
 21 Advocacy Staff wants to throw out every project?
 22 MR. ARMSTRONG: Object as a misstatement
 23 of our position.
 24 THE COURT: Sustained.
 25 THE WITNESS: Yeah, and it's a

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1 misstatement of any position I've taken in testimony.
 2 But in any event, I will respond to it.
 3 THE COURT: There's a disconnect here.
 4 MR. ARMSTRONG: Yep.
 5 BY MR. SANDERSON:
 6 Q. Why in 2018 are these replacement projects not
 7 reasonable, necessary and prudent?
 8 A. They haven't been shown to be reasonable,
 9 necessary or prudent. That is my testimony. It isn't
 10 the other one.
 11 Q. One of the things, Mr. Pavlovic, you testified
 12 to earlier was that MDU is missing data regarding the
 13 type, vintage, and characteristics of the pipe in the
 14 2018 projects. That was your testimony?
 15 A. No, my testimony is that that is an adequate --
 16 that is a very accurate characterization of MDU's
 17 system knowledge of its North Dakota distribution
 18 system.
 19 Q. Certainly. And you heard Mr. Darras testify
 20 that much -- or not much, but certainly portions of its
 21 system were pre-code and it doesn't know what has been
 22 in there because it's been in so long before the system
 23 and accurate records were kept. Did you hear that
 24 testimony?
 25 A. I already know that they don't have the records

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1 for their system. It was demonstrated to me in the
 2 Webex demo.
 3 Q. Certainly. There's portions of their system
 4 that they don't have records that were put in before
 5 the necessary record-keeping system was put in place.
 6 It's so old it precedes that.
 7 A. That's right.
 8 Q. And you're criticizing their programs in 2018
 9 that they don't have the necessary data when you know
 10 they don't have the necessary data and there's no way
 11 for them to have that data. Am I accurately reflecting
 12 your criticism?
 13 A. I'm just saying that there's no -- no data has
 14 been -- two issues here, actually. The pipeline
 15 regulations that govern the Distribution Integrity
 16 Management Plan, okay, those regulations require gas
 17 distribution systems to complete their system knowledge
 18 to undertake such steps as are necessary to complete
 19 their knowledge of their system. Having done that,
 20 then they are to identify threats.
 21 MDU doesn't have any idea -- you know, I -- my
 22 understanding of the record -- of the record keeping
 23 under the uniform standard of accounts -- system of
 24 accounts requires you to have kept records of what you
 25 put in the ground, what it was -- I mean, pre-code.

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1 Why MDU doesn't have those records, I don't know I can
 2 speculate as to why they don't, but apparently they
 3 don't. The DIMP specifically says you're to use your
 4 records, you're to use your normal leak surveys and
 5 other survey techniques of your system, use the data
 6 that you get when there is a leak, when there's an
 7 excavation leak or any other kind of leak that you
 8 repair to improve your system knowledge, your knowledge
 9 of your system.
 10 Q. And isn't that --
 11 A. What I'm saying is --
 12 Q. Mr. Pavlovic --
 13 A. Let me finish.
 14 At the Webex demonstration of the GIS, which is
 15 really remarkable, it's a beautiful system, okay. And
 16 I don't know if people are familiar with what a GIS
 17 actually is, but it's just a geographical
 18 representation of the system. It's digital. You click
 19 on a pipe segment and up comes a menu and it has all
 20 the information that there is for the thing.
 21 When I was at the Webex, I was asking -- I
 22 was -- I don't remember the name of the people -- the
 23 person who undertook it, I don't know if Mr. Darras was
 24 there or who it was. But anyway, they were showing me
 25 this thing. I would point out a pipe segment and I

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1 would ask, well, what's there? They'd pop it up, most
 2 of the entries would be empty. Don't know what it is.
 3 And after a while, whoever it was that was conducting
 4 the Webex said, "Well, we'll find out when we replace
 5 it." Well, yeah, obviously you will find out what's
 6 there when you replace it because you'll be able to
 7 record what's in there.

8 My question is, is wholesale replacement a
 9 proper way to perfect your system knowledge, or should
 10 you -- I really hate making speeches -- or should you
 11 be continuing to perfect your knowledge through the
 12 normal operating methods, possibly using sampling
 13 things? But I don't think that wholesale replacement
 14 of the system is a proper, prudent or reasonable way of
 15 perfecting your system knowledge.

16 Q. Now, Mr. Pavlovic, you're certainly aware that
 17 is exactly why Montana-Dakota selected three of its
 18 smallest projects of differing age pipe in Barlow,
 19 Eldridge and Cleveland to test and study. You're aware
 20 of that?

21 A. If the testing and studying is being done for
 22 that purpose, then I would revise my recommendation and
 23 say that that should be allowed.

24 Q. Okay.

25 A. Into the base rates. But just the testing.

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1 Again, replacement is not the way to -- is not a
 2 reasonable, prudent or necessary way to improve your
 3 system knowledge and determine what you actually --
 4 what threats actually exist on your system.

5 Q. Now, Mr. Pavlovic, you were present today when
 6 you heard AARP's expert testify that public safety is
 7 the number one concern for the AARP. Did you hear that
 8 testimony?

9 A. Yes, I heard that testimony.

10 Q. Okay. Do you agree that public safety is the
 11 number one concern for Advocacy Staff?

12 A. I would say that public safety is the number
 13 one concern for everyone involved in the utility
 14 industry, and it is usually marked in regulations.

15 Q. Okay. And along those lines -- along those
 16 lines, Mr. Pavlovic, are you aware in the past few
 17 months there was a natural gas explosion in Cleveland?

18 A. No, I was not aware of that.

19 Q. Okay. When -- as being here on behalf of
 20 Advocacy Staff and the consumer --

21 A. Cleveland, North Dakota?

22 Q. Cleveland, North Dakota, not Ohio. In
 23 Cleveland, North Dakota.

24 In being here on behalf of all North Dakota Gas
 25 customers, did you talk to anybody in Cleveland to see

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1 if they believe that the replacement project of these
 2 early vintage steel and plastic pipe in Cleveland is
 3 reasonable, necessary and prudent?

4 A. That isn't -- that isn't information I would
 5 gather in determining whether it's prudent, necessary.
 6 Q. I think it's a simple question. Did you
 7 attempt to talk to anybody from Cleveland or any
 8 customers from that community to see if they believe
 9 it's reasonable, prudent, and necessary?

10 A. Not knowing about the explosion, no, I did not
 11 speak with them.

12 Q. In any other of the six communities that are
 13 getting replacement of their aging natural gas
 14 infrastructure, did you speak to any of those customers
 15 to determine whether they believe these projects are
 16 reasonable, necessary and prudent?

17 A. No --

18 MR. ARMSTRONG: Object to relevance,
 19 Judge. How does talking to people in the community
 20 tell whether their projects are reasonable or prudent?

21 THE COURT: Sustained.

22 BY MR. SANDERSON:

23 Q. Now, I want to get into your testimony,
 24 specifically get past the 2018 projects and more into
 25 the SSIP mechanism. You recognize that recovery

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1 mechanisms have been implemented across the country in
 2 a number of states to deal with aging infrastructure
 3 issues?

4 A. I'm aware of a number of programs and
 5 associated recovery mechanisms to replace aging
 6 infrastructure for safety reasons.

7 Q. Okay. And in fact, it's your testimony that
 8 put in the January 2017 U.S. Department of Energy
 9 report?

10 A. Yes, that's correct.

11 Q. Okay. And in your Exhibit 1, the 2017
 12 Department of Energy report, it indicates that 39
 13 states have adopted some form of recovery or program
 14 similar to MDU's SSIP. And I'm not talking the
 15 details, but have adopted some form of --

16 A. Accelerated replacement program for
 17 infrastructure for safety reasons. Some jurisdictions
 18 it's been for reliability reasons.

19 Q. Do you -- and so we're in agreement roughly 39
 20 states have adopted some form of the program?

21 A. Yes.

22 Q. Okay.

23 A. They have -- I think I need to be really clear.
 24 There are -- in a number of jurisdictions there have
 25 been proposed and accepted a large number, it's

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1 probably 39, but I haven't bothered to count the exact
2 number there, but I will rely on you, of programs to
3 replace infrastructure at an accelerated pace that is
4 before it has reached the end of its life for safety or
5 reliability reasons.

