DIVIDER

STATE OF NORTH DAKOTA
INFORMATION TECHNOLOGY DEPARTMENT
SFN 2053 (4-2002)

CONTINUED

DESCRIPTION

PU - 399 - 01 - 186 Montana-Dakota Utilties, Co.,A Division of MDU Re 2000 Electric Operations Annual Report Filed 4/17/01 Closed 4/16/01

150 PU-399-01-186 Filed 09/20/2013 Pages: 675
Archived File - Roll No. 567 Continued From Roll 566
Public Service Commission

RECEIVED
MAR 13 2002
NORTH DAKOTA
PUBLIC SERVICE
COMMISSION
EXECUTIVE SECRETARY

STATE OF NORTH DAKOTA

PUBLIC SERVICE COMMISSION

Montana-Dakota Utilities Co.	:	Case No.
2000 Electric Operations	:	PU-399-01-186
Annual Report	:	

TRANSCRIPT OF

HEARING

VOLUME I

Taken At
State Capitol
Public Service Commission
Bismarck, North Dakota
February 25, 2002

BEFORE ALLEN C. HOBERG
-- PROCEDURAL HEARING OFFICER --

EMINETH & ASSOCIATES
Court Reporters
BISMARCK, NORTH DAKOTA
(701) 255-3513

RPR
Registered
Professional
Reporters

ORIGINAL

A P P E A R A N C E S

COMMISSIONERS PRESENT:

COMMISSIONER SUSAN E. WEFALD
COMMISSIONER LEO M. REINBOLD
COMMISSIONER TONY CLARK

MR. WILLIAM W. BINEK
Public Service Commission
State Capitol
600 East Boulevard Avenue
Bismarck, North Dakota 58505-0480

FOR THE COMMISSION STAFF.

MR. WILLIAM P. PEARCE of
Pearce & Durick
Attorneys at Law
314 East Thayer Avenue
P.O. Box 400
Bismarck, North Dakota 58502-0400

-- and --

MR. DOUGLAS W. SCHULZ of
Montana-Dakota Utilities Co.
Attorney at Law
400 North Fourth Street
Bismarck, North Dakota 58502-4092

FOR MONTANA-DAKOTA
UTILITIES CO.

MR. PATRICK FAHN
Public Service Commission
State Capitol
600 East Boulevard Avenue
Bismarck, North Dakota 58505-0480

COMMISSION ADVISOR.

C O N T E N T S

	Page No.
Opening discussion	6
Opening statements by the Commissioners	9
Summary of the application by Mr. Hoberg	10
Opening statement by Mr. Binek	15
Commission staff rests	138
Opening statement by Mr. Pearce	139

WITNESSES:

Mike Diller

Direct examination by Mr. Binek	17
Cross-examination by Mr. Pearce	50
Examination by Commissioner Wefald	61
Examination by Commissioner Reinbold	73
Examination by Commissioner Clark	75
Further examination by Commissioner Wefald	78
Further examination by Commissioner Clark	80
Redirect examination by Mr. Binek	81
Examination by Mr. Fahn	83
Recross-examination by Mr. Pearce	84
Further examination by Commissioner Clark	85
Redirect examination by Mr. Binek	87

Charles W. King

Direct examination by Mr. Binek	89
Cross-examination by Mr. Pearce	119
Examination by Commissioner Wefald	129
Examination by Commissioner Reinbold	135
Redirect examination by Mr. Binek	136
Examination by Mr. Fahn	138

C. Wayne Fox

Direct examination by Mr. Pearce	141
Examination by Mr. Fahn	146
Examination by Commissioner Reinbold	149

C O N T E N T S (Continued)

J. Stephen Gaske

Direct examination by Mr. Pearce	151
Cross-examination by Mr. Binek	196
Examination by Commissioner Wefald	225
Examination by Commissioner Clark	234
Redirect examination by Mr. Pearce	237
Recross-examination by Mr. Binek	239

Paul L. Wilkinson

Direct examination by Mr. Pearce	241
Cross-examination by Mr. Binek	256
Examination by Mr. Fahn	260
Examination by Commissioner Wefald	261
Examination by Commissioner Reinbold	264

EXHIBITS:

No.	Description	M	O	R
1	Direct testimony of Mike Diller	6	19	19
2	Rebuttal testimony of Mike Diller	6	19	19
3	PSC staff Power Point presentation	6	19	19
4	Direct testimony of Charles W. King	6	91	91
5	Rebuttal testimony of Charles W. King	6	91	91
6	MDU's witnesses' direct testimony	6	153	153
7	MDU's witnesses' surrebuttal testimony	6	153	153
8	MDU's Request No. 5 for information from Charles King	6	153	153

C O N T E N T S (Continued)

EXHIBITS:

No.	Description	M	O	R
9	Table 1, Prices and Intercontinental Exchange	6	294	294
10	MDU's Pool Sales Calculation	6	357	357
11	Reliability Assessment, 2001-2010	64	72	73
12	Selected gas utilities companies data for most recent calendar year	106	107	107
13	MAPP 2001 update to the 2000 regional plan	195	302	302
14	Public Utilities Reports, Advance Sheets	218	219	220

(The following proceedings were had and made of record herein, commencing at 9:02 a.m., Monday, the 25th day of February, 2002:)

(Exhibits 1 through 10 were marked for identification.)

MR. HOBERG: Okay. Let the record show it's approximately nine a.m. on the 25th day of February in the year 2002. This is the time and place scheduled in the Public Service Commission hearing room in the State Capitol in Bismarck, North Dakota, for the hearing in the matter of the North Dakota Public Service Commission staff complaint regarding Montana-Dakota Utilities Company in its year 2000 electric operations annual report.

In November of last year the Office of Administrative Hearings received a request from the Public Service Commission to provide an administrative law judge to preside in this matter. My name is Allen Hoberg. I've been duly designated by the Commission to serve as procedural hearing officer today.

We'll start with the parties giving their appearances for the record, beginning with the complainant, PSC, and followed by the respondent.

Mr. Binek, please, if you'd tell us -- if you'd make your appearance and tell us who you have with you, please.

THE WITNESS: My name is William Binek. I'm chief counsel for the Public Service Commission, and I am appearing today as advocacy -- as counsel for the advocacy staff in this proceeding. With me is Mike Diller, who is the Commission's chief accountant or director of accounting, and Mr. Charles King right in the table behind me, who is the Commission's cost-of-capital expert witness.

MR. HOBERG: Thank you. Will Mr. Fahn be participating?

MR. BINEK: Oh, Jerry Lein is also on the staff side. Mr. Fahn is a Commission advisor.

MR. HOBERG: Okay. Thank you, Mr. Binek. Mr. Pearce, are you handling the matter this morning?

MR. PEARCE: Yes, I am. William Pearce of Pearce & Durick in Bismarck appearing on behalf of Montana-Dakota Utilities Company. Also appearing -- well, at the counsel table with me is Mr. Donald Ball, MDU's director of regulatory affairs. Mr. Douglas Schulz is also appearing with

me, MDU's legal staff, and with him is Rita Mulkern of MDU, and also at the table with Mr. Ball and myself is Mr. Terry Blinsky, one of our witnesses, and we have four, five other of our witnesses who are in the room. I believe all of our witnesses are here.

MR. HOBERG: Okay. And you've indicated that you have about nine witnesses?

MR. PEARCE: I think we have nine altogether. That's right.

MR. HOBERG: Thank you, Mr. Pearce. I don't believe there are any intervenors in this matter today. Are you aware of any intervenors, Mr. Binek?

MR. BINEK: No.

MR. HOBERG: Mr. Pearce?

MR. PEARCE: No.

MR. HOBERG: Is there anyone else who wishes to participate in this hearing today in any capacity? Anyone else present?

All right. And, of course, we have today also members of the Public Service Commission, to my left Commissioner Leo Reinbold, Commission President Susan Wefald, and Commissioner Tony Clark; and beginning with Commissioner Wefald, who

has the electric portfolio, I'll now ask the commissioners for their opening comments. Commissioner Wefald, please.

COMMISSIONER WEFALD: Good morning. I know that this is a very important case to everyone in this room. A lot of work has gone into it by all of the parties as evidenced by the testimony that has been presented to the Commission ahead of time for us to read and to go over. I know that this -- there's important issues involved in this case, for example, the wholesale power sales that are involved in it, and I'm looking forward to a good hearing. Thank you.

MR. HOBERG: Thank you, Commissioner Wefald. Commissioner Reinbold, please.

COMMISSIONER REINBOLD: Good to see everyone here. It's a hearing and I'm here to hear what you have to say. Not many people are interested in what I have to say, so let's move on and get started.

MR. HOBERG: Thank you, Commissioner. Commissioner Clark, please.

COMMISSIONER CLARK: Certainly very interesting and important case. Enjoyed reading through the submitted written testimony and look

forward to a good hearing today. On a personal note I would add it seems like all we've been doing lately are telephone hearings, which is my portfolio, which means I usually get to ask questions first, but I get to ask questions last so I get to depend on the other Commissioners now to do all the heavy lifting for me, so that feels good.

MR. HOBERG: Thank you, Commissioner Clark. And our court reporter is Stephanie Smith today.

Just a brief summary of the application before we get going. On September 7th the North Dakota Public Service Commission received a complaint from its staff alleging that Montana-Dakota Utilities is recovering more revenue than necessary to earn a reasonable return on its investment in North Dakota to provide electric utility service.

On September 19th of 2001 the Commission found that the staff complaint stated a prima facie case and that the complaint should be served on MDU. The staff complaint was served on MDU on September 20th.

On October 9th MDU filed an answer

admitting some of the allegations of the complaint, denying others, and asking that the complaint be dismissed.

On November 21st the Commission served its notice of hearing, notice of public input sessions and notice of intervention deadline. Public input sessions were scheduled for December 11th and held. The public or formal hearing was scheduled for today.

The issues for this matter as stated in the notice of hearing are as follows: What is the value of MDU's property, useful -- used and useful, for the service and convenience of the public in North Dakota?

What is MDU's rate of return on its property, used and useful, for the service and convenience in North Dakota?

What is a just and reasonable rate of return on MDU's property, used and useful, for the service and convenience of the public in North Dakota?

What rates and charges are necessary to provide a just and reasonable rate of return on MDU's property, used and useful, for the service and convenience of the public in North Dakota?

Are MDU's rate schedules designed in such a manner that they result in a basis of charge to its customers that is just and reasonable without discrimination?

And, finally, any other relevant information or proposals concerning the proceeding.

The burden of proof today is on the complainant, the PSC staff, to show by the preponderance or the greater weight of the evidence that in the public interest MDU's electric service rate should be changed to reduce annual revenue by 9.155 million, or to show that other administrative action as a result of the staff complaint is appropriate.

The parties have agreed to a procedural schedule for this hearing and have prefiled direct, rebuttal and surrebuttal testimony. Here is the hearing procedure that'll be followed today in light of that procedural schedule.

We'll start with the complainant, the PSC staff, who indicates that they will present two witnesses in this matter, Mr. Mike Diller and Mr. Charles King. Both of them have already filed direct and rebuttal testimony. So the staff will call them to respond to MDU's -- primarily to

respond to MDU's prefiled surrebuttal testimony.

Following the questions by Mr. Binek of each of those witnesses, they will be subject to cross-examination by MDU, if it desires; and thereafter the members of the Public Service Commission may ask questions. Following Commission questions I will allow such further questions of the witnesses as are necessary.

Then following the complainant's presentation of its two witnesses, I'll call on MDU to present its case and further answer to the complaint. MDU has already filed the direct testimony of six witnesses, Mr. Fox, Mr. Gaske, Mr. Blinsky, Mr. Gress, Mr. Ball and Ms. Mulkern. It has also prefiled in response to Mr. Diller's rebuttal testimony the surrebuttal testimony of eight witnesses, Mr. Gaske, Mr. Mahowald, Mr. Wilkinson, Mr. Schiffman, Mr. Blinsky, Mr. Espeland, Mr. Ball and Ms. Mulkern.

Mr. Pearce has indicated that he will call nine witnesses today to provide further testimony, and it will be essentially the same procedure there. Mr. Pearce will have some questions for them on direct, Mr. Binek may have some questions for them on cross-examination, then the Commission

may have some questions, then I'll allow such further questions as are necessary of the witnesses.

As I've indicated, there's been a lot of prefiled testimony. If there's documentation that's introduced today besides that that's already marked and distributed, we'll need seven copies for the record.

No decision is being reached on this matter today. The proceedings are being transcribed and tape-recorded and will be reviewed by the Commission later. The Commission will then issue its findings of fact, conclusions of law and order in regard to the complaint, and anyone who doesn't agree with the final -- I should say any party who doesn't agree with the final decision of the Commission may have appeal rights or other rights under Chapter 28-32, the Administrative Agencies Practices Act or under the practices and procedural rules of the Commission, Article 69-02 of the North Dakota Administrative Code.

Expense of transcribing these proceedings, if necessary, will be borne by the party appealing the decision.

Are there any questions about the

procedures today? Mr. Binek?

MR. BINEK: No.

MR. HOBERG: Mr. Pearce?

MR. PEARCE: No.

MR. HOBERG: Commission members, any questions?

COMMISSIONER WEFALD: No.

MR. HOBERG: Okay. Mr. Binek, did you wish to begin with an opening statement?

MR. BINEK: I don't believe it would be necessary to have an opening statement. The way we intend to proceed is a little bit different in this case because this case is a little bit different.

A great deal of the testimony -- the basis for the cases are -- on both sides are laid out in the rebuttal and from the MDU standpoint the surrebuttal testimony that was just filed a few days ago and was filed in accordance with the procedure that was set up, but the staff witnesses need to respond to that surrebuttal testimony.

So instead of just having the witnesses present a summary, they will get into some depth in their opening testimony and there will be question and answer rather than just a summary, but I intend to start out with Mr. Diller, who is going to have

a Power Point presentation, and I think that that will lay a good overall -- or a good overview of the case.

So I don't think that there's any need for me to spend time with a preliminary statement. It will be covered basically in Mr. Diller's opening testimony.

MR. HOBERG: Thank you, Mr. Binek. I do hope, though, that the parties -- even though it's been docketed in the record, that all of the exhibits that will be evidence in this matter, even the direct and rebuttal and surrebuttal, will be referred to so it's on the record of the hearing today.

MR. BINEK: Yes.

MR. HOBERG: Okay. Okay. Please call your first witness then, Mr. Binek.

MR. BINEK: I will call Mr. Mike Diller, and I would ask that Mr. Diller be allowed to testify back at the desk behind me where he has the Power Point presentation set up, and there is a microphone there.

MR. HOBERG: Okay. And that's good, but we do need to swear him in, nevertheless, and I need to tell you, Mr. Diller, and really all of the

witnesses here today, as I'm required to do by law, that the maximum penalty for perjury in this state is a Class C felony, punishable by a maximum 5 years imprisonment, $5,000 fine or both.

(Witness sworn.)

MR. HOBERG: Thank you. Mr. Binek, please.