6 Q. And some of those states specifically call out
7 the Aldyl A pipe, correct?

8 A. Yes, some states mention -- some in the
9 program -- in some states, the program is specifically
10 mentions Aldyl A.

11 Q. And in your direct testimony on --

12 A. Oh, excuse me. The Aldyl A vintages that were
13 made with the resin which promotes cracking.

14 Q. And on page 7 of your direct testimony, you
15 identified there were two primary purposes for these
16 infrastructure accelerated replacement programs; is
17 that correct?

18 A. Yes.

19 Q. Okay. And the first of those reasons for
20 adopting a program similar to this is to accelerate the
21 replacement of targeted infrastructure for safety or
22 reliability purposes. That's in your testimony?

23 A. That's in my testimony, and it's also what I
24 just testified to.

25 Q. And the second main rationale for adopting

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1 these programs is to accelerate gas utility
2 infrastructure cost recovery outside of base rate
3 proceedings?

4 A. That's exactly right.

5 Q. Okay. Do you agree adoption of a program in
6 North Dakota has the potential to accelerate
7 replacement of targeted infrastructure for safety and
8 reliability purposes?

9 A. Doesn't have the potential. If you adopt such
10 a program here in North Dakota, it will.

11 Q. Okay. And also, agreeing with your -- or
12 recognizing that, it also would allow a gas utility
13 infrastructure recovery outside of rate base. It would
14 accelerate that recovery if a program was adopted in
15 North Dakota?

16 A. Yes, that's what investment trackers do, they
17 accelerate recovery of the investment that the utility
18 makes rather than having to wait for a rate case to do
19 a prudence review and have it accepted into rate base.

20 Q. One of the criticisms you had of
21 Montana-Dakota's SSIP is a lack of customer benefit.
22 That's one of your stated criticisms.

23 A. A lack of a demonstration of customer benefit.

24 Q. Okay. And you don't see any benefit to the
25 customer of replacing 50-plus year-old pipe?

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1 A. Solely on the basis of being 50 years old? No.

2 Q. Okay. It serves no benefit to get a 50-plus
3 year-old pipe, or as Mr. Darras's 30 -- 1939 coupling
4 out of the ground and replacing it with a newer
5 fitting, that serves no benefit to the customer?

6 A. It serves no benefit to the customer if that
7 particular piece of facilities hasn't reached the end
8 of its life.

9 Q. Okay. Now, is Advocacy Staff taking the
10 position that this Commission does not have the
11 authority to adopt an SSIP program?

12 MR. ARMSTRONG: Judge, I got to object.

13 He doesn't speak for all of Advocacy Staff.

14 THE COURT: Sustained. Ask him his
15 opinion.

16 MR. SANDERSON: Well, Judge, who do I
17 question on Advocacy Staff if they're putting up
18 witnesses?

19 MR. ARMSTRONG: Question him about his
20 opinion. He's an expert witness.

21 THE COURT: He's here to give an opinion.
22 Ask him what his opinions are. We know who he's
23 working for.

24 MR. SANDERSON: That's why I don't
25 understand, but I will certainly address it as you

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1 instruct.

2 BY MR. SANDERSON:

3 Q. Is it your opinion, Mr. Pavlovic, here
4 testifying on behalf of Advocacy Staff, that this
5 Commission does not have the authority to adopt
6 accelerated replacement program?

7 A. No. It clearly has the authority. That's why
8 we're here today.

9 Q. Okay. So you agree that if this Commission
10 deemed it appropriate, they have the full authority to
11 adopt an accelerated replacement program similar to 39
12 other states?

13 A. That's my understanding.

14 Q. Okay. Are you opposed, you personally, opposed
15 to an accelerated recovery mechanism outside of a full
16 rate case?

17 A. No.

18 Q. Okay. Now, you were present when AARP's
19 witness testified, and he said I've never seen a rider
20 or mechanism like this that he's comfortable with. So
21 you believe under the right circumstances it would be
22 appropriate?

23 A. Yes.

24 Q. Okay. And that gets to the question, Mr.
25 Pavlovic, and what program parameters would you as the

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1 witness on behalf of Advocacy Staff want included in an
 2 accelerated replacement program to make it acceptable
 3 to this Commission for the benefit of North Dakota
 4 customers for safety reasons?
 5 A. Well, if we're talking about the tracker
 6 mechanism, there ought to be a plan, a schedule; there
 7 needs to be a definition of the eligible facilities, an
 8 evidentiary-based definition of the eligible
 9 facilities. Probably -- well, I'm personally opposed
 10 to this, but -- as an expert -- but when these things
 11 were originally put in place, they were viewed, and it
 12 really is the way to view a tracker, it is just a mini
 13 revenue requirement. It's just like -- it's the same
 14 questions and the same calculations that you do when
 15 you do a base rate. Fundamental principle of rate
 16 making is recovery doesn't begin until the plan is in
 17 service and useful, used and useful.
 18 So when these programs were originally put in
 19 place, it was quite often it was the Company informed
 20 the Commission with the report that it was going to
 21 make the following replacements. A year later when
 22 they had done the replacements and it was possible to
 23 address the question is it used and useful in its
 24 service, then it was reviewed for prudence and then
 25 recovery began. What has evolved is to define --

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1 companies did not like that arrangement. They wanted
 2 to start recovery immediately, even before the stuff
 3 was in the ground. So there were a couple
 4 jurisdictions in which it was actually done by
 5 legislation at the behest of the utilities, the
 6 company -- the Commissions were instructed basically to
 7 define the year in which something went into service as
 8 the instant in which it went into service so that if
 9 something was going to go into service in 2018, the
 10 Company could begin recovering for that investment on
 11 January 1st of that year.
 12 So what has happened is that -- and this is
 13 probably what you should do. This is what I would
 14 recommend if you're going to approve this kind of a
 15 mechanism, is something like what the Company has
 16 proposed here in testimony. I haven't seen it anywhere
 17 really in writing. Which is the Company makes a filing
 18 with the Commission, says these are the projects we're
 19 going to put in service for the next year, this is
 20 the -- this is the cost, this is what we estimate the
 21 cost will be, we calculate the revenue requirement, and
 22 you need a more specific -- in the tariff, you need a
 23 more specific statement of what is going to be used to
 24 calculate the revenue requirement. And then they can
 25 begin recovery even though the stuff is not in the

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1 ground yet. Then at the end of the year, the Company
 2 makes a true up filing in which they provide the
 3 documentation for the replacements and the cost and you
 4 can do a real -- it's like -- the first filing is like
 5 an advanced determination of prudence, it just gives
 6 the presumption of prudence to something the Company
 7 does. The second filing is where you've actually
 8 determined that this was a prudent investment and that
 9 it's used and useful in service and that true up is
 10 then carried over to the next period.
 11 There probably should be a cap on the amount
 12 that can be recovered. This is frequent. And the
 13 reasons are various, but gradualism is another. And
 14 there should also be a requirement after a certain
 15 period, it should -- the investment should be taken out
 16 of the tracker and put into base rates.
 17 Q. Now, Mr. Pavlovic, I want to follow up on
 18 those. You're aware at least with respect to the
 19 testimony and information the Company's indicated,
 20 they -- their intent is to make filings with the
 21 Commission and identify the projects each year and
 22 costs, consistent with what you said would be
 23 appropriate?
 24 A. That's sort of what I understood MDU's
 25 witnesses to be saying the last day and a half.

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1 Q. And you also heard MDU's witnesses testify that
 2 there would be no recovery under this accelerated SSIP
 3 mechanism until the Commission approved the project?
 4 Do you agree that would be an appropriate method?
 5 A. The two filings that I mentioned, that's
 6 basically what happens with the initial filing.
 7 Q. Okay. And another thing you indicated is in --
 8 in your statement was you believe a true up filing
 9 should occur. Now, you're aware right in the tariff,
 10 tariff 94 discusses the Company coming back to the
 11 Commission to true up all actual costs? That's
 12 something they're proposing?
 13 A. Yes, I'm aware of that.
 14 Q. Okay.
 15 A. I don't think it's very well laid out in the
 16 tariff, but . . .
 17 Q. But those -- adding these requirements or
 18 parameters would make an accelerated replacement
 19 program similar to the SSIP more acceptable to you in
 20 your opinion?
 21 A. It makes a -- it -- that is the -- that is
 22 the -- you know, this is a loose definition of an
 23 appropriate tracker, cost-recovery mechanism for any
 24 kind of replacement program. But I keep coming back
 25 to, I do not believe that the Company has -- I don't

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1 think that they're able at this point to demonstrate
 2 that they have portions of their system that are a
 3 specific threat simply because it happens to be old or
 4 simply because it happens to be Aldyl A. There's lots
 5 of Aldyl A vintages out there that weren't made with
 6 the resin that gives the propensity to brittleness and
 7 cracking.
 8 Q. Now, Mr. Pavlovic, following up on your -- what
 9 you think is appropriate, you provided the document
 10 that identifies 39 other states that have some form of
 11 this. What states, in your expert experience, have a
 12 model that you believe is appropriate that this
 13 Commission could look at to have the parameters that
 14 you think are important in developing a system like
 15 this?
 16 A. I would name Massachusetts and Maryland, only
 17 because I'm the most familiar with those. I think
 18 there are similar mechanisms in place in New Jersey.
 19 Q. Okay. Can you just describe maybe a couple
 20 functions of each of those states' recovery system that
 21 you believe are appropriate or should be adopted?
 22 A. They're the ones that I just listed for you.
 23 Q. Okay. Including some of the things, a cap and
 24 a requirement to get the projects moved into rate base
 25 the next --

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1 A. Yeah.
 2 Q. Have you looked at Montana-Dakota's riders for
 3 electricity?
 4 A. No, I have not.
 5 Q. Okay. You're aware that North Dakota does have
 6 a rider mechanism for certain projects, environmental
 7 projects on the electricity for environmental and
 8 transmission projects?
 9 A. I understand that to be the case based on other
 10 people's testimony today.
 11 Q. Okay. So just so I'm clear, Mr. Pavlovic, with
 12 respect to your opinion, you're not fundamentally
 13 opposed to the SSIP, you just would like certain
 14 parameters in place to make it acceptable?
 15 A. The cost recovery -- that -- what you just
 16 said, a cost recovery mechanism can be very easily made
 17 acceptable whether either the Commission or Advocacy
 18 Staff wants to get involved, and that is another
 19 question. I'm -- but I'm -- I will continue, in answer
 20 to your question, to draw a sharp distinction between a
 21 recovery mechanism and whatever the program is.
 22 Q. Well, you just made a comment, whether a
 23 Commission wants to get involved in this type of
 24 project. But you're aware 39 other Commissions across
 25 the country have made the decision to get involved in

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1 this significant public safety issue?
 2 A. Yeah, and I can tell you because I actually
 3 happen to participate and will be participating in two
 4 more in the next month, two of these processes in
 5 Massachusetts, and they are a significant burden.
 6 Q. Mr. Pavlovic, I have no further questions.
 7 Thank you for your time.
 8 THE COURT: Mr. Coffman?
 9 MR. COFFMAN: Yes. Thank you.
 10
 11 CROSS-EXAMINATION
 12 BY MR. COFFMAN:
 13 Q. Good afternoon. So are you aware of the
 14 30-some jurisdictions that have an accelerated
 15 infrastructure replacement program, how many of those
 16 also include a surcharge or --
 17 A. To my knowledge, they all include a surcharge
 18 of one sort or another, because that's the point. I
 19 mean, these programs -- there is the safety -- there
 20 are the safety programs and there are the recovery
 21 programs -- the recovery mechanisms. And almost
 22 every -- every accelerated replacement program that I'm
 23 aware of has an accelerated recovery mechanism.
 24 Q. Okay. Well, do you have any doubt that MDU
 25 could engage upon a program that prioritizes and

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1 accelerates main replacements without having to
 2 piecemeal it out through a surcharge and its cost
 3 recovery -- and recovery due to general, normal full
 4 audit rate case review?
 5 A. I think that they could implement this program
 6 without this accelerated recovery. The error in the
 7 jurisdictions that I'm familiar with this, the argument
 8 for the accelerated recovery has been made by the
 9 utilities. I've never really understood how this
 10 works, but that hasn't kept Commissions from approving
 11 it, arguing that they needed the accelerated recovery
 12 in order to obtain the funds to get the -- to replace
 13 the stuff.
 14 Q. Does that make sense to you?
 15 A. I have some problems with it. But utilities
 16 have three sources of investment. They have the
 17 internally generated free cash flow, they can borrow
 18 money, or they can issue stock. And most utilities in
 19 fact use all three methods, and if the utility is
 20 saying that the internally generated funds aren't
 21 sufficient, that's an empirical question that you have
 22 to look into the facts.
 23 Q. But isn't the cost recovery really more of a
 24 matter of timing and regulatory lag than it is safety?
 25 A. The recovery is. And recovery isn't anything

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1 about safety unless you tie it to safety by saying I
 2 have to make these replacements for safety reasons and
 3 the only way I can get the capital to do it is to have
 4 the accelerated recovery. Now, whether that's the case
 5 for MDU, I don't know.
 6 Q. And isn't regulatory lag virtually eliminated
 7 in the state of North Dakota because of the interim
 8 rate mechanism?
 9 A. There's a certain portion of it. Regulatory --
 10 but the regulatory lag exists as long as
 11 you're operating -- for as long as they operate under a
 12 given set of rates and don't come in for a new rate
 13 case.
 14 Q. And isn't there a positive impact to the public
 15 of a regulatory lag?
 16 A. Oh, yes, the regulatory lag is definitely --
 17 it's part of the traditional regulatory model. You
 18 don't have regulatory lag, the Company has no incentive
 19 to seek efficiency gains.
 20 Q. And over time, there can be under earnings and
 21 over earnings, so regulatory lag could work to the
 22 benefit of either the customer or the utility?
 23 A. That's also true.
 24 MR. COFFMAN: That's all I have.
 25 THE WITNESS: Actually, I want to expand

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1 on my answer to your second-to-last question.
 2 The tracker mechanisms do two things, they
 3 eliminate regulatory lag, they also guarantee a return.
 4 It's the guarantee of the return that I object to most.
 5 That's my answer.
 6 MR. COFFMAN: Thank you.
 7 THE COURT: Okay. Major?
 8 MAJOR UNSICKER: No questions, sir.
 9 THE COURT: Ms. Jeffcoat-Sacco.
 10
 11 CROSS-EXAMINATION
 12 BY MS. JEFFCOAT-SACCO:
 13 Q. I don't want to oversimplify, but forget the
 14 tracker for a couple of minutes and talk about the
 15 investment.
 16 A. I'd love to do that.
 17 Q. Yeah. Basically what you're saying, I think,
 18 and correct me if I'm wrong, is that the Company has
 19 simply not met its burden here, not proved its case
 20 here?
 21 A. For making these replacements. That's my
 22 testimony.
 23 MS. JEFFCOAT-SACCO: That's all I have.
 24 Thanks.
 25 THE COURT: Commissioner Kroshus.

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1
 2 EXAMINATION
 3 BY COMMISSIONER KROSHUS:
 4 Q. Okay. I'm going to move through these very
 5 quickly. But just -- and some of this will be
 6 repetitive. But you don't believe that currently MDU's
 7 system poses a safety risk, or we don't know?
 8 A. Well, it's my understanding there aren't many
 9 incidents. What incidents there are, are due to -- the
 10 majority of them are due to excavation damage,
 11 according to their DIMP and according to their 7100
 12 reports. I don't see that any evidence has been
 13 presented that suggests that there's any portion of
 14 their system that poses an imminent threat.
 15 Q. And you believe there's ample opportunity to
 16 still do the testing, the sampling of the various types
 17 of pipe through regular maintenance and repair of the
 18 system?
 19 A. Plus they -- the -- what this firm, GTI, is
 20 doing. I mean, you know, it could make sense to go out
 21 and sample the systems to determine what's there. But
 22 my point is that will not be nearly as expensive as
 23 replacing the system.
 24 Q. Would this be considered a normal part of doing
 25 business, repairs and maintenance?