MR. BINEK: Thank you.

MIKE DILLER,

having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. BINEK:

Q. Please state your name for the record.

A. Mike Diller.

Q. And what is your occupation?

A. I serve the Commission as its director of accounting.

Q. And how long have you been employed by the -- when you refer to the Commission, you're talking about the Public Service Commission?

A. That's correct.

Q. How long have you been employed by the Commission?

A. About 14 years.

Q. And where -- were you employed anywhere prior to coming to work for the Commission?

A. I worked for the Oklahoma Corporation Commission for about four years and a couple other places before that.

Q. What is your educational background?

A. I have an accounting degree and I'm a certified public accountant.

Q. Okay. And where did you get your degree?

A. Oklahoma Christian College.

Q. Have you testified previously in rate case proceedings?

A. I have.

Q. Mr. Diller, I've handed you what have been marked as Exhibits 1, 2 and 3, and can you identify those exhibits, please?

A. Exhibit 1 is my direct testimony, Exhibit 2, rebuttal testimony, and Exhibit 3 is the Power Point slides that I'll be presenting.

Q. Was the testimony in Exhibits 1 and 2 prepared by you or under your direction?

A. They were prepared by me.

Q. Are there any corrections that need to be made to either Exhibits 1 or 2?

A. I don't believe so.

Q. If I asked you the questions today that are contained in those exhibits, would your answers be the same?

A. Yes.

Q. And do you adopt Exhibits 1 and 2 as your sworn testimony in this case?

A. I do.

Q. And you said Exhibit 3 is -- are basically the slides of the Power Point presentation that you'll be making?

A. That is correct.

MR. BINEK: Okay. Thank you. And at this time I would offer Exhibits 1, 2 and 3.

MR. PEARCE: No objection.

MR. HOBERG: Exhibits 1, 2 and 3 are admitted.

MR. HOBERG: Commissioners, do you have the exhibits?

COMMISSIONER WEFALD: Yes.

Q. (MR. BINEK CONTINUING) Mr. Diller, would you please provide a brief summary of MDU's reported earnings to the Commission?

A. Yes. As you can see here on this slide, MDU's last electric rate case was filed in 1986 and resulted in a 6.37 percent rate increase. Since

then earnings have fluctuated from year to year, and that's basically what that chart on the right shows.

The Commission has basically used a 12-percent return on equity as kind of a benchmark in settlements and even after full-blown rate cases has ordered returns around 12 percent.

As you can see then, earnings have been above 12 percent most of the time since the last rate case, and in particular the last three or four years earnings have been significantly higher than 12 percent. If -- and just to give you something to think about, I guess, each return on equity is worth about 1.1 million dollars. So if you wanted to lower MDU's electric earnings by one percentage point, you'd have to reduce rates by 1.1 million.

So just so you understand a little further, I guess, so if we had perfect vision in 1998 and we knew exactly what the future would hold in 1999, we would have lowered rates by around four-and-a-half-million dollars, and even then 2000 and 2001 earnings would have been above that 12 percent again.

So we -- staff just believes that the recent earnings are too high for a regulated

monopoly service provider and need to be adjusted.

Q. What test year are you using in this proceeding?

A. Well, it's been kind of an evolutionary process. We started out with a 2000 test year. We filed a complaint against MDU alleging that MDU was overearning by 9.155 million dollars, but then in -- a few weeks ago 2001 results were received and yielded basically the same return that the year-end 2000 did.

So in staff's rebuttal testimony we give consideration to the new 2001 test-year information and MDU's testimony effectively moving the test year to 2002 and beyond. Staff reduced its original position to a finding of excess earnings of 7.3 million instead of the 9.2 million.

Q. What should the Commission consider in determining if rates are too high?

A. Well, the Commission's been employing profit regulation for a long, long time, and we should stick with that. Profit regulation is comprised of three basic components, rate base or investment in North Dakota electric plant; and then rate of return, which is adjusted a weighted cost of capital. It's a percentage that's based on the

cost of debt on term -- I'm sorry, cost of debt, common equity and preferred stock. If you take rate of return times rate base, you get return required, and then you compare that to net regulated income, and the difference is excess earnings. You've got to apply a tax factor to that, but essentially that's it.

Q. Would you describe what has happened to the rate base level since the last test year?

A. Yes. We -- the Commission authorized 140 -- approximately 140-million dollars of rate base in the last test year, and rate base did climb the first two or three years after that and since then has been kind of on a downward spiral. There was a little bit of an increase there in the later years, but overall the trend has been deteriorating rate base, and basically what that means is that accumulated depreciation and accumulated deferred income taxes are outstripping plant and service additions.

Q. What do you mean by rate base? What is rate base?

A. What is rate base?

Q. Yeah.

A. Okay. I think that's -- well, rate --

Q. Just a general description.

A. Yeah. I think we're going to see it on the next slide, that's why I'm hesitating, but rate base is just an investment necessary and plant in service, materials and supplies, those kinds of things to provide electric service.

Q. Okay. Thank you. Is there any agreement between staff and MDU as to the appropriate rate base level for this proceeding?

A. Yes, basically there is. We don't have an issue with rate base any longer. In rebuttal testimony staff updated rate base for 2001 financial information which does reflect, like I indicated, a lower rate base than originally filed for the year-end 2000, but we also accepted MDU's adjustments to rate base for what it termed as extraordinary capital costs in its rebuttal testimony. So in surrebuttal testimony MDU accepted staff's rate base, and there really is no issue with rate base.

Q. Please provide the Commission with a detailed summary of rate base as agreed to by the parties in this case.

A. This slide basically shows what I just talked about, the different components of rate

base. The beginning -- though this slide does not indicate, the beginning balance there is the beginning balance as of 2002, and then the adjustments reflect MDU's extraordinary capital costs, and so we have a higher ending balance, and just average the beginning and ending and that's what we've agreed to as far as rate base, the $128,902,000.

Q. Okay. Moving on to the next component of profit regulation, and that's the required return on investment. Please summarize the reported cost of capital since the last rate proceeding.

A. I presented this at the public information session. It's included here just to refresh the Commissioners' minds, but essentially we started -- when we -- when the Commission authorized the last rate of return, it was set at 10.88 percent. That just indicates what MDU has reported to us over the years as far as its actual cost of capital, weighted cost of capital, to give you some idea of where it's been, and the components of cost of capital are listed on the left side there.

Q. Has the North Dakota Public Service Commission had any rate cases or earnings review proceedings in the years 2000 and 2001?

A. Yes, it has.

Q. What are those cases and when were they decided?

A. Well, we had a couple PBR cases with Otter Tail and NSP, and in those cases we used a 12 percent return on equity as a benchmark. I'm --

MR. HOBERG: For the record, Mr. Diller, PBR is what?

THE WITNESS: Performance based regulation.

MR. HOBERG: Thank you.

THE WITNESS: The order date for NSP was December 29th -- and Otter Tail was December 29th, 2000, and -- I hope I'm not getting ahead of you, Bill, but --

Q. (MR. BINEK CONTINUING) Go ahead.

A. -- we also had a gas case with Northern States Power Company where the Commission authorized or ordered an 11.5 percent return on equity.

Q. Okay.

A. And that one was decided October 9th -- I'm sorry. That's application date. It was ordered June 27th, 2001.

Q. And the -- that NSP gas case, was that a

regular rate proceeding rate case?

A. Yes, it was.

Q. And what -- what did you say the return on equity was set at in that case?

A. 11.5.

Q. Was there expert testimony on cost of capital and return on equity in that case?

A. There was.

Q. Who was the staff's cost-of-capital witness in that case?

A. Mr. King.

Q. Pardon me?

A. Mr. King.

Q. Okay. The same witness that is here --

A. Same witness.

Q. -- today. Would you please provide the Commission with a comparison of MDU's cost of debt with the other two investor-owned utilities operating within the State of North Dakota?

A. Bill, could we go back one?

Q. Oh, I'm sorry. Did I move ahead of you here? Okay. The cost of capital comparison?

A. Right.

Q. Would you please provide a cost of capital comparison for the Commission to identify the

differences between the company's recommendation and that of staff?

A. Yes. On this slide you can see that the capital ratio is the same for both staff and MDU. We are not taking issue with the capital ratio. We are taking issue with the cost of long-term debt and the cost of equity, and I've highlighted those with original boxes there. That's -- those are the issues with regard to cost of capital.

Q. Now would you please provide the Commission with a comparison of MDU's cost of debt with the other two investor-owned utilities operating within North Dakota?

A. Yes. What we have here basically is a chart of long-term debt cost reported to the Commission since MDU's last test year. In the last test year the Commission authorized a long-term debt cost of just a little over ten percent. That's signified by the solid red line there, and then you have the comparison of MDU, Otter Tail and NSP as far as the cost of debt. NSP is around seven, Otter Tail's is around eight, and MDU's is around nine.

Q. Who from the staff will be testifying to the appropriate cost of long-term debt?

A. Mr. King.

Q. Moving on to the last component of profit regulation, please summarize net regulated income results reported since the last rate case.

A. Well, net regulated income is simply revenues less expenses. Again, the red line indicates what was authorized in the last rate case back in 1986. You can see that net regulated income has fluctuated some. It appears like there's a number of years here that they've under-earned, but that's not really the case. If you recall the rate base summary, rate base has been declining, and so when net income declined there in that dip, it really wasn't a problem. MDU still managed to return -- earn a reasonable return on its investment, and you can see in the last few years that net regulated income has gone up quite a bit.

Q. Okay. I think you've already answered this, but did MDU underearn every time its return dipped below the red line?

A. No.

Q. Would you please break down revenues by major categories for the Commission?

A. Well, I've broken them down into three

categories, retail sales, sales for resale, and then anything else, other revenue.

Q. Did staff make any adjustments to the 2001 retail revenues?

A. We did not. MDU does not calculate the impact of weather on retail sales. Both Otter Tail and NSP provides us with weather normalized information, but MDU does not have that capability, and so in order for us to make an adjustment to retail sales we would have had to develop our own econometric model, and we just simply don't have the resources to do that. I will make note here that North Dakota net margins, if you take revenues less production expense and include the off-system sales, which has fluctuated in the last few years, if you take those out, the net margins are down 1.1 million dollars in 2001 compared to 2000, but we've not made an adjustment.

Q. If this case used a 2000 test year, would North Dakota net margins be higher?

A. Yes. 1.1 million dollars higher.

Q. Why didn't staff develop its own economic -- econometric model for forecasting sales and make a weather normalized adjustment?

A. Well, like I said, we don't have the

internal resources necessary to develop something like that. It has also to do with the way the Commission is funded. We were provided dollars to hire expert witnesses for rate increase applications, but the legislature appropriates very little money for cases like this. In fact, we had to stretch this thing over two bienniums in order to put the funds together to hire our one expert.

Q. Now moving on to sales for resale margins. First, would you please explain what you mean by the term "sales for resale"?

A. Explain the -- I'm sorry. What did you say?

Q. What do you mean by the term "sales for resale"?

A. Sales for resale is kind of what it sounds like. It's sales that MDU makes to another company for resale to the end customers.

Q. And how important is the resale issue in this case?

A. Very important. It's most of the case. You can see the numbers on the left-hand side there. I mean, this is some serious -- serious money here. Those are five-million-dollar increments on a total company basis.

Q. Would you please summarize how margins have changed in recent years?

A. Well, this slide shows that, and basically -- is that first year '96? 1996 MDU reported 1.9 million dollars of net margins on sales for resale, in 1997 it reported 2.5 million dollars, in 1998 it reported 4.8 million dollars of margins, in 1999 MDU reported margins of 9.9 million, in the year 2000 MDU reported margins of 15.9 million dollars. In staff's case it's -- in staff's case it has included total company margins of 15.1 million, just slightly down from 2001, and then MDU has -- is currently -- as far as I'm aware, currently at 6.4 million dollars for net margins in 2002.

Q. What has caused the growth in margins?

A. Well, the number of customers have grown, volumes are up, and revenues per megawatt-hours have increased, as well. If you take change in volumes and change in price, that affects the net margins.

Q. Why should the Commission place more reliance on actual results than MDU projections using the futures market as a proxy for test year sales for resale margins?

A. I'm sorry, Bill. You're going to have to read that again. I didn't hear it.

Q. Okay. Why should the Commission place more reliance -- well, first of all, why don't you explain this difference. What is the difference between staff and MDU?

A. Well, this slide capsulizes the difference, I guess. We are relying on actual results, and MDU -- MDU's case relies on future projections.

Q. And why should the Commission place more reliance on actual results than MDU's projections, which use future markets as a proxy for test-year sales for resale margins?

A. Well, it sounds kind of coy, but actual results have actually occurred, and there's some confidence in that, I guess. It's not based on a theoretical application. In MDU's case the future projections are based on a lot of variables, and, you know, it gets -- it gets down to what we've testified in our -- each party's testified in its case, and that's the general market condition is -- it's kind of hard to predict what's going to happen in the near term and thereafter. I --

Q. Go ahead.

A. Okay. I guess predicting off-system sales margins for any length of time to me is more of an art than a science, and I just think that there's room to consider both parties' presentations.

Q. After reading MDU's testimony, can you identify factors it claims affect the future price of electricity?

A. Well, what I did -- the time frame -- the turnaround in rebuttal and surrebuttal was so close that I can't address all the issues that MDU has brought up. They've added quite a few new witnesses and new information in the surrebuttal round. So what I did is just tried to identify factors that affect resale margins in their testimony, and I thought they were pretty good. Future contracts, natural gas prices, droughts, national economy, manufacturing industry, new generation capacity, natural gas supplies. These things all affect future resale margins. Weather, natural gas transportation rates, incremental operating costs, transactional risks, fuel cost differentials, transmission constraints, generation mix, transmission access, market power of supplier, institutional inefficiencies, regulation uncertainties, stranded costs exposure, plant

outages, incomplete market information, and finally, nuclear safety regulations, hedging activities, spark-spreads, conservation programs, gas exploration levels, gas in storage, and a general market uncertainty.

Q. What do you recommend with regard to sales for resale margins?

A. Well, I think the uncertainties of the future warrants the consideration of actual results as a proxy for future rates.

The resulting rates in this proceeding may be in effect for 15 years. Using an average of recent results will smooth out recent market fluctuations and provide for a normalized level going forward.

And I might be called the big easy, I guess, for suggesting this, but I am going to suggest an alternative here for the Commission's consideration, and basically that is to use an average of the sales margins for the past three years for purposes of this proceeding.

Q. Please show the Commission how you have calculated this proposal.

A. It's rather straightforward. The next slide shows how it's calculated. Basically add '99

margins, 2000, and 2001 margins. You need to add back demand penalties, which I'm not sure why they were included in the first place in the margins, but that's also in our testimony, that demand penalties should not be included as a cost of service. So you add that back in and you get total margins then of 35 million over the last three years. You get a three-year average, compare it to 2001 resale margins. The difference is 4.2 and you jurisdictionalize that, and staff is willing to step down once again and reduce net margins by 2.8 million dollars on North Dakota basis.

Q. Why are you recommending this proposal?

A. Well, I think that staff needs to remain considerate of what the company's trying to do and considerate of the testimony that it has provided. We're not operating with blinders on. We see that there has been a hiccup in the general economy, market conditions, and so this is just a proposal, I think, to keep our testimony relevant and in the ballgame.

Q. Okay. Next moving on to expenses, please summarize any remaining differences between MDU and staff.

A. Okay. The remaining issues, demand

penalty and A&G costs. As far as the demand penalty goes, staff argued that it should be excluded. Company in its surrebuttal testimony argued that, well, if you're going to exclude the demand penalty, then you should at least give us the cost of procuring additional capacity to avoid the demand penalty, and that made sense to me, and so the demand penalty is excluded. The additional capacity costs that MDU suggests in its surrebuttal testimony is now included in the staff's position.

As far as the A&G costs, I think it requires a closer look.

Q. Please provide a summary of the administrative and general expenses so the Commission understands what is included in the costs.

A. Okay. In the administrative and general expense category we have, I don't know, ten or so different accounts, salaries, office supplies, outside services, property insurance, injuries and damages, employee pension and benefit costs, regulatory commission expenses, general advertising, miscellaneous, rents and maintenance of the general plant.

Q. In recent years A&G costs in total have

been decreasing. Please identify what caused A&G expenses in 2001 to increase by 12.4 percent.

A. Well, it's pretty easy to identify what's caused the increase, and I guess that's the purpose of this slide. You can see in 2001 that A&G costs in total went up about 12 percent, and then MDU's position is another 12 percent above that for 2002 and beyond. As far as 2001 is concerned, salaries -- A&G salaries are up a little more than $800,000, office supplies is up about 37 percent or $800,000. I guess the rest are pretty much the same.

Q. Please identify the A&G expenses that remain unresolved in this case.

A. Office supplies, insurance expense, and pensions and benefits, and under pensions and benefits we have pension expense, FAS 106, or post-retirement benefits, and SISP, which stands for supplemental income security plan.

Q. In the last chart it showed that office supply -- office supplies expense increased from 2.122 million to 2.906 million when comparing 2001 to 2000, or 37 percent in office supplies. Please explain what would cause this.

A. Well, within the office supplies expense

account we have a number of items that are included in there, automobile service, bank charges, books and subscriptions, building service, communications, office equipment, computer infrastructure, membership fees, office supplies, legal department expenses, postage and printing, meals, travel, incidental expenses, and corporate aircraft. The ones in red there are the particular items addressed by Mr. Ball in his testimony as to the reason that office supplies expense is up 37 percent and will stay there.

Q. What do you recommend the Commission should approve of a reasonable and ongoing expense level?

A. Well, staff's position is that -- is that we -- office supplies expense is somewhat controllable. The Commission has an office supplies expense account, just like I suppose any other business, and there are years when we spend a lot of money on software upgrades or equipment upgrades, and then there's years that we don't spend hardly anything.

It -- if you go back and look at those items that I've provided you a list of, there's some controllable costs in there, and I guess

staff's approach has been kind of like the legislature's approach to us when we request appropriations, and that is we're going to give you so much money and that's -- and that's what you're going to -- that's how you're going to conduct your business, and so we've added five percent on top of 2000 and suggested that that's the level we should use in this proceeding. And then I guess -- can I go ahead, Bill?

Q. Sure. Go ahead.

A. I guess to finish up the slide here, MDU's surrebuttal testimony does not provide an analytical approach to quantifying future estimated costs. In Don's -- Mr. Ball's testimony there are some words that explain why costs are going up, but it's not -- it's not adequately quantified in my mind to convince staff to change its position, and I might also say, for instance -- I guess if I'm going to say it's not adequate, I should give you at least one example of why I think that, and as far as I know, there hasn't been any effort to quantify the amount of savings on corporate airfares that MDU expects because of owning this corporate aircraft now and -- or at least having it at their disposal beginning in 2001.

So I just think a lot more work needs to be done before I can suggest a 37 percent increase in office supplies expenses is reasonable.

Q. Moving to insurance expense, what accounts within the A&G expenses are used to record insurance expense?

A. I think it's account 924 and 925. I think those are the FERC account numbers, but in any event, property insurance is the cost of insurance or reserve accrual to protect against losses to property; and injury and damages account is the cost of insurance or reserve accruals to protect against damage claims of employees or others not covered by insurance, and those are basically FERC descriptions of those accounts. The Federal Energy -- FERC stands for the Federal Energy Regulatory Commission.

Q. Have you reviewed Mr. Ball's surrebuttal schedule DRB-2, calculating MDU's increased insurance expense?

A. I have. I have the same concerns with their analysis of insurance expense. As I recall -- I don't remember -- did you reference his schedule, Bill?

Q. DRB-2.

A. I don't have it in front of me, but it's -- I can recall it well enough. In that schedule Mr. Ball lists premiums by all the different insurance carriers, comes up with a total company amount, and then jurisdictionalizes it and compares that to what MDU or Mr. Ball calls, I think, North Dakota expense of 420,000, is what I recall, and the difference is an adjustment. I don't know what that $420,000 represents.

If I look at both -- if you go back -- if you go back here and you add up property insurance and injuries and damages for 2001, the 344 and 474, you'll have over $800,000 worth of insurance costs. Now there might be other insurance costs in other accounts somewhere, but when you -- when you consider that there's $800,000 worth of expenses here and their list comes up with $800,000 worth of expenses, I don't know if that's an increase or not. I just can't tell from that schedule.

MR. HOBERG: I'm sorry. Mr. Diller, you said "when you said you go back here." The record won't reflect where you went back to unless you tell us.

THE WITNESS: To DRB-2.

MR. HOBERG: Thank you.

THE WITNESS: Okay. So our position remains unchanged.

Q. (MR. BINEK CONTINUING) Okay. And that includes insurance expense?

A. Right, right.

Q. Okay. Moving to pension and post-retirement expense, what have you concluded after reading Mr. Ball's testimony?

A. I sound like a broken record, but I guess I have the same -- same concerns with it, and I did provide Mr. Ball with a courtesy call, I think it was Saturday or Sunday, this weekend, left a message on his machine, and I understand that he's going to have some more information, but, you know, MDU chooses to update some costs for pension costs and post-retirement benefits.

There's a lot more money in that 926 than pensions costs and post-retirement benefits. I don't know what else is in there, but it's -- it would be kind of like me -- it would be kind of like me going -- Susan's -- Commissioner Wefald is looking at me. It would be kind of like going into Commissioner Wefald's bank account and looking to see that a particular item changed from one year to the next and concluding that she needs more money

to live her life without considering all the costs associated with a particular category or classification of expenses.

Some of it may be just I don't -- I'm not seeing it. So we'll give Mr. Ball an opportunity later to clear this all up, but for -- I guess so the company knows exactly where I'm coming from, if you take 2001 pension expense, which is a negative 1.7 million dollars because fund assets are taking care of current costs, and then you add to that post-retirement benefits in 2001 of 1 million dollars, that means you've included an analysis of a negative $600,000 worth of pension and benefit costs, and if you go way back there again and -- I never can go the right direction -- you can look down there and see that the employee pension benefit costs for 2001 is 2.4 million dollars positive.

MR. HOBERG: And again, Mr. Diller, where are we looking right now for the verbal record, please?

THE WITNESS: In the administrative and general expenses slide.

MR. HOBERG: Thank you.

THE WITNESS: And so, again, Mr. Ball may

very well have some answers for these things, but at this point staff is unable to concede to anything.

Q. (MR. BINEK CONTINUING) And now we come to the last expense issue, which is supplemental income security plan. In your rebuttal testimony you speak about a number of other benefits MDU employees receive and that only 27 employees are considered key employees and that there is a lack of symmetry in the plan. Can you give the Commission any other reasons why it should not allow SISP as a ratemaking expense?

A. Well, I know this is a hot issue and very important to the people in this room, but I have a lot of concerns with it. Basically, just so we're clear, SISP represents a double pension for key employees. That's essentially what it is.

It was a few weeks ago, but I had trouble sleeping one night so I was up from two to four o'clock in the morning, and, of course, nothing's going except reruns of Congressional hearings and things like that, and so I was watching the Congressional hearings on Enron, and, I mean, I don't know -- it was weird, but they were talking about key employees, and the ex-CEO was being

questioned about the 100 million dollars that Enron paid to its key employees to keep them on board -- on board as far as the sinking ship was concerned, and it was 100 million dollars. In this case MDU's only asking for 100 million dollars for --

Q. 100 million dollar or 1 million?

A. I mean 1 million. Yeah, I wish -- they wish, they wish. 1 million dollars for 2001, but it's still a significant amount of money, and one of my employees when I'm -- when I'm struggling with an issue trying to decide what the right thing to do is, he said, Mike, if you can justify it on the front page of the paper, then you can do it, and that's -- I guess that's a principle that I'm living by here when I talk about supplemental income security plan.

I can't justify spending on average $40,000 per employee. If you take the million dollars, divide it by 27 employees, have $40,000 per employee for 2001 and forevermore -- or until rates change again, I just can't justify that, and I'm uncomfortable with it.

I think that people in -- Enron has been an interesting case, and I think it has a warning to all of us, especially managers of companies.

And then the next one is beneficiaries. Who is SISP benefiting? Again going back to Enron, I remember the -- I remember one of the Congressmen asking the question, well -- or not even asking, basically stating that, you know, it looks to me like -- it looks to me like that what you've done is management's taken care of itself. That's what it looks like to me.

And so who are the beneficiaries? Are the ratepayers the beneficiaries of this or are the stockholders the beneficiaries? You decide, I guess.

And then mergers and acquisitions I think are also in the mix here. Every time NSP merges or thinks about merging, the people I work with, the people I talk to, they're scared to death. We don't know if we're going to have a job when this thing's over, and they're key employees, and when we get down to the five bell operating electric companies as this continues to -- it's just a manner of speaking -- continues to play out, there's going to be a lot of employees looking for work, and there already are some. So we remain unchanged in this position.

Q. Please summarize staff's adjustments to

net regulated income.

A. This is just a schedule of everything that we've talked about. Some of these numbers come from direct testimony, rebuttal testimony, surrebuttal testimony, but it capsulizes staff's adjustments to 2001. We reduce sales for resale margins by 2.8 million dollars, and these are North Dakota numbers, by the way. We amortize the AVS maintenance over three years, eliminate demand penalties, add additional capacities for purposes of not incurring any more penalties, eliminate Schedule F revenues, include -- and we include Energy Share and Lignite Council dues in ratemaking expense, normalize office supplies expense. We add depreciation for the plant additions that we made in agreement with MDU, and in the last number there, income tax expense is just -- it's adjusted to reflect all the other adjustments above that.

Q. Would you please provide a summary of net regulated income?

A. Next slide does that. It shows 1999, 2000, 2001 reported earnings and then our adjustments are in there, and you have a test-year net regulated income of 15.7766 million dollars.

Q. After giving consideration to MDU's

surrebuttal testimonies, please show the Commission how you've calculated what you believe to be MDU's excess earnings position.

A. All the way over on the right side, the rate base that we've essentially agreed to is the first item, 128 million dollars. The rate of return required -- it does reflect staff's position, using 11.7 percent ROE and its cost of date. So the rate of return is 9.92 percent. Multiply the first two, get the third line, compare that to the return earned that I just summarized in the previous slide, get a return excess of 3 million dollars, you apply the tax factor to that, and we are arguing at this point that MDU should use its revenues by 5 million dollars or thereabouts.

Q. Now you've -- staff has reduced it position from basically 9 million dollars to 5 million dollars; is that correct?

A. Yeah, I know. Staff's calling me the big easy, but I'm just trying to be as responsible and forthright and fair as I can.

Q. Has MDU changed its position in any way that you're aware of?

A. No. Not that I'm aware of.

Q. Do you have anything else that you would like to present to the Commission prior to cross-examination?

A. Well, I -- I thought it would be helpful to the Commission, depending on what it decides -- it may or may not need these last couple of slides, but I'm just providing the Commission with a worksheet. There's really only four issues in this case, and once you've decided those four issues, you plug in the numbers, and whatever the revenue excess calculates on the bottom, that's what you should order.

Cost of capital -- you've got to decide what the long-term debt cost should be and you need to decide what the common equity return should be, percentage return. You plug that in and you apply it to the average rate base to get a return required, and then all you need -- all you need is net regulated income, what you think that'll be in the near future or thereafter, and you need to make an adjustment for administrative and general expenses and sales for resale. Plug those in and have your staff run through the income tax calculation on the bottom and you'll have your answer. So it's just provided mostly for your

staff, I guess, to use if they so choose.

MR. BINEK: At this time I tender the witness for cross-examination.

MR. HOBERG: Thank you, Mr. Binek.

THE WITNESS: Should I -- should I go up there now?

MR. HOBERG: Mr. Pearce --

MR. PEARCE: That would be more --

MR. HOBERG: -- would it be preferable to have him up there.

MR. PEARCE: That would be more convenient for me rather than having to turn around --

MR. HOBERG: Okay. Please, Mr. Diller.

MR. PEARCE: -- if that's possible.

MR. HOBERG: Mr. Pearce, please. Yeah. It might work best if you could put the mike on that side.

MR. PEARCE: Over here perhaps.

MR. HOBERG: Yeah, right there. Thank you.

CROSS-EXAMINATION

BY MR. PEARCE:

Q. Okay. I have a few questions. Mike -- may I call you Mike? We've known each other for years.

A. Please.

Q. Mike, you indicate in your testimony, and it appears in your Exhibit 3, the Power Point presentation printout here, that you effectively moved the test year to 2000 and beyond; is that right?

A. 2002.

Q. 2002, I mean.

A. That's correct.

Q. 2002 and beyond.

A. That's correct.

Q. Does that reflect your opinion that for rates that are going to be forward going to the future it's most appropriate to use the most recent information available?

A. Yes.

Q. Now in your discussion of sales for resale margin you indicated that there are lots of variables and many factors. In fact, I believe you listed a series of four pages of factors here that you think are pretty good ones, if I may quote you; is that correct?

A. I agree with the company that those factors do in fact affect the price of electricity.

Q. And you're recommending now, as I

understand your testimony, a three-year average of sales for resale margins as the appropriate benchmark?

A. That's true.

Q. What was the purpose for three? I mean, why not five to get a longer range analysis?

A. I guess you could -- you could go back ten years when there wasn't any resale margins, I guess, ten years ago, or none to speak of. To answer your question directly, it's just arbitrary. I don't think it would have made any difference to add another year because -- let's see, 1998 resale margins were still quite high, but if you went back five years, it would change it a little bit.

Q. And again, if I may quote you, I think you referred to 2001 as a hiccup in effect in the national economy, recognizing that the year 2001 is going to have some very unusual features about it.