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1 A. Repairs and maintenance are a normal part of
 2 doing business, and that is the normal way that a gas
 3 utility updates its information about its system.
 4 Q. What about the time frame argument that was
 5 made yesterday in terms of even if the system is
 6 going -- if some of this vintage -- early vintage pipe
 7 is going to no longer be good 20, 30 years from now,
 8 you really have to start now about impacting --
 9 significantly impacting consumers down the road?
 10 A. I just don't think it's right. I mean, that
 11 amounts to saying this is -- on what basis, I don't
 12 know, that this is a danger that is so large that we
 13 just can't wait to address it.
 14 Q. So now is not -- so the 39 states, are they
 15 jumping the gun?
 16 A. No, many of those -- many of those states --
 17 the early adopters were reacting to the San Bruno and
 18 stuff like that, and they were reacting to the
 19 fact that -- and most of were them were on the east
 20 coast. Most of them had -- and some of them still
 21 do -- significant amount of their distribution systems
 22 consists of wrought iron, cast iron, and bare steel.
 23 The cast iron -- the problem with cast iron -- this is
 24 the Allentown problem. The problem with cast iron is
 25 that it's very brittle. You can dig a hole near a cast

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1 iron main and some of the earth can fall underneath it
 2 and it will crack of its own weight. Cast iron is
 3 basically bad stuff. It can break at any point. It
 4 can also last for hundreds of years.
 5 And bare steel, too, is -- bare steel, in most
 6 environments, corrodes really fast. Right. So these
 7 programs, the early ones, were to replace types of
 8 material that had -- that, you know, you knew they were
 9 just bad stuff and that something could happen at any
 10 moment. The later ones -- and Aldyl A has been added
 11 to this. But again, it's only a certain vintage.
 12 There's no problem with later versions of it, and it's
 13 even -- my understanding is there are vintages that --
 14 there are vintages of it that did not use this one
 15 resin which apparently creates the potential for this
 16 brittle cracking. So you could have stuff that's
 17 vintage 1970 and it's not a problem at all.
 18 As it's sort of spread west, we started
 19 encountering systems -- encountering -- I've started
 20 encountering utilities proposing to replace
 21 low-pressure systems or -- and the reasons are various,
 22 it's both safety and reliability and stuff like that.
 23 But I guess what I'm saying is the early adopters, they
 24 were reacting to a very real and present danger. The
 25 late adopters are -- you know, it's like MDU's

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1 proactive approach. But again, it's based on their
 2 system knowledge, it's based on being able to
 3 demonstrate that a portion of their system in fact
 4 poses a threat.
 5 Q. And everything you read, that detail is clearly
 6 lacking?
 7 A. It appears to be that it's clearly lacking
 8 here.
 9 Q. Okay.
 10 A. And there's no -- I mean, again, how many
 11 incidents -- you know, what is their leak rate? I
 12 mean, I saw nothing in the DIMP, I saw nothing in the
 13 7100 reports that suggests that there's some portion of
 14 their system that this is about to become a very real
 15 danger.
 16 Q. Out of the 5.6 million, 800,000 is for
 17 third-party testing of the pipe.
 18 A. I think that's actually for replacement, too.
 19 Q. For replacement as well?
 20 A. For the third-party testing, it's presumably --
 21 I don't know what it is, but it's presumably a smaller
 22 number.
 23 Q. Whatever that smaller number is, could it be
 24 argued that that should be a part of regular repairs
 25 and maintenance, that testing would be a part of that?

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1 Or do you think that the current situation with the
 2 potential with resin, or at least the wrong type of
 3 resin, having been used during the manufacturing
 4 process, do you think that in itself is enough to look
 5 at that as above -- as an above and beyond expense, or
 6 embedded within that's just a normal part of
 7 maintaining a system is periodic testing of the
 8 material?
 9 A. Well, they -- a periodic testing of the
 10 material, that is not a normal thing. They are
 11 under -- they are under the obligation to improve their
 12 knowledge of their system, of what they've got where
 13 and the condition of it. And I mean, that's the
 14 federal government. But you should really be holding
 15 them to that as well. And I think within reason I
 16 would say any expense that they undertake in order to
 17 get their system knowledge up to where it should be,
 18 that should be part of their normal operations --
 19 operating maintenance.
 20 The Nicor utilities have been trying to get a
 21 tracker -- the gas utilities -- I'm sorry, NiSource.
 22 The NiSource Utilities have tried on a number of
 23 occasions on the east coast to get a tracker in for the
 24 expenses, not the investment, but the expenses of
 25 getting their system knowledge up to the federal

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1 requirement. To my knowledge, Commissions have
 2 consistently said no, you know, that's just an expense,
 3 you know, it's covered in your regulars.
 4 Q. So this is -- to wrap up, this is
 5 essentially -- and I don't want to oversimplify this,
 6 but is this like having a set of tires that are 60,000
 7 mile tires that still have 30,000 miles remaining on
 8 the tread, and yes it would be safer to put new tires
 9 on, but you have to balance that with economics?
 10 A. Well, economics is one of the things that you
 11 have -- I mean, because you're talking about rates, and
 12 you're required to balance it with economics. But I
 13 think that that's the case. I mean, there's no --
 14 again, they have presented no evidence that suggests
 15 that -- overall their system is just fine. If they can
 16 identify the Aldyl A threat, that seems fine. They
 17 know the rate at which their steel, their low-pressure
 18 steel, is corroding and the rate at which it needs to
 19 be replaced. It may be that the case can be made that
 20 some of these low-pressure systems, the steel portion,
 21 should be replaced just because they've reached the end
 22 of their life.
 23 But Mr. Rubin made reference to their
 24 depreciation study. The depreciation study, those are
 25 average service lives that you're looking at there.

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1 The truth of the matter is that some pipe goes bad the
 2 day you put it in the ground and some pipe will last
 3 100 years. You know, and that's just the way it is and
 4 the way it has always been with gas utilities. There's
 5 a certain rate at which stuff fails and you have to
 6 replace it.

7 Q. All right. Thank you very much.

8 THE COURT: Chairman Christmann.

9

EXAMINATION

10

11 BY CHAIRMAN CHRISTMANN:

12 Q. Before I lose track of that, expand on that.

13 So something fails and you have to replace it, but do
 14 you replace that small segment, or is that an indicator
 15 and when a bunch of those indicators add up that
 16 there's been failures of that type of product that then
 17 those should be replaced more quickly?

18 A. Okay. I have to preface this by saying I am
 19 not an engineer. Okay. I've worked alongside a lot of
 20 utilities over the years and utility engineers.

21 My understanding the way gas utilities work is
 22 that periodic -- I mean, these are the things that
 23 happen. Somebody digs a hole and breaks a line. Now
 24 you got a leak and it's got to be repaired. Somebody
 25 smells gas, the gas company comes out and discovers

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1 there's a leak. Plus utilities routinely -- I believe
 2 MDU is on a year cycle -- do leak surveys where they
 3 actually go over the lines with leak detectors.

4 When a leak is detected, it's one of three
 5 classes, but one is you don't have to do anything about
 6 it, it's not big enough to worry about it. Two is that
 7 it needs to be fixed but it doesn't need to be fixed
 8 immediately. And then there's what needs to be fixed
 9 right now. Most leaks are repaired. They don't
 10 involve investment, they don't take pipe out and put a
 11 new pipe in. It's almost like when you get -- you can
 12 reach a point where you've got so many repairs on a
 13 segment of pipe that you should -- that the repairs
 14 have become a danger, and then you replace it. That's
 15 the way gas utilities operate.

16 Q. Okay. And then to clarify and see if I
 17 understood right. Based on one of Commissioner
 18 Kroshus's questions, I understood the 800,000
 19 distinction was for the replacement and the testing of
 20 plastic pipe and that the remainder, the 4-point-some
 21 million, had to do with steel pipe replacement?