A. Is that the word I used, hiccup?

Q. You did use hiccup, I think.

A. Okay. Yes, I guess I did.

Q. I'm not sure how to spell it, so I have it in my notes here probably misspelled. And you testified that trying to estimate prices in the future is based on a lot of variables and it's more

of an art than a science, but you would agree, however, would you not, that insofar as there are reasonable techniques to try to project these prices, it would be appropriate to use them?

A. Yes.

Q. I don't think I understood in your testimony on the office supplies and expenses account why you chose five percent as an allowance. Was that a --

A. That was just an arbitrary number. Could be ten. I thought five was reasonable.

Q. But you wouldn't think ten was unreasonable?

A. I wouldn't argue strenuously against ten.

Q. And just to set the record straight, I assume -- I hope you're not suggesting that Montana-Dakota Utilities is run in some fashion similar to the way Enron was run.

A. I have no reason to believe that.

Q. Your -- let me find the right page. The page of your exhibit showing the resale margins -- here it is. I guess the pages aren't numbered, but somewhere about a third of the way through the sheet labeled resale margins it reflects a very substantial decrease, does it not, from 2001 to

2002 in the net margins?

A. I think you're referring to MDU's projections, the decrease from 2001 to 2002. That represents MDU's projections.

Q. Right. Down to the figure you show for MDU 2002, right at the far right, that's the projections?

A. Right.

COMMISSIONER WEFALD: Excuse me. Where is he referring to?

MR. HOBERG: He's referring to the resale margin, I believe, the chart. This one.

MR. PEARCE: About a third of the way -- or half the way into his --

THE WITNESS: I couldn't figure out how to number those slides. I'm sure there's a way, but I was in a hurry.

Q. (MR. BINEK CONTINUING) Given that you are in effect, as you say, moving the test year forward to 2002 and I believe your agreement that the most recent actual results provide the best benchmark, if the evidence to date shows a continuing decline in sales for resale margins, would it not be most reasonable to give the most weight to the most current figures? In other words, we're looking at

the -- we're always trying to base ongoing rates with the future on conditions that will exist in the future, are we not?

A. There was a lot in that question.

Q. I'm sorry. Let me --

A. I can -- I can ramble a little bit, but if you want to narrow that down --

Q. Yes. Let me redo that. I realized halfway through it was getting rather convoluted. The point of the question was: In your opinion, is it most -- would it be most reasonable, if we're looking at rates that are going to be going forward into the future, to base our projections on the most recent available information and trends?

A. That is true. I feel like I have to say something else here. That's true, but we have to keep in mind that we're not necessarily setting rates just for the next six months. It's our hope that we can develop rates that'll be in effect for the next 15 years, and we may not achieve that and that may not be achievable, but this is -- you know, ratemaking is theoretical, and we need to -- in the end we need to come up with rates that are going to make sense over a period of time, and I would not -- I would not conclude that this is just

for 2002.

Q. Do you have any basis for believing that the hiccup, as we've characterized it, in 2001 will return in 2003 or 2004 or 2005?

A. That's the whole quandary in this -- I mean, that's the problem with this whole case, is nobody's sure what's going to occur. The general market is unsure where it's headed. You know, you listen -- I listen to the news like everyone else. One guy says we've had a recession, another guy says we haven't had one yet. I don't know. I don't have a crystal ball.

Q. I assume you have seen -- looked at Mr. Ball's surrebuttal testimony, which hasn't gone into the record orally yet, but to the effect that at least the first month-and-a-half of 2002 are continuing to show a fairly dramatic decrease in resale margins?

A. I believe that's what his testimony shows.

MR. HOBERG: I think, Mr. Pearce, we've marked your surrebuttal as Exhibit 7; is that right?

MR. PEARCE: That's right. That's right.

Q. (MR. PEARCE CONTINUING) And turning back to your -- I believe this is your prefiled direct

testimony, which would be Exhibit 1, on page 8, line 21, you say it's difficult to determine to what degree --

A. You're on my direct?

Q. Yes, yes.

A. The direct?

Q. I think my reference is to your direct, I think, page 8, line 21.

MR. HOBERG: Exhibit 1.

MR. PEARCE: It would be Exhibit 1.

COMMISSIONER CLARK: Line 21?

MR. HOBERG: I think you said page 8, line 21; is that right?

MR. PEARCE: Yes.

THE WITNESS: "In this case staff has determined not to pursue"; is that where we're at?

MR. PEARCE: I think I'm on the wrong -- I'm on the wrong -- I may be wanting to refer to the Exhibit 2. Yes. I'm sorry. Exhibit 2, your rebuttal testimony. It's at the bottom of page 8, and you're saying --

THE WITNESS: Just a second. Exhibit -- okay. Rebuttal testimony.

Q. (MR. PEARCE CONTINUING) Exhibit 2, I'm sorry. It's your rebuttal testimony.

A. Okay. I'll be right with you. Okay.

Q. And I'm not saying it's inconsistent -- it's consistent with what you've testified to this morning, but you're saying a fair bit of judgment by the Commission will be required to decide the issue of how these economic factors will affect prices. You're not saying, though, are you, that the Commission should not exercise its best judgment but simply rely on past data, but --

A. I think it's a difficult issue and it's a difficult case, and they should exercise due diligence in their determination.

Q. Relying on the evidence in the case, of course?

A. Sure.

Q. Then on page ten of that rebuttal testimony, toward the top, actually lines four and five and six, you're agreeing that it appears that this is in relation to one of these factors that will affect the future resale margins?

A. You're talking about MAPP now?

Q. Right. You appear to be agreeing that planned additions to generation will outstrip the projected growth and demand, and then you indicate that some believe that the recent effects

surrounding Enron has changed the energy markets in general. Are you saying that you have some evidence that these -- this new generation will not come into place because of the Enron situation? I didn't understand what you were getting at.

A. Well, you know, it's -- it's always difficult to determine where resources will go, and we don't have unlimited resources. Some of the resources may go to war efforts or technologies or Dot-Coms or generation. I don't know, but any time you have some market changes like we're experiencing, the market's going to respond to that and resources are going to go in different places, but -- so I guess that's what I was thinking when I wrote that. We know that Enron has affected a lot of companies. If you watch the news like I do -- I guess I have a couple -- couple of news reports, if that's what you want, that would state a similar kind of thing. If you're interested in that, I can provide that.

Q. I just was -- the question really was, I guess, more directed at your -- your assessment of the situation, and I realize none of us are -- or I guess actually I'm not an expert on the Enron situation, but do you have any strong reason for

believing that the Enron situation will dramatically affect the growth of future generation capacity, I guess is what I'm asking?

A. Well, I'm not an economist and I've not fully researched this. When I make this statement, it's based on news shows that I've watched and articles that I've read at my desk while working for the Commission indicating that resources are harder to come by now that Enron has caused this flap, and it's understandable. People are a little worried as to, well, what do the books and records really mean, and that reflects on the energy industry and the independent power producers, and they have to have a lot of capital to build a generation facility, and that's all I'm trying to say.

MR. PEARCE: That's all the questions I have.

MR. HOBERG: Thank you, Mr. Pearce. Perhaps we should take a ten-minute recess here before we start with Commission questions.

(Recess taken.)

MR. HOBERG: We're back on the record after a short recess, and we're about to begin questions by the Commission. Mr. Fahn, as

commission advisor do you have any questions of Mr. Diller at this time?

MR. FAHN: No, I don't. Thank you.

MR. HOBERG: Thank you, Mr. Fahn. Commissioner Wefald, did you have any questions of Mr. Diller, please?

COMMISSIONER WEFALD: I have a few.

EXAMINATION

BY COMMISSIONER WEFALD:

Q. Mr. Diller, I was -- went on to the web site of NERC this morning, and I found a report, and it was the reliability assessment of 2001-2010. It's called The Reliability of Bulk Electric Systems in North America, and it's dated October 16th, 2001, and it's put out by the North American Electric Reliability Council.

MR. HOBERG: Are you familiar with that, Mr. Diller?

THE WITNESS: Not really.

COMMISSIONER WEFALD: Should I pass him a copy?

Q. (COMMISSIONER WEFALD CONTINUING) Are you familiar with this report?

THE WITNESS: I'm not familiar with it.

COMMISSIONER WEFALD: May I pass this

report to him?

MR. HOBERG: Sure.

Q. (COMMISSIONER WEFALD CONTINUING) I've underlined several sentences under Resource Assessments for MAPP under -- on page 43.

A. Okay.

Q. Would you read those sentences?

A. Just the bottom?

Q. Mm-hmm. The things that are underlined on that page.

A. Oh, okay. All right. First part of the paragraph that's underlined, "The MAPP-U.S. region is judged to be inadequate over the 2001-2010 period."

Q. The MAPP what?

A. The MAPP-U.S. region. I'm sorry. "The MAPP-U.S. region is judged to be inadequate over the 2001-2010 period."

Q. And that refers to -- "inadequate" refers to what? What is the topic of that section?

A. Capacity.

Q. Capacity.

A. Okay. "The summer reserve margin is expected to be below the 2000 forecast and to decline from a high of 20 percent in 2001 to 15

percent in 2005 and 1 percent in 2010 when committed and proposed generation is considered. In addition, when a 3 percent demand forecast uncertainty is taken into account, the MAPP-U.S. area may be capacity" -- "In addition, when a 3 percent demand forecast uncertainty is taken into account, the MAPP-U.S. area may be" -- oh, there must be more -- I'm sorry. -- "may be capacity deficient by 2004 summer and nearly 5,442 megawatts by 2010.

"Because of the potential generating system inadequacy, MAPP must plan for additional resources and carefully watch construction lead times to ensure that enough resources will be available to maintain regional adequacy. The ability to import power may be severely limited in the near term because of the lack of external resource availability."

MR. HOBERG: I think we better mark that since he's been reading from the exhibit. We better mark it and place it into the record as an exhibit.

COMMISSIONER WEFALD: That would be fine.

MR. HOBERG: Would you hand it to the court reporter, please, so she can mark that?

COMMISSIONER WEFALD: Sure.

MR. HOBERG: It would be Exhibit 11, I think.

(Exhibit 11 was marked for identification.)

MR. HOBERG: And I think we better give Mr. Pearce an opportunity to look at that, too.

Q. (COMMISSIONER WEFALD CONTINUING) My question is -- a question on that is that in your recommendations you're recommending that we use the last three years of wholesale revenues and average those to determine an average amount that we could expect to see in wholesale revenues in coming years.

A. That is my assertion. Yes.

Q. This MAPP report indicates that -- taking all those factors into consideration -- I'm assuming they took all those factors into consideration because these are experts who write these reports -- that they're anticipating shortages not only in 2002 and 2003 and 2004 but extending into 2010. Given that information, are you inclined to change your recommendation that we average the last three years and just go with the last year?

A. Well, I guess besides the reasons I've already given, you know, the reason that I did that is I do see some very near term problems with sales for resale margins, but that's so -- to me some of what's driving this is the absence of winter. I mean, of course they're not selling any electricity at this in December and January and February. I've never seen a winter like this. I'm thinking longer term than MDU, and that's really the difference.

Q. Well, on the -- on this -- even for this year when they're projecting six million of wholesale revenue -- and I'll have a chance to talk to their person later on, but are -- those are based on current costs, futures costs; is that what they're --

A. The futures market, right, and I'm not an investor in futures and I don't have a lot of experience there, but my understanding is that the further out you get, the less accurate futures are going to be as far as what actual prices may end up being. I would say it's pretty accurate a few months out.

Q. So let's say that in May there's a projection for a really hot summer and they -- with the weather forecasters. Could those futures

change at that point? Could -- or should I be asking someone else?

A. Well, it's just getting a little outside of my expertise. I would guess that the futures market is based on normal weather. I don't think that futures are based on the Farmers Almanac or anything like that, at least I hope not.

Q. But they change from month to month?

A. Sure, they do. They change every day.

Q. Okay. And on -- MDU may have the potential to have increased wholesale sales contracts in the future?

A. Yes. That opportunity always -- always exists.

Q. And I have another question, and this is on the AVS major maintenance in your testimony on page 13.

MR. HOBERG: Direct testimony or --

COMMISSIONER WEFALD: This is on his rebuttal testimony.

MR. HOBERG: Okay. Exhibit 2.

THE WITNESS: On page 13?

Q. (COMMISSIONER WEFALD CONTINUING) Mm-hmm. You talk about -- under that, "Mr. Ball argues for the inclusion of one-third of the major

maintenance cost of the Antelope Valley generating station Unit II (AVS) incurred in 2001 totaling 460,000 system-wide. Originally, Mr. Ball's argument added these additional expenses to staff's 2000 test year because the cost of the maintenance was not incurred until 2001. However, since staff is now advancing the use of 2001 operating results, Mr. Ball's testimony argues for a reduction in 2001 reported results by two-thirds of the maintenance costs. Staff therefore reduces maintenance expense in 2001 by two-thirds of the total cost testified to by Mr. Ball to properly reflect a three-year amortization. An adjustment to reduce 2001 operating expenses by 920,000 is therefore necessary."

Can you please explain to me why for one test year you have a -- why it's two-thirds of the maintenance cost and not one-third of the maintenance cost?

A. I can see why that would be a little confusing if you weren't familiar with the details. It's not an issue that we're disputing with the

company. Both sides are in agreement with what I've done, but having said that, in 2001 MDU incurred a total cost of that 460 times three, whatever that number is. That was recorded on the books for 2001. MDU argued when I was using a 2000 test year that one-third of those costs should be included in 2000. Okay. It should be included in the test year. Well, when we updated the 2001 test year, all of the AVS maintenance costs were included in operating expenses. So all I'm doing is turning --

Q. For a total of how much?

A. Well, the 460 times 3. What is that, 1280? No. It's more than that.

Q. 460 times 3?

A. 460 times 3. And so all I've done is turned Mr. Ball's argument around on him and said, okay, if you want one-third of the amortization in 2000 when it -- when it was expensed in 2001, it's only appropriate that we exclude two-thirds of the costs in the updated 2001 expense of it, because all the costs are in there. Does that help or should I keep talking?

Q. Why are -- was this expensed over three years or was it expensed over just two years?

A. Well, it was booked as an expense in 2001. All of the costs were booked as a maintenance cost in 2001.

Q. All right.

A. And since we're using 2001 as a proxy for developing rates in 2002 and beyond, we only want one-third of those costs in there.

Q. Yes.

A. So to do that you have to take two-thirds out.

Q. Okay. And so at the present time you're only including $460,000 --

A. That's right.

Q. -- in 2001?

A. That's right.

Q. All right. But now you're using a 2002 test year. So can you just show me how then you updated that number?

A. Just carried it forward. I mean, if you incurred it in 2001 and you agree to a three-year amortization, then the 460,000 should still be in 2002 and 2003.

Q. Okay. All right. Thank you.

A. On a theoretical basis. I mean, MDU has expensed it already in 2001, but for ratemaking

purposes we've agreed to a three-year amortization on AVS maintenance.