22 A. That's my understanding as well.

23 Q. Okay. And did I sense right that toward the
 24 end of your discussion with Mr. Sanderson there was
 25 kind of a sense that you'd have some temperance for a

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1 program as has been discussed here in testimony but not
 2 so much laid out in the advanced testimony where the
 3 Company would come in, in the spring with a list of
 4 proposed projects, get approval, put them in, true up
 5 in the fall, similar to an ADP process?

6 A. Yeah, that's the way to do it if you want to
 7 allow the Company to go on a systematic replacement
 8 program where you, in essence, determine on the -- make
 9 prudence decisions on the fly as opposed to waiting for
 10 a rate case and then making a big prudence decision.
 11 That's the way to do it. If you think that it's
 12 justified for them to undertake a replacement program,
 13 then this is a good way -- this is a good way to
 14 implement it through a recovery mechanism. You could
 15 also throw out the recovery mechanism and just have
 16 them say, look, you're going to come in each year and
 17 you're going to file and when it gets so big that you
 18 need to -- that you need to reduce your rate -- to
 19 increase your rates because the investment has grown,
 20 then you come in for a rate case.

21 I mean, it is true, this will -- there are down
 22 sides to these trackers, but for sure as an investment
 23 as in a driver of rate cases, if you have one of these
 24 things in place, it will reduce that driver for a rate
 25 case.

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1 Q. Okay. And based on your knowledge, and I don't
 2 know how much it is, of our agency, most of the public
 3 utilities division, who's been in the room today, do
 4 you think that it would be necessary if we were to
 5 operate a system like that to have a filing fee so that
 6 the Commission could hire professional staff to help
 7 determine the prudence of those projects?

8 A. I think that's absolutely necessary.

9 Q. Okay.

10 A. Because it is an effort. It takes money, it
 11 takes resources. It doesn't take anything if all
 12 you're going to do is rubber stamp it. But I would
 13 strongly recommend that you institute a fee.

14 Q. Okay. So especially with the plastic portion,
 15 because if I understood it correctly, the steel portion
 16 of the 2018 projects are just strictly replacement. I
 17 didn't understand that there's really going to be
 18 testing on that material.

19 A. That was my understanding, too.

20 Q. Okay. And so on the plastic portion where part
 21 of the 800,000 will be for testing, do you think
 22 there's even a possibility that that testing will show
 23 that there's some certain material out there and then
 24 they might conclude, okay, that was put in at a certain
 25 time and so, you know, certain towns would have the

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1 same thing, that then that would indicate a more dire
2 need and a safety cause to go ahead and do these
3 quickly?
4 A. If they -- if the testing determines -- you
5 know, and this is a testing problem, okay, is it a
6 probability and the random samples and extrapolating to
7 other portions of the system. But if they're able to
8 identify that they actually have the vintage of Aldyl A
9 that is subject to brittleness and joint cracking, then
10 they should replace it.
11 Q. And so --
12 A. And, you know, and they can make the case. I
13 mean, they can make the case, you know, based on the
14 testing, you know, whether you can -- to what extent
15 you can extrapolate out to these other areas.
16 Q. And so is the -- the original SSIP program
17 requested, is that just something that's ahead of its
18 time, that it should have been do the 2018 projects,
19 get testing, and then build the SSIP program around
20 fixing those things that the testing indicated are in
21 fact a safety problem?
22 A. That's what I believe. I mean, I believe that
23 you have to be -- they have to be able to demonstrate,
24 number one, that the target is there, that the threat
25 is there, and that you know where the threat is. At

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1 that point when you know those two things, then it's
2 appropriate to institute this kind of a replacement
3 program, and it's probably appropriate balancing
4 everything to allow for a tracker recovery as long as
5 it's periodically moved -- that that investment is
6 periodically moved into rate base.
7 CHAIRMAN CHRISTMANN: No other questions.
8 Thank you.
9 THE COURT: Commissioner Fedorchak.
10
11 EXAMINATION
12 BY COMMISSIONER FEDORCHAK:
13 Q. I have so many books, I can't get close to my
14 mic.
15 So yesterday the Company provided testimony
16 that basically industry standards and federal
17 regulations are driving change in the way they approach
18 pipeline safety and integrity. Would you agree with
19 that? That that's what they testified?
20 A. I agree that that's --
21 Q. Systematic approach?
22 A. Yes, and I would actually -- I agree with that.
23 Q. Because you agree that PHMSA is requiring that
24 now?
25 A. Yeah.

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1 Q. Okay. So is this SSIP basically -- because
2 Advocacy Staff and you -- I don't want to get into
3 characterizing whether it's the whole Staff or just
4 your opinion, but --
5 A. Well, they'll adopt whatever -- what they want
6 what I tell you.
7 Q. It seems that you at least are objecting to the
8 SSIP in favor more of their standard operating
9 procedure that they've pursued in the, you know, normal
10 course of business over the last couple of decades?
11 A. Well, that's the best source of improving the
12 knowledge of their system. But, I mean, I think it's
13 clear that they need to do more than that.
14 Q. Okay.
15 A. Unless -- I mean, this is a complicated issue
16 about, you know, going back and drawing on -- I don't
17 know the nature of their records. I do know that
18 they're supposed to have kept records, according to the
19 uniform standard of accounts, of various things. But
20 in particular, the nature and the vintage of what they
21 put in the ground.
22 Q. Umm-hmm. Well, if they don't have them, they
23 don't have them. We got to deal with reality, right?
24 A. In which case you've got to figure out some
25 other way to get that knowledge. And I said sampling

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1 is one of them. I mean, they routinely go out and dig
2 up and repair leaks. I don't know what the expense is,
3 they would have to tell you. It might be big enough
4 that it would be appropriate to put it in a tracker, an
5 expense tracker, not an investment tracker. But in any
6 event, I mean, you know, they do this all the time,
7 they go and they dig up a segment and they repair it.
8 Well, you know, they go, dig up a segment, replace that
9 piece and send it for testing.
10 Q. So I want to separate the tracker and the
11 recovery mechanism from just the pipeline safety, their
12 operations, for the purpose of my questions for now.
13 So if -- it strikes me that this SSIP is the
14 standard operating procedure of the future. It's --
15 now it has a name. But it is where the industry
16 standards and PHMSA is pushing companies to go as a
17 standard way of operating; would you -- is that a wrong
18 conclusion?
19 A. No, no, I think that that's absolutely right.
20 I mean, again, to take the example of Massachusetts,
21 which is what I'm most familiar with, most utilities,
22 most gas utilities have a series of programs operating
23 procedures that result in replacing facilities. And in
24 Massachusetts, what the companies have done is that
25 they've just added another one, it's called the Safety

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1 Replacement Program, and it's focused on identifying,
 2 you know, safety issues.

3 Q. What other issues for replacement are there? I
 4 mean, just don't like how it looks anymore --

5 A. No, stuff --

6 Q. -- or why else do you replace --

7 A. -- stuff wears out --

8 Q. And it's not safe --

9 A. -- and it's damaged --

10 THE COURT: Hold on. We got to talk one
 11 at a time for the court reporter, who's really doing a
 12 lot here lately.

13 THE WITNESS: I'm sorry.

14 BY COMMISSIONER FEDORCHAK:

15 Q. If it's damaged, it's not safe so you replace
 16 it. If it wears out, it's not safe so you replace it.
 17 I mean, I can't think of any other reason that the
 18 stuff gets replaced if it isn't safe?

19 A. That's the ambiguity that people plant. No,
 20 it's true. No, sometimes you replace stuff because you
 21 have to increase the capacity because you're adding
 22 loads.

23 Q. Sure. That's good.

24 Okay. So if -- if this is sort of the new way,
 25 the new way of managing the system and making sure it's

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1 safe, we're kind of trying to figure out what's the
 2 prudent way for them to increase the knowledge, because
 3 you -- and how do they do that? How can they -- I
 4 mean, you suggested that the sampling is one way. How
 5 else? Because in the PCD-2, page 2 of this -- oh, page
 6 4 of 18 of Darras's -- of the SSIP plan as it stands,
 7 they basically say that -- page 4 of -- so it's page 4
 8 of 18. So see that paragraph in the middle, early
 9 vintage steel pipe. So these pipes are being slated
 10 for replacement to eliminate aging and obsolete. Bare
 11 steel or poorly coated pipe, pipe with unknown
 12 attributes or missing data, gas meters located indoors
 13 and or mechanical couplings and fittings.