Q. All right. Thank you. On page 14 on the MISO RTO of your rebuttal testimony, that paragraph, Mr. Ball argues that revenue streams

> related to MAPP Service Schedule F for power transmitted on or across its system will disappear as a result of MDU joining the Midwest Independent System Operator, Inc., regional transmission organization. MDU further asserts through its responses to staff's inquiries that no savings or additional off-system sales will occur because of MDU's decision to join MISO staff has no proof to the contrary that these revenues will -- should it be "not be lost"?

A. That these revenues -- these revenues will be lost and therefore -- well, I'm just saying that we have no proof to argue against MDU's assertion that these revenues will no longer occur. I don't know much about MAPP or Schedule F.

Q. Anyway, so we're accepting those?

A. I've trusted MDU's judgment in this matter.

Q. All right. On contributions on page 17, "Staff agrees to include North Dakota's share of contributions made to Energy Share of North Dakota and the Lignite Energy Council as testified to by Don Ball totaling $33,000."

What donations are given to the Lignite Energy Council and why should ratepayers pay for those?

A. That's -- that's what -- that's what Mr. Lein asked me, too. He's been assigned to staff in this case, and I guess I just didn't want to argue about it. I didn't think it was a material amount of money. I didn't give it a lot of thought, and there certainly is arguments that contributions like these should be recorded below the line and the company should be willing to pay for that out of stockholder dollars. I'm not -- I'm not hung up on it either way.

Q. Does that include the Energy Share dollars, as well?

A. Yes. I mean -- and that one's probably easier than Lignite. At least Lignite -- well, let me start over. That one seems to be easier to exclude. I mean, who is getting the benefit of being the contributor? Is it the ratepayers or is

it MDU? I mean, if you're getting the glory, then maybe you should pay for the cost of it.

COMMISSIONER WEFALD: I have no further questions at this time.

MR. HOBERG: Thank you, Commissioner Wefald. Before we move on to Commissioner Reinbold, we better deal with Exhibit 11 which we've marked. Have you had a chance to look at that, Mr. Binek?

MR. BINEK: No, I haven't.

MR. HOBERG: Okay. Maybe you should take a look at it, too. What is it actually titled, Mr. Binek?

MR. BINEK: Reliability Assessment, 2001 through 2010.

MR. HOBERG: Thank you.

MR. BINEK: And it's put out by North American Electric Reliability Council. I have no objection to it.

MR. HOBERG: Mr. Pearce, any objection to it?

MR. PEARCE: I have no objection as to foundation. I guess I wouldn't stipulate to its relevance or reliability, but no objection to having it received for what it is.

MR. HOBERG: Okay. I'll admit Exhibit 11 then. Commissioner Reinbold, please.

COMMISSIONER REINBOLD: Thank you. I have a couple quick questions.

EXAMINATION

BY COMMISSIONER REINBOLD:

Q. Mike, you're a good witness. That's on the record now.

A. That remains to be --

Q. That's my heavy one first. You said you didn't know if we had a recession or if we're going into recession. Would you let me know, because it makes a great deal of difference in, you know, what my plans are in the future. So as you determine, you know, whether we are in recession, let me know. You don't need to respond to that yet. Just bring me the data.

I think you said the issues are four basic issues in the case; is that correct?

A. There's some sub issues within those issues, but that's basically correct.

Q. And the money issue is -- if I've got my notes correct, the reduction of the number nine million down to five million, is that the number we're talking about? That's your testimony?

A. That's my testimony, yes.

Q. Okay. You indicated also that off-system sales, that type of income, is heavy and very significant in the case?

A. Almost -- well, without that we probably wouldn't have brought a case to the Commission.

Q. Okay. Then let me ask you the next question. Off-system sales, is it a guessing game?

A. Sure, it is. That's why I made the comment that it's more of an art than a science. It's a difficult issue. I mean, if the economy was going along like it was and there was no indication that it would falter, then this case would be easy.

Q. So you're --

A. We'd just reduce rates nine million dollars and be happy, but --

Q. Are you agreeing that it might be a guessing game by the company?

A. It -- we're both trying to provide the Commission with an analysis, an approach to projecting what we see as reasonable margins on sales for resale, and that's it, I guess.

COMMISSIONER REINBOLD: Okay. That satisfies that question. And that takes care of all of them. Thank you.

MR. HOBERG: Thank you, Commissioner Reinbold. Commissioner Clark, please.

COMMISSIONER CLARK: I do have just a couple questions.

EXAMINATION

BY COMMISSIONER CLARK:

Q. I don't believe that it's a point of contention at all, but I didn't see it discussed much in the prefiled testimony. The tax factor, just for my own edification, could you talk a little bit about how that's arrived at? Is it kind of a generally accepted accounting number? I think it's 1.65 or something like that.

A. Right. There's -- there is no argument between the parties in this case. That's a factor that's, I guess, been used ever since I came here. Well, no. We had a little, slight tax change a while back, but it's -- it's simply a factor that adjusts the results for the effect of income taxes. So if I come up -- let me -- maybe I can refer to -- if I can find one. For instance, towards the end of my Power Point presentation, just three pages back, it's labeled staff revenue excess calculation.

Q. Mm-hmm.

A. When we're all done, we have a return excess of 3 million dollars, and that's -- that's how much we want to see net regulated income adjusted downward, and in order to get that kind of a reduction you've got to actually reduce revenues by 5 million dollars because you're going to have tax savings resulting from those revenues, and so that's the principle. As far as how it's exactly calculated I could provide that later. I don't have it in front of me.

Q. But there's no disagreement on that?

A. There's no disagreement that I'm aware of.

Q. The -- this is more of just kind of a high-level regulatory philosophy question, and it -- it came to my mind because of your response to the letter from Commissioner Wefald from a few months ago where she was exploring ways of dealing with volatile types of income like off-system sales. You talked about the philosophy of regulatory lag, and that -- that that's one basis for using historic net income as a basis for rate setting. Is that still the staff position?

A. That is a high-level theoretical question, and, again, Mr. Lein, assigned to staff, has questioned me on that, Are you sure you don't want

to accept Commissioner Wefald's suggestions through her letter that we maybe want to include this in the fuel cost adjustment? I'm still the same free-enterprise guy that I've always been, and I prefer to see a level established in rates and let the company try to beat it than just capturing it through a fuel clause adjustment. Then it seems to me like it takes all the incentive out of the game, and that's steeped in my own personal philosophy more than anything.

Q. But the theory of regulatory lag itself would kind of say that -- correct or not -- that in the good years where MDU can outperform, they maybe make a little more, then the staff comes forward with a rate case and you reset rates a little, and maybe they -- and they may hit a few bad years and then they don't do quite as well so they come in for cases, kind of the idea that over time these peaks and valleys -- you get the right rate and kind of an equitable treatment for ratepayers over time. Is that the general theory on that?

A. That's the general theory. I would say that the staff is somewhat handicapped because of the funding, and so the regulatory lag is likely much greater for us than it is for the company.

When they file, we have eight months to deal with the case. When we file, we might have to wait a few years until budget dollars are there to present our case.

COMMISSIONER CLARK: Okay. Thank you. That's all I have.

MR. HOBERG: Thank you, Commissioner Clark.

COMMISSIONER WEFALD: I have a follow-up question.

MR. HOBERG: Commissioner Wefald, please.

FURTHER EXAMINATION

BY COMMISSIONER WEFALD:

Q. So if in future years MDU actually, let's say in the next five years, makes at lease 15 million dollars on wholesale power sales every year, then you would be off by -- then you should have reduced rates perhaps in this case by --

A. An additional 4 million dollars.

Q. -- an additional 4 million dollars.

A. That's true.

Q. And so then ratepayers are hurt by the calculations that were made today on this matter.

A. That's true.

Q. If MDU only makes -- it makes less, then

MDU is hurt by this calculation.

A. Correct.

Q. But in your mind then MDU has the incentive to make further -- take further cuts, make further efficiencies, try harder to do off-system sales in order to make up that difference; is that correct?

A. That would be my assumption. Yes.

Q. And so that's why you weren't willing to go with the proposal that it be a set percentage of whatever type on that?

A. Well, I mean, quite frankly, you could -- I guess you could -- every month if we wanted to true-up rates to reflect all the costs that MDU incurs to provide electricity, I suppose we could do that, but we would be in a lot of trouble, I think, if we got into that kind of mode because then there's no incentive to manage costs, no incentive to increase revenues because the PSC's going to flow through everything that we do. This is just a smaller piece of the pie but that same principle applies, and so that's why staff to this point has been unwilling to agree to some of the suggestions that are in this letter, but we even have some disagreements within our own group. As

I've already indicated, Mr. Lein asked me if I was sure, and so what I'm testifying to is my philosophy and my opinion and that's it.

COMMISSIONER WEFALD: Thank you.

MR. HOBERG: Thank you, Commissioner Wefald. Any further questions? Commissioner Clark.

COMMISSIONER CLARK: I do have one.

FURTHER EXAMINATION

BY COMMISSIONER CLARK:

Q. Are you aware of any other ways of dealing with this issue of volatile off-system sales that other commissions around the country have gone about besides just the fuel clause adjustment-type mechanism? Are refunds ever awarded? I'm just kind of trying to think outside the box.

A. Well, I have very limited knowledge about what other states are doing. You know, I did -- as I've already testified, I did come from the Oklahoma Corporation Commission, and in that state, at least while I was there -- I don't know if they're still practicing this -- they require -- they required that the company keep ten percent of off-system sales profits for themselves as an incentive to make off-system sales, and the other

90 percent would be flowed back to ratepayers through those -- through the ratemaking process. So it wasn't an automatic flow-through, but -- so there's -- I'm sure there's lots of things like that out there. I'm just not aware. I think we can be as creative as we want.

COMMISSIONER CLARK: Thank you. That's all I have.

MR. HOBERG: Thank you, Commissioner Clark. Any further questions? Anything on redirect, Mr. Binek?

MR. BINEK: Yes. I think just a couple of questions.

REDIRECT EXAMINATION

BY MR. BINEK:

Q. In response to a question from Mr. Pearce concerning expenses, I think you made the comment that you wouldn't argue strenuously against a ten percent increase for expenses. Your recommendation is that five percent is what should be the allowance?

A. That's my recommendation.

Q. And that remains your recommendation?

A. Yes, it does.

Q. Okay. Mr. Pearce also referred to Mr.

Blinsky's testimony that showed a decline -- I think a sharp decline in resale sales for the first two months of 2002, and I think you've already addressed this in another comment, but doesn't the mild weather that we've experienced here and basically across the country so far in 2002 and all winter long cause sales for resale to decrease from previous year levels?

A. Well, I know that one of their big customers is Otter Tail Power Company, at least it has been in the past, and it's a winter-peaking utility company. If you don't have any winter, that customer's sales is probably not going to happen. So I just extrapolated that little bit of knowledge when I'm stating that, of course, sales are down these first few months.

Q. And that would be true for basically all companies selling into the resale market.

A. I would think so.

MR. BINEK: I have no further questions.

MR. HOBERG: Thank you, Mr. Binek. Mr. Fahn, did you have a question?

MR. FAHN: Yes.

EXAMINATION

BY MR. FAHN:

Q. I wanted to make sure I understand the staff position. Staff started out at 9.155 million dollars -- suggesting a 9.155-million-dollar rate reduction, revenue reduction.

A. That's correct.

Q. And then changed to 7.327 and --

A. In -- or in -- I guess it's called rebuttal, that's true.

Q. Right. And we've been continuing down here -- we're now at 4.941-million-dollar revenue reduction and I guess I'm -- the Commission has to rely on the facts in the case, and so I want to make sure I understand that would you characterize your position as telling the Commission that they should not reduce revenue -- I mean, the maximum they should reduce revenue is 4.941 million, or could they reduce revenue by some other number that -- somewhere between where you started and where you are today or something less than where you are today?

A. I think there's enough information in this case the Commission could use a 2000 test year, a 2001 test year, a 2002 and beyond. My

recommendation of 5 million dollars is just based on what I feel is appropriate. After the Commission's finished hearing the rest of the witnesses in this proceeding, maybe they'll go with something lower or higher. No, I'm not suggesting that we limit it to 4.9 million dollars.

MR. FAHN: Thanks.

MR. HOBERG: Thank you, Mr. Fahn. Mr. Pearce, did you have some questions of Mr. Diller?

MR. PEARCE: Yes, just two, I think. Actually two related questions, I guess.

RECROSS-EXAMINATION

BY MR. PEARCE:

Q. Mike, in response to a question that Mr. Binek just asked you about weather being a factor, you aren't saying weather is the sole factor. As I recall, you gave 28 factors in your four pages.

A. No. I'm not arguing that weather's the only thing affecting off-system sales.

Q. One of many factors?

A. One of many factors.

Q. And I believe the evidence shows -- or will show it in MDU's testimony that there actually were more megawatts sold for resale in January of 2002 than in January of 2001; is that your

understanding?

A. I could probably get that understanding. I'll agree to that, subject to check.

Q. All right. What we're talking about is a matter of net margins, and that's based on price rather than -- I mean, it isn't simply a matter of the power sold, is it? It's a matter of power and the price?

A. Right. It's the product of the two. Yeah.

Q. As far as the impact of weather, that would simply impact the amount of power sold, not the price?

A. That's true. Weather would have -- well, I don't know the answer to that one.

MR. PEARCE: That's all I have.

MR. HOBERG: Thank you, Mr. Pearce. Any further questions of Mr. Diller then? Commissioner Clark.

COMMISSIONER CLARK: I do have one on the expense side.

FURTHER EXAMINATION

BY COMMISSIONER CLARK:

Q. And following what Mr. Fahn said, building a record for the Commission to decide things on, on

the office supply expense you recommend --

COMMISSIONER WEFALD: What page are you on, Commissioner Clark?

COMMISSIONER CLARK: Well, this would be in Mr. Diller's rebuttal, 18 and 19.

Q. (COMMISSIONER CLARK CONTINUING) It talks about office supply expense and making a -- specifically on 19 -- making an upward five percent inflationary adjustment. Where is that five percent derived from, or should we have something on the record that verifies that is an appropriate inflationary increase?

A. Well, as far as where the percentage comes from, I think I've testified that that's arbitrary, but as far as how it's calculated, if you take the 2000 expense level, the more normal level, if you will, of $2,122,000 and you take that times 1.05, you will come up with the $2,228,000, and so you just compare that with the 2001 number of $2,906,000 and you get an adjustment required of $678,000. That would be on a total company basis.

Q. But the five percent isn't tied to the CPI or any specific --

A. Not tied to anything.

Q. Okay. For the insurance expense -- I'm

not sure exactly where that is pagewise in the testimony, but I remember it more from your slide presentation. I heard you saying that's a little bit tougher to tell and you just don't think we have the information yet to verify if the insurances expense is a legit increase?

A. Right. I'm just -- I'm not sure. It doesn't appear that they've analyzed all of the pension and benefit costs, but I could be wrong. I guess I'm waiting for Mr. Ball's testimony to --

COMMISSIONER CLARK: Thank you. That's all I have.

MR. HOBERG: Thank you, Commissioner Clark. Any further questions then of Mr. Diller? Mr. Binek?

REDIRECT EXAMINATION

BY MR. BINEK:

Q. I hate to get back into this weather situation, but Mr. -- Mr. Pearce asked you basically about the correlation between demand and price. If we have -- if we have warm weather like we're experiencing and experiencing it throughout the country basically, even if MDU's sales -- resale sales are high, you know, comparably high, the fact that we have warm weather does result in

overall decreased demand and decreased price for the product, doesn't it? It does have an effect also on price?

A. That's why I changed my answer and said I don't know. I would think that it would, but -- it seems to me like it would be, yes.

MR. BINEK: Nothing further.

MR. HOBERG: Anything further of Mr. Diller? No further questions of Mr. Diller? Thank you, Mr. Diller.

THE WITNESS: Thank you.

MR. BINEK: At this time I'll call Charles King.

COMMISSIONER WEFALD: Could everyone have a copy of that exhibit then?

MR. HOBERG: Yes, yes.

COMMISSIONER WEFALD: Thank you.

MR. HOBERG: Good point. Mr. Pearce -- I think at a break or something we'll make copies of Exhibit 11. Please be seated, Mr. King. I think you were present earlier when I gave the admonition in regard to percentage; is that correct?

THE WITNESS: Yes.

(Witness sworn.)

MR. HOBERG: Thank you. Mr. Binek,

please.

MR. BINEK: Thank you.

CHARLES W. KING,

having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. BINEK:

Q. Please state your name and business address for the record.

A. My name is Charles W. King. My business address is 1220 L Street Northwest, Washington, D.C.

Q. And what is your occupation?

A. I am an economic consultant.

Q. And by whom are you employed?

A. I am the president of the economic consulting firm of Snavely King Majoros O'Connor & Lee, Incorporated.

Q. And how long have you been in this position?

A. I have been either president or vice president of this company since it was founded in 1970, which makes it what, 32 years now.

Q. And could you just briefly state your educational background?

A. I am a -- received a Master -- a Bachelor of Arts in economics from Washington and Lee University and a Master of Arts in public economic policy from the George Washington University.

Q. And did you prepare prefiled testimony in this case, both direct and rebuttal testimony?

A. Yes, I did.

Q. I show you what have been marked as Exhibits 4 and 5 and ask if you can identify those exhibits.

A. Those are the testimonies that I prepared. Yes.

Q. And if I asked you the same questions today that are contained in these exhibits, would your answers be the same?

A. Yes, they would.

Q. And do you adopt your prefiled testimony as your sworn testimony in this case today?

A. Yes. I should note that the rebuttal testimony to some extent supersedes some of the information that was in the initial testimony.

Q. Yes. Do you have any corrections that need to be made to your testimony?

A. A couple minor typos that one could correct. In the initial testimony, page 4, line

29, the word -- the fourth word in that line is "if." It should be "it," so that it reads, Nothing prevents it from inflating the company's -- from inflating the equity percentage. And then page 11 of that same initial testimony, at line 22 is missing a word. It should read "that it must be a large corporation." Those are the only corrections I have.

Q. Okay. And with those corrections do you adopt this as your sworn testimony?

A. Yes, I do.

MR. HOBERG: Are you offering these, Mr. Binek?

MR. BINEK: Yes, I will offer them.

MR. HOBERG: Okay. Exhibits 4 and 5, which are Docket Nos. 14 and 53, have been offered. Mr. Pearce, any objection?

MR. PEARCE: No objection.

MR. HOBERG: No objection. Exhibits 4 and 5 are admitted.

Q. (MR. BINEK CONTINUING) Thank you. What rate of return are you recommending -- I guess I should -- what rate of return are you recommending be allowed to MDU's electric operations in North Dakota?

A. I am recommending an overall rate of return of 9.22 percent, which incorporates a returned equity of 11.7 percent. This is a revision upward from the testimony that I submitted last August in which I had recommended a returned equity of 11.2 percent.

Q. Have you read the rebuttal and surrebuttal testimony of MDU witness Stephen Gaske in this proceeding?

A. Yes, I have.

Q. What rate of return does Dr. Gaske recommend for MDU's electric operations in North Dakota?

A. Dr. Gaske recommends a return of 10.7 percent with an equity return incorporated into that of 12.75 percent.

Q. Can you identify the specific reasons for the difference between your recommendation and that of Dr. Gaske?

A. Yes. There are four reasons for the difference between our recommended rate of return. The first is the cost of the debt that should be included in overall rate of return.

The second -- well, the next three go to the cost of equity, but they are respectively the

selection of companies that are comparable to MDU for purposes of determining the appropriate rate of equity return; the addition of an increment to the equity return in the amount of -- for stock flotation costs; and, finally, a tiny difference in the procedure for calculating the value of next year's dividends in the process of computing a DCF, discounted cash flow, rate of return.

Q. Are there other areas -- any other areas of disagreement with Dr. Gaske?

A. Yes. We disagree as to the appropriate checks for our respective discounted rate -- discounted cash flow rates of return.

Q. Okay. What is the issue with respect to the cost of debt?

A. The issue relates to how to treat the cost of refunding the old debt that was repurchased back in 1992 when the company acquired or sold much of the long-term debt that it now has outstanding. These costs were considerable. They were 13 million dollars out of a total of 136 million dollars in debt, or about 10 percent of the principal. Now both Dr. Gaske and I agree that these costs should be recovered. The question goes to where they should be recovered and how.

Dr. Gaske advocates what's called the yield to maturity approach. If you think of the cost of debt as a fraction, the numerator of the fraction is the annual cost of debt, the denominator is the total principal amount. Under the yield to maturity approach the cost of -- these flotation costs -- I'm sorry, not flotation -- they were costs of issuance, mostly of the cost of repurchasing the old preexisting debt, the 13 million. That is backed out of the denominator. That is, it's backed out of the amount of money to be recovered.

There is the alternative approach, which I have employed, which we will call the accounting approach, in which the amount is -- the cost of issuance of a debt is added to the numerator, that is, the annual amount that is recovered in the rate of return. These yield very different costs of debt.

The yield to maturity approach in this particular case yields 9.22 percent, and the accounting approach, which I recommend, yields 8.62 percent.

Now I've adopted the accounting approach because MDU's 9.22 percent debt cost is way out of

line with that of other utilities. NSP, which is -- now calls itself I believe Xcel Energy -- has an embedded debt cost of 6.99 percent. That is about -- well, let's see, 223 bases points -- a basis point being a hundredth of a percentage -- below what MDU is requesting. Otter Tail's embedded debt cost is 7.68 percent. You saw those -- these comparisons in one of Mr. Diller's slides. This rate of 9.22 percent is also way above any current cost of corporate debt, the yields to corporate funds in the public markets.

What I am proposing is a significant -- significant reduction over the -- over the yield to maturity approach, but it reflects certain known facts. The first is that no competitive company would be able to maintain debt costs of 9.22 percent, 2 percent -- 2, 3 percent above what current yields are, without some hurt to its stockholders.

We are not asking for a hurt to the stockholders of MDU. We're just asking that debt issuance costs be recognized exactly as they appear on the financial books. This isn't such a shocking idea because NSP proposed exactly this approach in its rate case here last year.

Q. The NSP approach, do you have an exhibit that shows NSP's approach?

A. I'm sorry. I do not have -- it's set forth in Dr. Gaske's testimony.

Q. Okay. So your -- at this point your position is the accounting approach should be used?

A. Yes. As I indicate, this is easier on ratepayers, it reflects the fact that the company's debt costs are excessive. You will probably hear -- you will hear this afternoon of elegant reasons why the company could not reduce its debt costs.

The fact remains that all the rest of the -- the other two utilities in North Dakota and all other utilities I am aware of are able to maintain debt costs well below eight percent. I do not understand why it would be impossible for this company to reduce its debt costs. To use the financing approach, which is fair to ratepayers and fair to shareholders, gives the company some incentive to reduce its debt costs whenever possible.

Q. Mr. King, on -- in your direct testimony on page six you make reference to a 40-million-dollar term loan from the Bank of America, and you

state that the 40 million dollars was borrowed on December 29, 2000, and matured on January 2, 2001. Is that correct?

A. That's correct. The -- the -- go ahead.

Q. Okay. Was that -- was the full 40 million dollars being carried on MDU's books as debt for the year 2000?

A. What brought it to my attention is when we initially began this proceeding, we had received a statement from the company as to its cost of capital, and the full 40 million dollars was shown as outstanding on December 31st of 2000.

Q. And this loan only covered a period of three days in the year 2000; is that correct?

A. Apparently the company had taken out the loan -- I can't remember the exact dates -- December 29th and it repaid it on something like January 2nd.

Q. Do you know what the interest rate was for that loan?

A. It was 9.575 percent.

Q. Did you make an adjustment in your testimony?

A. Yes, I did. I inquired of the company as to what the average outstanding amount against this

line of credit was during the year 2000. The company responded that it was 1.3 million. So I reduced the amount in the capital structure and in the debt structure to 1.3 million, and that is reflected in the debt allowance that I've got, and I believe the company has accepted that adjustment, at least Dr. Gaske has not objected to it.

Q. Okay. Does that complete the issues with regard to the cost of debt?

A. Yes, it does.

Q. What is the issue with respect to selection of comparable companies for the purposes of DCF calculation?

A. Well, you have to understand you can't measure MDU's equity return directly, and the reason is that it has too many nonregulated businesses. MDU's parent, of course, is the only company that sells stock. MDU -- M-D Utilities, which I think is the official name of the affiliate or the subsidiary that we're dealing with, does not sell stock in the open market.

The parent company really has only about a quarter of its earnings generated by regulated activities. Three-quarters of its earnings come from nonregulated activities, a lot of it in the

pipeline and energy exploration business, and that's in my initial testimony. The result is that it's necessary to use surrogate companies that are heavily regulated that reflect the kind of business that MDU is engaged in.

I set up a series of criteria for selecting these companies. First, that they had to be -- 85 percent of their revenue had to be regulated, that is from rate base return type regulations such as we're talking about here. The companies had to have investment grade beyond ratings; and, finally, the companies had to have sufficient size to be reasonably comparable to MDU, and I established a threshold of annual revenues of 100 million dollars.

I made two selections, one electric-only company and the other a combination gas and electric company, and the listing of these companies is set forth in an exhibit to my initial testimony.

I found only five electric-only companies that fit this standard, and I believe ten -- yeah, it was ten combination companies, and those are the companies that I studied for purposes of determining their return to equity to MDU.

Having studied those, I found that the electric-only companies generally had higher rates of return, that is discounted cash flow indicating rates of return than did the combination companies, and I concluded that the combination companies should be used as the comparable utilities to MDU. Why? Because MDU is a combination company.

Now this might not matter if there were no difference between the risk of a combination company -- by combination I'm talking about gas and electric -- if combination companies had the same risk as electric-only companies.

The two objective reasons for believing that a combination company is less risky: In the first place for some uses of energy the two were competitive. That certainly is true of cooking and hot water heating, and in much of the company it's true of heating, as well. Maybe less so in North Dakota where electric heating is relatively rare. Elsewhere in the company electric heating is quite competitive with gas heating.

The other reason has to do with the weather. Most gas companies -- well, all gas companies peak in the wintertime because the principal use of gas is space heating. Most

electric companies in this country, not all, but most, peak in the summer because the principal use for electricity is air conditioning. If you have both services, electricity and gas, you have -- you spread the risk of unusual weather. So that if you have a warm winter, like we're having now, that's going to hurt your gas operation, but that could be offset by a warm summer, which will pick up on the electricity side.

So as a consequence combination companies are less risky. MDU, being a combination company, I selected the returns from the combination companies. Dr. Gaske strongly objects to this. He thinks that electric-only companies are the appropriate surrogate, and obviously we disagree, and it's, I guess, for you to decide which of us is right. So that's the principal disagreement there.

Q. Why do you object to Dr. Gaske's selection of electric-only companies?

A. Well, Dr. Gaske used a different threshold of regulated revenue than I did. I set the threshold quite high at 85 percent. Even at 85 percent there's still a fairly significant influence in investors' minds of unregulated activities because often those are the fastest

growing and the potentially most profitable but in the near term often the least profitable activities the company engages in.

Dr. Gaske set his threshold lower. He set it at 75 percent and in the process picked up three companies. IDACORP, which is Idaho -- what is it, Idaho Gas, Idaho Utilities Energy -- but anyway, that's its new name, IDACORP -- AEP, which stands for American Electric Power, and Cleco, these are all electric utilities that have between 75 and 85 percent of regulated revenue. They also have very high DC -- discounted cash flow rates of return as computed by Dr. Gaske. They range from 12.5 percent to 15.4 percent.

I have included in my rebuttal testimony an exhibit which has the -- the Value Line writeups for these three companies. If you look at those writeups, you will see that what excites Value Line at least is the nonregulated activities of each of these three companies. That's what's driving investor expectations, particularly as to future growth.

Now, it results in a much higher rate of return? Why? Because these are riskier activities, being unregulated. These -- these

companies can't go to regulators if profits go south on these -- on these unregulated ventures. As a consequence I believe these companies are inappropriate to compare with MDU's regulated electric activity.

If you take these three companies out and if you ignored Dr. Gaske's flotation cost adder, which I will talk about in a minute, you find that the remaining I believe seven companies have rates of return virtually in the range that I'm talking about, that I recommend, 11.7 to 11.9 is his range for the remaining companies. That probably is one of the bigger areas of disagreement between us.

Q. What is the issue with respect to flotation costs?

A. Well, flotation costs are the costs of selling stock, and they involve underwriters' commissions and discounts and a whole host of things. Dr. Gaske has increased the discounted cash flow equity return by 4.75 percent to capture what he claims is a necessary component for flotation costs, and this number's based on a survey that he conducted of the cost of floating new stock by a number of utility companies.

Now I reject this adder for a number of

reasons. First of all, it's too large for MDU. If you take MDU's total flotation costs for the last five years and compare it to the amount of stock that it sold or issued, it comes to only about .94 percent, but that's not the real objection. The real objection is that Dr. Gaske would take this flotation cost, which pertains to selling new issues of stock, and apply it to the entire value of all the equity that had ever been sold by this company, including equity that's been sold through dividend reinvestment plans which have virtually no flotation costs, and stock that is not necessarily issued in public offerings.

The result is that when you apply Dr. Gaske's 4.75 percent, you come with a figure of about 6 million dollars every year that is recaptured for flotation costs. Well, 6 million dollars exceeds the entire cost of flotation companies incurred for all stock issues over the last five years. It's a gross overrecovery.

Now, I don't think that flotation costs should be excluded from the recovery of capital costs, but if you take the actual flotation costs of MDU for the last five years and you annualize them, it comes to about a million dollars a year.

You compare that to the total value of -- book value of MDU's equity and it comes to about .1 percent. The number is so small that it gets lost in the rounding, and I think it is not unfair to simply ignore it because it is a minuscule item.