14 Yesterday it seemed to me in the testimony from
 15 the Company that they admitted that the steel probably
 16 isn't worn out as much as they're concerned about the
 17 couplings and the fittings. Did you hear that?

18 A. Yes, I did.

19 Q. So how does -- if they don't have the records
 20 to show where there's these couplings and fittings,
 21 where all this stuff is -- and I'm not trying to defend
 22 their position, I'm just trying to understand, like,
 23 what are the other alternatives if you're going to dig
 24 it all up to find that, then you just survey and cover
 25 it back up again? Or what should we be doing to

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1 increase the knowledge on the system?

2 A. My understanding is that if the coupling is
 3 failing, that will -- it will result in a leak. That's
 4 what a coupling -- that's what practically everything
 5 on gas system, when it fails, it results in a leak, and
 6 it ought to show up in the leak surveys that they make,
 7 some -- I understood that MDU does it on an annual
 8 basis. But I know there are utilities that do it on a
 9 semi-annual basis.

10 Q. So is there concerns with waiting for leaks to
 11 be the driver of replacement? Is there safety concerns
 12 with that? What if it's a really slow leak in a
 13 downtown area and you've got --

14 A. Then it's not -- then it's not a hazard.

15 Q. If a leak -- like, if I leave my grill on for a
 16 little -- short amount of time and then start it -- or
 17 if I leave it on, it's leaking a little bit, I come to
 18 start it, it's going to explode -- like, create a huge
 19 problem?

20 A. That's your grill, it's not their system.

21 Q. Well, what -- I mean --

22 A. This is why you -- this is why they perform the
 23 leak surveys and why they categorize them. When they
 24 identify a leak, they determine whether it's one that
 25 needs to be repaired at all. If it needs to be

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1 repaired it's because it's sufficient enough that gas
 2 is accumulating someplace and could possibly ignite.

3 Q. So if it's a slow leak, it doesn't accumulate
 4 enough to cause a problem?

5 A. That's --

6 Q. That's the theory?

7 A. You should ask MDU. But my understanding is
 8 that that's the way gas utilities work. I mean,
 9 it's -- you know, it is. I mean, gas leaks are
 10 detected -- gas leaks are -- they're both the problem
 11 and they're the indicator of a problem.

12 Q. So more leaks -- leak surveys would be another
 13 suggestion that you made here twice, not once?

14 A. Determine how frequently they need to do the
 15 leak surveys. They may be doing them sufficiently. I
 16 mean, annual -- annual survey may be sufficient.

17 Q. What else --

18 A. In which case what it tells you is that there
 19 aren't many problems occurring on their system.

20 Q. You've multiple times said there just isn't the
 21 justification and there aren't customer benefits shown.
 22 So what more do we need from them to -- what should we
 23 be asking for to justify these investments?

24 A. The customer benefit -- typically the customer
 25 benefit is tied to instituting the surcharge tracker

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1 mechanism. But having said that, I think you should
2 be -- I think you should be requiring them to complete
3 their DIMP, it's -- the DIMP document is in the
4 response to Staff's 3.2, and it's actually kind of
5 interesting reading.
6 But in any event, they've got -- they list
7 there action items, the things that they're doing. And
8 they should be telling you what can we do -- MDU should
9 be telling you, if we do this, we can accelerate these
10 action items and get to the point where, you know,
11 beyond the question of doing the normal leak surveys,
12 we can begin to act proactively, exactly what they mean
13 by that. I mean, different people mean things -- to
14 identify threats that need to be replaced.
15 Q. So complete the DIMP first, which will identify
16 threats?
17 A. Yes, I would say.
18 Q. Is that something that is -- isn't that an
19 ongoing thing, the DIMP?
20 A. Yeah, of course it's --
21 Q. Is there a beginning and an end to that?
22 A. Well, no, they have to set this up -- the
23 requirements are that they perfect their knowledge and
24 then continue to update it. And continuing to update
25 it would amount to what their normal thing, got a leak,

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1 okay, we have a leak on this segment and we know what
2 that segment is made of and whatever all that means.
3 What -- MDU can tell you better than I can tell you
4 what actions they need to complete the DIMP to where
5 it's just sort of a -- it's just sort of an ongoing
6 updated picture of their system.
7 Q. Is it possible that they need to do the DIMP,
8 keep working on the DIMP and as they find things, fix
9 them at the same -- you know, fix things as they go,
10 but they're still working on the DIMP. Or does all the
11 DIMP needs to be done, entire system --
12 A. I don't think -- it doesn't all need to be
13 done, no. No, it's the sort of thing that you need --
14 I mean, if -- I suppose you could construct a program
15 that were to say, all right, when they identify an area
16 that does have Aldyl A, for example, of the sort that
17 you want to get rid of, they go ahead and replace it,
18 and they recover that through a tracker.
19 Q. So it could be that they're doing that right
20 now. Maybe. Is that the tracker side --
21 A. I don't know what they're doing right now.
22 Q. That they're -- they've done some of the DIMP
23 and have identified it, and now they've got some
24 projects in 2017 and '18 that they think need to be
25 replaced or addressed. Is that possible?

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1 A. It's possible.
2 Q. But you didn't see that evidence in --
3 A. I didn't see anything that suggested that that
4 was the case.
5 Q. Okay.
6 A. But there's not -- I mean, it may be the case
7 in which case I would reassess my --
8 Q. Your conclusion.
9 A. -- my conclusions about whether, you know, the
10 program is justified at this point and whether it
11 requires tracker recovery.
12 Q. Umm-hmm.
13 COMMISSIONER FEDORCHAK: Okay. I think
14 that concludes my questions. Thanks. I think you've
15 already addressed all the tracker issues that I had.
16 So I don't need to bug you with that.
17 THE COURT: Okay. Mr. Sanderson. Oh, I'm
18 sorry, Mr. Armstrong, redirect.
19 MR. ARMSTRONG: Thank you.
20
21 REDIRECT EXAMINATION
22 BY MR. ARMSTRONG:
23 Q. I think all your testimony has been flushed out
24 a couple times by now. I just have a couple questions
25 for you.

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1 In your review of the SSIP program and/or
2 mechanism -- I understand there's a difference between
3 the two of them, correct?
4 A. Correct.
5 Q. Was an incident in Cleveland, North Dakota ever
6 brought up as a justification for the SSIP?
7 A. It was not presented to me.
8 Q. And then do you still have PCD-2 in front of
9 you?
10 A. Yes, I do.
11 Q. When is the first time you ever saw that?
12 A. When Mr. Darras's rebuttal testimony was filed.
13 Q. That was after your direct testimony?
14 A. That was after my direct testimony. What's the
15 date on this? The date of filing of rebuttal testimony
16 was the first time I saw it.
17 Q. Were you asked to review the 2017 projects by
18 Staff?
19 A. No.
20 MR. ARMSTRONG: Thank you. That's all the
21 questions I have.
22 THE COURT: Mr. Sanderson.
23 MR. SANDERSON: Thank you.
24
25 RECROSS-EXAMINATION

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1 BY MR. SANDERSON:
2 Q. I've got some follow-up for you. I believe you
3 acknowledged in response to a question from
4 Commissioner Kroshus that certainly some early vintage
5 Aldyl A pipe poses a safety risk?
6 A. It's susceptible to brittleness and cracking.
7 Q. Okay. And then you also indicated that there
8 are low-pressure replacement projects going on across
9 the country for safety and reliability reasons?
10 A. There are -- they're going on in certain
11 places, Illinois being the principal one that I'm aware
12 of.
13 Q. Okay. There's not a -- you heard Mr. Darras's
14 testimony where he said there's not a lot of
15 low-pressure systems in the country. Would you agree
16 with that?
17 A. No. I know a number of utilities that still
18 operate low-pressure systems.
19 Q. Now, let's get into this regular repairs and
20 maintenance, because this is important -- I believe
21 important. You said normal repairs and maintenance
22 that the Company does should be covered as an O&M
23 expense?
24 A. It is an O&M expense.
25 Q. Certainly. And you also testified you're aware

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1 for decades Montana-Dakota has done repair and
2 replacement and maintenance projects?
3 A. I assume that -- I mean, I'm -- I have to
4 assume that. I mean, I haven't examined their records.
5 Q. Are you -- can you identify any project prior
6 to 2018, a repair or regular repair or maintenance
7 project, that has been held not to be reasonable and
8 prudent and necessary?
9 A. I know of none.
10 Q. Okay. But yet the regular repair and
11 maintenance projects in 2018, the seven they've
12 identified, you're saying every single one of those is
13 not reasonable, not prudent, and not necessary?
14 A. What year?
15 Q. 2018.
16 A. I'm not saying that. I'm saying that the SSIP
17 projects are.
18 Q. And you're aware they're repair and maintenance
19 projects?
20 A. No, they're replacement projects.
21 Q. Okay. And then that gets back to how does --
22 how does those projects differ from replacement
23 projects they had done years prior?
24 A. As I said, it's my understanding that gas
25 utilities, and MDU is a gas utility and probably

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1 operates the same way. There are two reasons when a
2 gas utility replaces a main: Either it's been repaired
3 so many times that it's basically falling apart or
4 because you want to increase capacity or because
5 there's been excavation damage to it. And those are
6 all -- those are routine replacement projects.
7 Q. And --
8 A. They all happen because there's some damage has
9 happened to the pipe or the pipe capacity needs to be
10 increased.
11 Q. And on those routine repair and replacement
12 projects that you deem normal and operating maintenance
13 expense, those are recoverable in rate cases?
14 A. Yes, traditionally that's the way they're
15 recovered.
16 Q. Okay. And in this case, it's your opinion that
17 the repair and replacement projects, the seven
18 identified in 2018, are not ordinary and reasonable and
19 necessary because they were identified in an SSIP
20 program?
21 A. I don't know that any of those projects involve
22 repairing a leak. All I know is that those are
23 projects to replace existing facilities, the status of
24 which -- the nature, status of which MDU hasn't told me
25 about.

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1 Q. And let's talk about that. You saw the PHMSA
2 integrity management program that Mr. Darras testified
3 that identified eight threat categories; do you recall
4 that?
5 A. Yes.
6 Q. Leaks is just one of the various threat
7 categories.
8 A. Well, that's true.
9 Q. Okay. You're also aware from Montana-Dakota's
10 depreciation studies that you've reviewed in this case,
11 that they have steel pipe and facilities and
12 infrastructure in place going back to at least 1960?
13 A. I've seen that they've testified that they
14 apparently have records of vintages that old.
15 Q. Okay. So you know some of their current
16 infrastructure is over 100 years old as we sit here
17 today?
18 A. Some of their current infrastructure could last
19 another 100 years.
20 Q. Okay. And so what you're saying is until
21 there's a leak, no need to develop a plan or procedure
22 to fix it?
23 A. No, I did not say that at all.
24 Q. Okay. Would Montana-Dakota and Mr. Darras be
25 in a better position to determine what projects are

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1 reasonable, necessary and prudent as the vice president
2 of gas operations than you as an expert reviewing just
3 some of the data?
4 **A. No, not necessarily.**
5 Q. Did you testify earlier overall
6 Montana-Dakota's system is just fine? I wrote that
7 down in quotes. Is that your opinion in this case?
8 **A. Yeah, that's mostly based on both the documents**
9 **I examined and the testimony of Mr. Darras.**
10 Q. And so since it's just fine, Montana-Dakota
11 doesn't need to proceed with its replacement project?
12 **A. It is functioning just fine right now. There**
13 **may or may not be a basis for undertaking these**
14 **replacement projects.**
15 Q. One of the things in response to Commissioner
16 Christmann's questions, you said no doubt if they were
17 to adopt a rate recovery mechanism for SSIP projects it
18 would reduce the rate cases?
19 **A. It reduces one of the drivers of rate cases.**
20 Q. And yesterday you heard Commissioner Fedorchak
21 say this may come down to the appetite of the
22 Commission for the number of rate cases. So let's talk
23 about that.
24 You're being paid here by Advocacy Staff
25 pursuant to a filing fee by the Commission, correct --

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1 or by the Company?
2 **A. That's my understanding.**
3 Q. Okay. And just roughly, do you know your
4 total? What's going to be roughly the total bill for
5 just your work in this case?
6 **A. I don't know.**
7 Q. Well, what's your hourly rate for testifying?
8 **A. \$200 -- yeah, \$200.**
9 Q. And do you have -- how much time have you spent
10 prior to today going through documents and preparing
11 direct and rebuttal testimony?
12 **A. I'd have to go back and check my records. I**
13 **can't answer that question.**
14 Q. You can't estimate that?
15 **A. My billings -- the billings to date from my**
16 **time probably are in the neighborhood of 15 to \$20,000.**
17 Q. And you're aware that those -- the costs of a
18 rate case that the Company forwards to Staff are
19 ultimately passed on to North Dakota customers and rate
20 payers?
21 **A. Yeah, no, I understand that. And that's**
22 **actually a fairly common way of funding regulatory**
23 **proceedings in North America.**
24 Q. Okay. One of the things you testified to is if
25 the testing shows issues -- if the testing the Company

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1 is doing this year shows issues with the Aldyl A pipe,
2 it should be replaced?
3 **A. If the testing shows that they have Aldyl A**
4 **pipe composed of the resin that was used for several**
5 **years that turns out to create a potential for**
6 **brittleness and cracking, then any vintages that were**
7 **made with that resin should be replaced.**
8 Q. Okay. And what about -- let me ask you this
9 question, and it's more in the terms of a hypothetical.
10 Let's say the testing that is being done in Eldridge
11 this year, it may not be Aldyl A pipe, but it shows the
12 same type of brittleness and potential for cracking,
13 would you believe that would be pipe that would need to
14 be replaced?
15 **A. Yeah, that's -- that's a defect in propylene**
16 **pipe. I'm not aware that there are other vintages or**
17 **polymers that were used that have this tendency.**
18 Q. Yeah, certainly. And that's why testing of
19 these various vintages is appropriate and necessary.
20 **A. It's appropriate to find out what they have in**
21 **their -- if they can't go back to their inventory**
22 **records and determine whether they bought and/or**
23 **installed any of that particular type of Aldyl A pipe,**
24 **then the only way to find out if it's there is to test**
25 **it.**

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1 Q. Okay. And let's talk about that issue. And
2 you had some responses to Commissioner Fedorchak in --
3 with regards to this not having records, or the
4 inventory records. You're aware, this is not a problem
5 that's novel to Montana-Dakota in North Dakota?
6 **A. I've encountered it with other gas utilities.**
7 **As represented to me here, this is the worst case I've**
8 **ever seen. There may be worse cases, but in my**
9 **experience, this is the worst case.**
10 Q. You're aware that the Company serves the city
11 of Minot with natural gas service?
12 **A. Yeah, that's my understanding.**
13 Q. You're aware that the Company did not install
14 that system and yet bought it from another operator and
15 took it over?
16 **A. I wasn't aware of that, no.**
17 Q. Situations like that also establish why the
18 Company would not have the necessary records; would you
19 agree with that?
20 **A. If that company didn't keep the records and**
21 **they didn't pass them on with the sale, then, yeah,**
22 **that would be why they don't have the records.**
23 Q. And that maybe wasn't a fair question.
24 But you're aware all of Montana-Dakota's
25 infrastructure wasn't installed by the Company?