The company's stock is selling well above book value. It does not -- oh, and we'll get into that. That's the other reason for Dr. Gaske's proposal, to include flotation costs. He argues that if you don't include flotation costs, the company's stock will sell below book value. Why? Because DCF is a calculation of the investor-required return. If you apply it to book values as Dr. Gaske has, the stock will sell at book value, and as a consequence when shares are sold, the subtraction from proceeds for flotation costs means that the company receives in terms of real money less than its book value, less than the -- and there is a dilution of the value of -- book value of these shares of the company.

I have an exhibit which I presented to you about a -- was it last year when I was here for the NSP case, which demonstrates that that flatly isn't so, and if we could hand that out, I could show why this is the case.

MR. BINEK: Why don't we mark this.

MR. HOBERG: This hasn't been marked yet, Mr. --

MR. BINEK: No, it hasn't.

THE WITNESS: In the NSP --

MR. HOBERG: Just a minute, please.

(Exhibit 12 was marked for identification.)

MR. HOBERG: Do you want to look at the exhibit first?

MR. BINEK: Yes. I would like to have him identify what this exhibit is.

MR. HOBERG: Okay.

THE WITNESS: This exhibit was distributed in the NSP case -- and I can't remember exactly the date I was here, but it was last year -- where I was rebutting the NSP -- NSP of course is Northern States Power and is now called Xcel Energy, but I think we all know it as NSP, but in any case, their rate-of-return witness argued that investors looked to a return on market value rather than book value and that we should be applying the DCF return to market value, and I was trying to show -- because -- unless you do that you will depress the stock down to its book value and you will not be

able to maintain ratios of market value to book value that are higher than one.

The purpose of this exhibit was to demonstrate that it flatly isn't true that when you give a discounted cash flow based rate of return to the book value of a regulated utility, that the consequence is a market value that equals book value.

Now if you look at the -- and what this has is the market per share -- market value per share, book value per share, the market-to-book ratio, and then column D is earnings per share, and then we get the return on first the market price and then on the book price, and --

MR. HOBERG: Before we testify on this, though, we better offer it.

MR. BINEK: Yes. I will offer this as an exhibit.

MR. HOBERG: Okay. Exhibit 12, Mr. King's chart from last year's NSP case, Mr. Pearce, any objection to Exhibit 12?

MR. PEARCE: No objection to foundation.

MR. HOBERG: Okay. Exhibit 12 is admitted. Mr. Binek, please.

Q. (MR. BINEK CONTINUING) Yes. Would you

proceed, please, with your explanation?

A. Yes. Look at the far right column. This is the percent earnings on book value. Now these are all gas companies, and in the NSP case I had recommended a rate of return of 11.2 percent on -- for NSP, and I believe in the settlement that subsequently was made it was agreed that the allowed rate of return would be 11.5 percent.

So if 11.2 to 5 -- let's say 11.5 is the appropriate rate of return on book value, then we can observe several instances where companies are earning less than 11.5 percent on book value. AGL Resources, that stands for Atlanta Gas & Light, is only earning 10.8 percent; Leclede Gas is only earning 9.1 percent; Northwest Natural Gas earning only 10.2 percent; Wisconsin Energy, 9.1 percent. These companies are clearly not earning an adequate return on their book value.

But look then at the market-to-book ratios. In every case they are still well above one. Why is that? And the reason is that the companies -- that investors are not looking at the current return on book value as the basis on what they'll buy that share for. They'll buy the shares for both the current return and the forecast future

earnings. All the -- investors in all of these companies are anticipating that earnings will increase; and, therefore, they are willing to accept very low returns on market price, and that's column E here, which, as you see, not one even approaches ten percent. Not one -- well, there's only one that does, that's Energy East, but all the rest are in the 6, 7 and 8 percent return. That's the current return that investors are making on the market value of their shares, and that's because they are betting that these utilities will be able to generate increased earnings in the future.

So I -- the basis of all this is that if you offer a book return -- a return on book value that matches the discounted cash flow return, which I believe to be 11.7 percent, the result will be a market price which exceeds the book value and easily recaptures the flotation costs that Dr. Gaske contends will be lost otherwise. So that's my rebuttal to that piece of Dr. Gaske's supplemental testimony.

Q. And what is the issue with respect to forecasting of dividends during the coming year?

A. Well, this is a mechanical thing. The theory of DCF is that the -- the dividend yield

piece, which is the immediate return of the discounted cash flow formula, should be next year's dividend over recent price. That's the dividend yield.

Now the question is we have -- we know what this year's dividend is. What's next year's dividend going to be? It probably will be increased over this year's dividend. Conventionally -- a rather mechanical way it's done -- is that you take the growth factor, which you've already identified as part of the DCF, and you divide it in half. Why in half? Because the probability of the dividend increase is randomly distributed through the coming year, and half of the coming year is six months from now and that's half of the annual increase in earnings that you predict for the company.

And so I used an adder of .5 of the growth factor to increase the dividend in my dividend yield calculation. Dr. Gaske says that's wrong, it should be .625, and Dr. Gaske will have to tell you why he's right and I'm wrong, but the result is negligible difference in our rates of return. It really is a nit on the whole calculation, but it is an area of disagreement.

Q. What is the -- what is the issue with respect to various checks on DCF rate of return?

A. Well, as you know, the DCF is the standard classical way you calculate rate of return, if you've sat in enough of these proceedings, but there usually is a need to have some kind of sanity check on what you get from the discounted cash flow procedure.

The sanity check I used was to look at the trend in interest rates since earlier rate-of-return decisions, and if you look at Schedule 4 of my initial testimony, you'll see a chart which traces both corporate and, I believe, government interest rates since the 1980s, and what you will see there is a gradual downward trend. It ziggles, but currently it's lower than it's been in 15 years. That's partly because of the Federal Reserve, it's partly because of the decline in inflation, but whatever the reasons, interest rates now are considerably lower than they were when rates of return were last set for this company, and the chart has on it the rates of return that were established not only by this Commission but by the -- I believe the Wyoming, South Dakota and Montana commissions to the extent that they made

decisions during the last 15 years.

COMMISSIONER WEFALD: Which page is that on?

THE WITNESS: That's exhibit -- Schedule 4 of the initial testimony.

COMMISSIONER WEFALD: Thank you.

MR. HOBERG: That's Exhibit 4.

THE WITNESS: It's just before the little resume, and I assume it's paginated the same way. It looks like this.

COMMISSIONER WEFALD: Thank you.

THE WITNESS: And at the far right of this I show the rate of return that I had picked last August, but that should have a new little star, which is a little higher for the rate of return which I'm now recommending of 11.7 percent instead of 11.2 percent.

Dr. Gaske has used two very different checks. Oh, I should say that the interest rates are not directly correlated with returns to equity. They vary because of different concerns about the assurance of equity return, the stock market variations, and inflation has a lot to do with it because an -- stocks are perceived as a hedge against inflation, and bonds -- if you lock in a

low interest rate and inflation goes through the roof, why, you're really losing because you're simply not -- I mean, you've got a fixed interest rate, and if you're earning five percent and the inflation rate goes to seven, you're behind two percent every year.

So these variations from year to year affect the risk premium of stocks over bonds, and -- but in general there is a -- is a correlation between stock returns and bonds, and that is -- that's called the risk premium check, and that's what I've attempted to do here.

Dr. Gaske has used the infamous Ibbotson Singfield approach, which I find rather bizarre. It goes all the way back to 1926 and says, let's trace what the difference between the returns to equity and the returns to debt have been over 50 -- now, what, 60, 70 -- I don't know how long that is -- almost 70 years, and that difference will wash out because it's many, many, many years -- will wash out the year-to-year fluctuations that might come about because of depressions and recessions and booms and busts and that's a good measure of risk premium, which I think is ridiculous.

First of all, if short-term expectations don't pay off, in other words, if you buy stocks this year thinking that you'll do better than bonds and as we saw in the last year the DOW goes from -- what is it now, 10,000 now, but it was close to 15 -- I mean, close to 12,000 a year or so ago, Nasdaq has gone -- is tanked, then you didn't realize your expectations, and that happened in the short run, and the idea that if you add all the short-run failures with some of -- and they'll offset the short-run successes that would have happened if you bought stocks back in the mid Nineties and kept them and sold them right at that magic moment in March 2000, well, that's ridiculous, that these would wash out and result in some real believable measure of risk premium.

The other objection -- or two other objections to this approach. The other one is that there's some sort of fixed, unchangeable risk premium over bond -- bond yields that applies for decades at a time. That's not true. Bonds and stock vary in their relative risk and benefit as I discussed a minute ago.

And the final objection is a purely mathematical one. If you look at the variations

in -- annual variations -- actually these are monthly measures, but if you look at the variations from year to year and the yields in the risk premiums over bond yields, they -- those variations exceed the average, exceed the mean, which means that the mean has no statistical significance whatever as a predictive instrument. And so I would dismiss this procedure for measuring risk premium completely.

Q. (MR. BINEK CONTINUING) What is your assessment of Dr. Gaske's alternative equity investment analysis?

A. Well, that's Dr. Gaske's other check on his equity return. He comes up with an equity return of 12.75 percent, and this is pumped up by the use of companies that are heavily engaged in nonregulated activities and by his 4.75 percent kicker for flotation costs.

Then he says, ah-hah, let's see what the return-to-book equity for industrial companies will be, and so he takes several hundred industrial companies and says that over 5 years they have earned 29.4 percent on their book equity value, and this means that a return of 12.75 percent to MDU is really quite modest and quite low.

Well, what this ignores is the very different relation -- different importance of return to book equity for an industrial company as compared to a utility company. If you want to buy a share of an industrial company, you have to pay the market price. There's no way you can get the book value. The book value is a historical number which measures how much money was put into the capitalization of the company over the past, but it's not a number that is meaningful to you as an investor. The only number that's meaningful is what is your return on the market value.

Overwhelmingly, market values exceed book value all across the economy, and so what appears to be a very high 29.4 percent on book value when you look at the market value is a much, much, much lower number.

Now why is that different from MDU or other utilities? It differs from MDU and utilities because MDU is regulated based on its book value. Book value has importance for utilities that is nowhere found in industrial companies because regulators, such as yourselves, decide what rate of return should be allowed on a rate base, and that rate base is not tied to the market value of the

company but to its book value, and that's why book value returns are important in utilities. They are not important or relevant in industrial companies.

Q. Do you have any final comments you'd like to make to the Commission?

A. Yes. I think there really are only two or three decisions you have to make. With respect to debt costs you have to make a simple decision of whether you would go with one calculation or another, and I've given you reasons for using the financial return, which I mentioned is used by NSP. So it's not an unthinkable thing.

The financial calculation of the cost of debt. We need to have some incentive to this company to get that debt cost down, which is excessive. That's one decision.

The other decision I don't think is all that great, that is the return to equity, because when you -- when you peel off Dr. Gaske's -- the two areas where Dr. Gaske has pumped up his equity return, which is including three highly -- well, three companies where nonregulated activities are clearly demonstrated -- are inflating the expected return and if you get rid of this flotation cost kicker, you find that his returned equity on his

selection of companies, which I don't even agree with, is about the same as mine. It's 11.7 to 11.9. I recommend 11.7 because it's based on combination gas/electric utility, and MDU is a combination electric gas and electric utility, and that's I think really -- I tried to reduce to a nutshell the decisions you have to make.

MR. BINEK: Thank you. At this time I'd tender the witness for cross-examination.

MR. HOBERG: Thank you, Mr. Binek. Perhaps this is a good time to take luncheon recess.

MR. BINEK: I would like to comment, Your Honor, that Mr. King does have to leave this afternoon. I think he probably needs to go to the airport, what, about 3:30?

THE WITNESS: Well, the plane's 4:40, so 3:30 is --

MR. BINEK: And I think MDU also has a witness in that same situation.

MR. HOBERG: Is that correct, Mr. Pearce?

MR. PEARCE: Yes. And I don't have a very extensive cross-examination for Mr. King, so that would certainly be no problem having him finished, I would think, within a half-hour after we get back

from lunch.

MR. HOBERG: Okay. So you don't have any problem with taking a luncheon break?

MR. PEARCE: No. That's fine.

MR. HOBERG: Till one o'clock?

COMMISSIONER WEFALD: Right at one?

MR. HOBERG: One o'clock. Okay. We'll be back after lunch at one o'clock.

(Noon recess taken.)

MR. HOBERG: We're back from luncheon recess, and we're about to begin the cross-examination of Mr. King. Mr. Pearce, please.

MR. PEARCE: Thank you.

CROSS-EXAMINATION

BY MR. PEARCE:

Q. Mr. King, I may have misheard, but at the very beginning of your testimony it seems to me that you said that your overall cost of debt was 9.22. I think you meant 9.92. Maybe I misheard it.

A. Let me make sure. That's a pretty important number.

MR. HOBERG: He said 9.22.

Q. (MR. PEARCE CONTINUING) Right. And I believe your number is 9.92.

A. 9.92, right.

Q. Okay.

A. Overall capital cost.

Q. Right. That's what I thought I heard. Now you testified on the -- as to your basis for reducing MDU's cost of debt from 9.22 to 8.62 percent. If I understood your testimony, your opinion is based solely on the -- your perception that that 9.22 is unreasonably high; is that right?

A. That's correct.

Q. And I think you also testified that the debt level of NSP that you talked about was based on your accounting based approach, not a yield to maturity?

A. The debt return is based on the accounting approach which amortizes the acquisition costs, the reacquisition costs over the life of the debt issued, which is the standard accounting treatment for these costs.

Q. Now I believe that -- doesn't FERC practice and also the prior practice of this Commission is to use a yield-to-maturity approach for the cost of debt?

A. That has been the case, yes, as I say so in my reply testimony.

Q. And that typically will yield a higher cost of debt than the accounting approach you testified to?

A. Yes.

Q. I believe you stated in a data response that you didn't know how the Otter Tail debt-comparison figure was computed; is that right?

A. No, I do not. I don't have background on that.

Q. Now when you say that the MDU cost of debt is unreasonably high, that -- again, that's simply your opinion based on comparing it to two other utilities, Otter Tail and Xcel?

A. Not just them. You get the Federal Reserve report on what current interest rates or bond yields are. You'll find numbers dramatically lower than 9.22 percent.

Q. Yes. And those are current rates, not embedded --

A. Current rates, right.

Q. Have you done any investigation into the MDU debt as to the purpose for the occurring of the debt or the timing of the debt issues that make up its --

A. I've looked at the report on the 1992

refunding. I've looked at it fairly carefully, but if that's investigation, the answer is yes.

Q. Is that the extent of the investigation that you've done?

A. I think so, yes.

Q. Now -- but in order to actually come to a reasoned judgment, expert opinion about the cost of debt, wouldn't you have to look at all of the history by which MDU acquired and refinanced and incurred the current embedded cost of debt?

A. I guess I don't understand your question.

Q. Well, let me -- perhaps I phrased it in a convoluted way again, but in order to make an informed judgment, let's say, about whether a debt cost is unreasonable or not, wouldn't you have to look at all the circumstances under which each issue of debt was incurred and the refinancings that occurred subsequently?