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1 **A. Yeah, that's probably true of almost every**
2 **other gas utility in the country as well.**
3 Q. Okay. Now, I want to talk about -- you said
4 two of the systems that you thought addressed this best
5 were Massachusetts and Maryland?
6 **A. I was saying these are good, thorough**
7 **regulatory arrangements for dealing with systematic**
8 **safety issues.**
9 Q. All right. And I want to get to the point of
10 this timing. Why now, or how long should this program
11 go? And again, I'm looking at your Exhibit KRP-1, the
12 2017 Department of Energy study, and specifically on
13 page 44, the Maryland section of that chart. And it's
14 talking about Maryland PSC approving Baltimore Gas and
15 Electric's 400 million 30-year stride plan. Maryland
16 is looking at this over a 30-year period.
17 **A. In that case, Baltimore Gas and Electric has a**
18 **lot of cast iron pipe in the ground.**
19 Q. Well, and in fact they're more concerned about
20 the 42 miles of bare steel that must be replaced within
21 15 years, the 1200 miles of cast iron they want
22 replaced in 30 years.
23 **A. Yep.**
24 Q. Okay.
25 **A. I'm sorry, was that a question?**

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1 Q. It was more a direct question, but I think
2 we're there.
3 MR. ARMSTRONG: I mean, at this point,
4 we're getting awful repetitive.
5 THE COURT: I'm going to let it go. It's
6 a little argumentative, but . . .
7 BY MR. SANDERSON:
8 Q. Now, one of the things I think it -- I don't
9 know if it's been made clear, but this investment for
10 replacement of pipe has no corresponding growth and
11 revenue with it with respect to new customers added?
12 **A. That's true.**
13 Q. And that's one of the things that is reason for
14 addressing these accelerated programs?
15 **A. That is one of -- that is one of the reasons**
16 **that -- for addressing this through a tracker**
17 **mechanism.**
18 Q. And certainly, because if the Company -- the
19 Bakken boom develops again and Williston is expanding
20 and the Company needs to make infrastructure
21 improvements, there's often revenue growth with that to
22 help offset the costs?
23 **A. Those are additions for growth.**
24 Q. Certainly.
25 **A. And they generate revenue.**

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1 Q. One of the things you said on your response to
2 one of Commissioner Fedorchak's questions is
3 Montana-Dakota needs to complete the DIMP model.
4 **A. It needs to complete its DIMP program, which is**
5 **getting information about the state of its system.**
6 Q. Would it be -- well, you're aware they've had a
7 DIMP model in place for a number of years and have run
8 multiple DIMP models?
9 **A. The model is just a data repository.**
10 Q. Okay. And you're also aware looking at Mr.
11 Darras's testimony that the projects selected for 2018
12 weren't just pulled out of thin air. I mean, there
13 were risk ratio scores assigned to them?
14 **A. Those risk ratios don't have anything to do**
15 **with the actual nature of the pipe system. I went over**
16 **this in my direct testimony. If you look at the DIMP,**
17 **you can tell that those are all -- that those are being**
18 **generated by generic assumptions about the nature of**
19 **various kinds of facilities.**
20 Q. And that again gets us to a position where you
21 believe you're in a better position to determine
22 reasonable, necessary and prudence with respect to the
23 2018 projects of Mr. Darras?
24 **A. I'm in a good position to determine whether the**
25 **information that has been provided is sufficient to**

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1 **demonstrate prudence.**
2 Q. And you testified that other companies have
3 mechanisms in place to recover Aldyl A and low-pressure
4 steel systems, correct?
5 **A. There are some -- there are some jurisdictions**
6 **where tracker recovery of replacement of low-pressure**
7 **systems is occurring. Those Commissions have approved**
8 **it.**
9 MR. SANDERSON: Mr. Pavlovic, I have no
10 further questions. Thank you.
11 THE COURT: Mr. Coffman.
12 MR. COFFMAN: No questions.
13 MAJOR UNSICKER: No questions.
14 THE COURT: Ms. Jeffcoat-Sacco?
15 MS. JEFFCOAT-SACCO: Yeah, I have one.
16
17 RE-CROSS-EXAMINATION
18 BY MS. JEFFCOAT-SACCO:
19 Q. When you were conversing with Commissioner
20 Fedorchak and Commissioner Christmann, with
21 Commissioner Fedorchak you were discussing what might
22 make a tracker acceptable?
23 **A. Yes.**
24 Q. Different --
25 **A. Well, the characteristics of an appropriate**

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1 tracker.

2 Q. A reasonable tracker. And then when

3 Commissioner Christmann asked you a question about

4 that, your response was, well, that would be good. And

5 I was just trying to figure out if that's the plan

6 that -- that's a good thing, oh, that would be good,

7 that's something we ought to do, the Commission ought

8 to do, or just that was better than the alternative

9 tracker that exists in the filing? And I don't know if

10 you can remember that. I don't want to make the court

11 reporter go back and find it, we can do that tomorrow

12 if we have to.

13 A. Well, I would -- I speculate that the answer is

14 yes, both that it would be good and that it was an

15 improvement over the tracker to the extent that it's

16 described in the tariff.

17 Q. Well, and what I was wondering is, is it your

18 opinion that -- if all of the evidentiary support is

19 met and this is something the Commission wants to

20 implement, that the tracker is the way to go as opposed

21 to having it in base rates. That's what it sounded

22 like to me when you said that would be good, and I

23 wanted to clarify if that's true or not.

24 A. I -- if it's in -- this is -- this is the

25 issue. If it's in base rates, if you put it in base

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1 rates, then there are going to be more base rate cases.

2 That's just a fact. If the Company's costs are, you

3 know, staying constant and aren't changing and the only

4 thing that's happening is that you're having these

5 safety replacements, then having the tracker would

6 avoid -- I mean, there wouldn't be any driver for a

7 rate case, unless somebody were to suspect that their

8 costs had actually fallen and gone down. But I don't

9 know how that works in North Dakota.

10 MS. JEFFCOAT-SACCO: All right. Thank

11 you. That's all I have.

12 THE COURT: Okay. Counsel, I'm looking at

13 the clock and I'm thinking we probably don't have time

14 to start and finish another witness yet today by 5:00.

15 I know some people have --

16 MR. ARMSTRONG: By 5:00?

17 THE COURT: Yeah. Can we start and finish

18 with somebody by 5:00 or can we even start part of a

19 direct by 5:00, or should we just come back tomorrow?

20 I think we're back on schedule and maybe even ahead of

21 schedule.

22 MR. SANDERSON: We would prefer to come

23 back tomorrow.

24 THE COURT: How many witnesses do you

25 have?

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1 MR. ARMSTRONG: I've got three left and

2 then FEA has their ROE and other issues expert as well

3 left.

4 THE COURT: Okay. I don't see any reason

5 why we can't get that done tomorrow. Is that okay with

6 you?

7 MR. ARMSTRONG: I thought Mr. Pavlovic

8 would be our shortest witness, to be honest with you.

9 THE COURT: Okay. Well, I'm thinking

10 we'll get it done tomorrow. I mean, we've only got

11 roughly 20 minutes here. So we'll adjourn for today,

12 and then we'll start at 8:30. If you want, we can try

13 to start a little earlier tomorrow?

14 MR. ARMSTRONG: We'll get through ours. I

15 mean . . .

16 THE COURT: Yeah, I think we'll get

17 through everybody. We'll do what we have to do.

18 MAJOR UNSICKER: Sir, I talked to Staff

19 earlier, would it be possible for Mr. Gorman to go

20 first thing in the morning?

21 MR. ARMSTRONG: I don't really have a

22 problem with that. All I know is our witnesses all

23 have flights at 4:58 tomorrow. So I would need them

24 done by 2:30 at the latest.

25 THE COURT: I'm fairly confident we can

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1 accomplish that. I don't think we're going to gain

2 much by staying here another 20 minutes today.

3 MR. ARMSTRONG: I agree.

4 THE COURT: Okay.

5

6 (The hearing was adjourned at 4:38 p.m.)

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REPORTER'S CERTIFICATE

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I, Christa A. Reeser, a Registered Professional Reporter, Certified Realtime Reporter, and Certified Realtime Captioner, do hereby certify that the foregoing pages of typewritten material constitutes an accurate verbatim stenographic record taken by me of the proceedings aforementioned before Patrick J. Ward, Esq., Administrative Law Judge, on the 31st day of May, 2018, at the times and place specified.

DATED: July 5, 2018

Christa Reeser

Christa A. Reeser
Registered Professional Reporter
Certified Realtime Reporter
Certified Realtime Captioner
Notary Public, Cass County

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