A. You know, I'm not even sure that would do the trick. Everything had to do with timing, and it would appear that MDU picked a very poor time or did poor timing, for whatever reason, in its refunding, and the refunded -- the effective costs of much of the refunded long-term debt was no lower than the cost of the debt that was refunded. Those

would show up in the MDU data.

I'll give you a specific example. Here's a retired issue -- a retired issue of -- looks like 74 million dollars with a cost of money of 10.498 percent. The new issue is effective cost of money of 11.024 percent.

MR. HOBERG: Mr. King, what were you referring to there?

THE WITNESS: I'm sorry. The document I'm referring to is not in evidence, and maybe it will be, though. Maybe this is provided by one of your witnesses, but what it is is the -- I had asked for a cost benefit study for the refunding of the debt that was responsible for these very high long-term embedded costs, and I was given two sheets of paper. One shows the long-term debt capital as of December 31, 1991, and the other one shows the cost of capital as of -- or cost of debt, rather, as of December 31, 1992, and presumably the difference between the two is the effect of the refunding.

So I was -- you know, I can't explain why it appears that those particular issues having been refunded wound up resulting in a higher cost than the previous issue. That's something your folks will have to explain. I couldn't rationalize it.

Q. (MR. PEARCE CONTINUING) You didn't look into or inquire as to the specific reason for the refinancing that was done?

A. No. I didn't get into why the refinancing.

Q. Now turning for a moment to your comparison companies, your proxy companies, I'm looking at your Exhibit CWK-3R, I believe it is, listing both -- showing both your list of electric-only utilities and your list of combination gas/electric utilities.

MR. HOBERG: Is this in the direct or rebuttal?

MR. PEARCE: I think that CWK-R is in your rebuttal. I think it's the last page, I believe, in exhibits to your rebuttal.

THE WITNESS: I have it.

Q. (MR. PEARCE CONTINUING) I note that under the electric utilities -- or electric-only you have -- just taking a couple, for example, Pinnacle West and Great Plains Power, which I believe is the successor to Kansas City Power and Light; is that right?

A. That's correct.

Q. Both have a DCF return of 12.9 percent.

A. Yes.

Q. And now those are companies, which I believe if we look at -- and the same evidence may be in your testimony, but I took this particular page from Mr. Gaske's schedule which shows the percent of revenues from electric operations of all the companies that derived 75 percent or more. I believe it's in his initial testimony in response to your direct. It's his JSG-2, Schedule 3, page 1 of 2?

A. JSG-2, Schedule 3.

Q. It's entitled "Mr. King's Electric Companies That Derive 75 Percent of Revenue From Regulated Electric Service."

A. Yeah, I have it.

Q. Now I notice that those two companies I mentioned, electrics-only, Kansas City Power & Light, which is the same as Great Plains, and Pinnacle West derived 95 percent of the revenue from electric operations. So we're looking at companies that are -- as you say, they're electric-only. They derive the vast bulk of their revenues from electric operations.

A. Yes, sir.

Q. It would seem that these would be logical

ones to compare to Montana-Dakota rather than, for example, looking down in your list of combination companies of Con Ed and Energy East, which I think respectively derived 73.6 and 68.4 percent of their revenue from electric operations and have significantly lower DCF figures then of about 9.6 and 10.9 percent. I know you've testified as to your theory about the combination companies and the risk, but doesn't it just as a matter of common sense make more sense to be comparing Montana-Dakota Utilities' electric operations to companies that are deriving essentially -- or a large bulk of their revenue from electric operations?

A. No. And the reason is that the fact that Montana-Dakota Utilities also has regulated gas services means that the appropriate comparison is with entities that provide both electric and gas service under regulation and very little else, that is very little in the way of nonregulated activities, and the reason is that the electric -- the risk of the electric activity is not a stand-alone risk as Dr. Gaske seems to think. It is affected by the presence of the regulated gas activity for the reasons that I've discussed. So

the comparable company is the one that is the combination company.

Q. Well, suppose for a moment as an example that for whatever reason there was a very bad year for electric sales for Montana-Dakota and a very good year -- well, suppose a lot of customers switched over, as you've suggested they might, to gas. Then Montana-Dakota would have to invest significant additional funds into its gas operations, I assume, doesn't that make sense, to serve them?

A. It might. But the virtue is that it's better off than if it had no gas operations. That's the advantage that a combination company has that an electric-only company doesn't have.

Q. And if that happened, the Commission would then, of course, need to allow Montana-Dakota to recover those additional expenditures on the gas side; right?

A. Conceivably, but we're talking about rate of return and investors' perception of business risk, and investors' perception is that the presence of gas -- regulated gas operations in the same service territory is a protection, not a -- not an obstacle to the company's business success.

Q. But would those investors -- how would they factor into account? In my example if the electric -- substantial electric costs were now stranded because the customers have switched over to gas, is the Commission going to allow MDU to recover on the electric side of those stranded costs in plant?

A. Well, there's very little -- virtually no example that I could think of where shifts between fuel sources has created stranded facilities of any kind, and the reason is that in most of the country total fuel consumption, because of total population, if nothing else, and also economic activity is expanding, so that when you have a shift from, say, electricity to gas, it is at the increment. It isn't that the electricity contracts and you have stranded electric facilities which you wind up as having a slower rate of growth for the electric side and a higher rate of growth for the gas side and the reverse if there is a shift in the other direction.

Q. But aren't we now in a recession, and for Commissioner Reinbold I will say my opinion is that we are in a recession, so won't that affect your increasing economic, aren't we going in reverse?

A. It's conceivable that in a recessionary period if you had a dramatic shift from one -- from one fuel source to another, you could have a temporary loss of capacity utilization. I don't know of any example of where that has in fact occurred.

MR. PEARCE: That's all the questions I have.

MR. HOBERG: Thank you, Mr. Pearce. Mr. Fahn, did you have any questions of Mr. King?

MR. FAHN: No, thank you.

MR. HOBERG: Thank you. Commissioner Wefald, did you have any questions of Mr. King?

COMMISSIONER WEFALD: Yes, I do.

EXAMINATION

BY COMMISSIONER WEFALD:

Q. I have one on flotation charts, the flotation costs. On page four and on page -- on page four of your testimony, Mr. King --

A. This is my rebuttal testimony, I assume, because --

Q. Your rebuttal testimony, yes.

A. -- the issue didn't come up in the initial testimony.

Q. Right. You state that the -- I guess it's

on page three. You state that Mr. Gaske calculates the average flotation cost of new common stock issues at 4.75 percent, and then you discuss about how he applied these -- how if you divide -- flotation costs are a little hard for me, so you'll have to excuse me. I need a little time to ask my question. You talk about how the -- and let me make sure I understand flotation cost first. Flotation cost is how much it costs to put out this new stock offering to the public or to whoever wants to take it; is that correct?

A. That's right. It's things like underwriters' commissions.

Q. Okay. So I think I've got the basic concept. All right. Now, when -- when Mr. Gaske -- Dr. Gaske figures this, you're saying that he multiplies it by the whole 1.77 million book equity value of the company and that comes to 6.3 million dollars annually, which is more than all the flotation costs the company has incurred in the past five years, and so therefore -- then you talk about what their actual flotation costs have been in the last five years, and that's 1.1 million.

A. That's correct.

Q. That's all on page four.

A. Right.

Q. But in their rebuttal testimony to yours, the final thing that we received last week, they talk about how some of these were mergers and so then the mergers didn't really have much. They were acquiring stock or something, there was hardly any cost.

A. I don't know the detail, but my impression is it may have been exchanging stock or something like that.

Q. Exchanging of stock or something. So his comments about the exchange of stock, does that make any difference on your testimony on this issue?

A. It goes to my .94 percent, which Dr. Gaske says is understated, because I used in that the denominator of all -- the value of all the shares issued, including the acquisition shares. I don't know for certain how this acquisition worked and whether there was in fact an increment in the capital of the combined companies, but taking Dr. Gaske at his word, then the 9.4 percent isn't a good expression of the cost of getting new equity capital, new as opposed to exchanged equity capital, and he comes up with a figure of

three-and-a-half percent or something like that.

That doesn't change, though, the figure that I talk about on line 17, page -- I mean, line 16, page 4, the 1.1 million. That is in fact the average annual real flotation cost incurred by the company each -- on average each year in the last five years. So that number is unaffected by this whole business of acquisition equity.

Q. In --

A. So his recovery of six million is still six times what it ought to be.

Q. All right. And does he actually use that figure for calculating the -- for adding -- for adding this flotation adder?

A. Well, it's the effect of his flotation adder. If you take this -- this adder of 4-and-a-half percent and apply that to the total equity of the value of the company, it comes up to 6.3 million annually.

Q. Are you -- even if -- but he points out in his testimony that there is a -- that the 4.5 is closely associated with the cost of issuing new stock that would be comparable to MDU Utility stock, and is it your position that there just should not be an adder, period?

A. If you wanted to put an adder in, you should take some expression of the average flotation cost annually and use that as the basis for the adder. What I contend -- you'll see that on page four -- is that this would be an allowance of .1 percent.

Q. And do you even think an adder should be used, because you said if a flotation cost adder is used.

A. Yeah.

Q. You say "if." Are there situations when -- in rate cases where people do not allow a flotation cost adder?

A. Oh, rarely is -- I've been in a number -- I fight this battle all the time, and generally commissions do not allow flotation adders. Now there are probably some that have, but it's not -- it's not one that sells well with commissions because it results in such an astronomical increase in the cost of equity relative to the true cost of flotation.

This 1.1 million versus 6.3 million comparison is repeated anytime that a company does what Dr. Gaske's proposing, which is to take the cost of floating incremental, that is to say new

equity, and apply that as an adder to the entire volume of equity of the whole company. It's just an apples-and-oranges application and results in an inflated recovery of what is really not a very big cost.

Q. And then the other issue that you said was very small and that has to do with the one where you're using a number of .5 and they're using shall and MDU's using a number of point --

A. .625. That's even --

Q. -- 625. And you said that's very small as far as dollar factor. You said, "The effect of this disagreement on the final result, however, is minimal," page nine.

A. Yes. And that really is a nit. I suspect Dr. Gaske would agree with me on that.

Q. Okay. So how many dollars would you think that's worth?

A. I haven't figured it out, but I could do it.

COMMISSIONER WEFALD: All right. That's all the questions I have right now. Thank you.

MR. HOBERG: Thank you, Commissioner Wefald. Commissioner Reinbold, please.

COMMISSIONER REINBOLD: Thank you. Just a

couple to clarify my notes here so that I can read it myself.

EXAMINATION

BY COMMISSIONER REINBOLD:

Q. Mr. King -- Dr. King, excuse me, do you agree with Diller, basically there are about four issues here in this case?

A. That's about it.

Q. Okay. So you wouldn't -- from a previous time you had stated that you were in favor of 11.7 percent on equity and you dropped it to 11.5.

A. It's the other way around. I started out at -- I ran these numbers back in August and it was 11.2 percent on equity, and between August and February we had such things as the California energy crisis and we had a little problem with a company called Enron, and I think the public -- the investing public took a somewhat dimmer view of utilities as investment vehicles, and I think that's bumped up the cost of equity for utility companies, and that's evidenced in my revision to 11.7 percent.

Q. Okay. Then my last question is the one we're all trying to get an answer to, and that is: Have we had a recession?

A. They tell me it's over. That's what I heard on the radio the other day. We can all go back and put our feet up and relax.

COMMISSIONER REINBOLD: Can we kind of knock off early today so we can do that? Thank you. That's all I have for this witness at this time.

MR. HOBERG: Thank you, Commissioner Reinbold. Commissioner Clark, please.

COMMISSIONER CLARK: I have no questions. Thank you.

MR. HOBERG: Thank you. Let's see. Mr. Binek.

REDIRECT EXAMINATION

BY MR. BINEK:

Q. Mr. Pearce asked you some questions about the timing of MDU's debt financing activities. Over the long run could we expect MDU would be on the winning side of timing just as often as being on the losing side?

A. Well, as these long-term issues that are carrying very high coupon rates and bearing these reacquisition costs, as they mature the cost of refinancing will -- will drop because the premium that the company would have to pay to buy these

bonds back will decline. One of the most expensive issues is due up, I believe, in 2007.

So within the next few years it'll pay this company to refinance. Whether they can do it right now beneficially, I don't know.

One additional reason for setting the debt rate a little lower than the company would like is the very fact that if we lock in this very high 9.22 percent debt return and, as Mr. Diller suggested, that we don't have a rate case for a number of years, the company can enjoy a nice windfall when it does refinance because it will have a revenue award that reflects very high debt costs and yet it's refinanced its debt down 300 basis points, which is quite possible.

So that's yet another reason that I think we should go with the lower financial or accounting calculation of debt cost.

Q. When Mr. Diller had his slide show earlier, do you recall that he indicated that MDU's long-term debt has always been quite high compared to Otter Tail and NSP for the past 15 years, and so wouldn't you expect that over time MDU's cost of debt would become -- begin to come in line with those other companies?

A. I would hope so, yes. I would hope the financial planning would improve and the company can reduce its debt cost.

MR. BINEK: I have nothing further.

MR. HOBERG: Thank you, Mr. Binek. Mr. Pearce, anything further?

MR. PEARCE: No.

MR. HOBERG: Mr. Fahn, anything further?

MR. FAHN: Just one question.

EXAMINATION

BY MR. FAHN:

Q. Just to confirm, when you -- your resulting cost-of-equity number does not include any flotation?

A. No explicit adder for flotation. No.

MR. HOBERG: Thank you Mr, Fahn. Any further questions then of Mr. King? No further questions? Thank you, Mr. King.

THE WITNESS: Thank you.

MR. BINEK: Staff has no further witnesses to present.

MR. HOBERG: You rest at this time?

MR. BINEK: We rest.

MR. HOBERG: Thank you. Okay. Thank you, Mr. Binek.

MR. HOBERG: Okay. Mr. Pearce, are you ready to present MDU's case.

MR. PEARCE: Yes. May I have just a moment to arrange my papers here?

MR. HOBERG: Sure. We're off the record.

(Off the record.)

MR. HOBERG: Mr. Pearce, your first witness is whom?

MR. PEARCE: Wayne Fox.

MR. HOBERG: Mr. Fox, please. I think you heard the admonition I gave earlier in regard to perjury, Mr. Fox?

THE WITNESS: I did.

(Witness sworn.)

MR. HOBERG: Thank you. Mr. Pearce, please.

MR. PEARCE: Thank you. I just have a very few comments by way of opening statement, and then I will ask Mr. Fox to testify.

The basis for the proceeding is already in the record. The evidence that the company will present will demonstrate that Montana-Dakota Utilities will immediately begin to incur revenue deficiency if new rates based on the Commission staff's position go into effect in 2002 and

continue in effect.

And, of course, as the case has already shown, the primary driving force behind this conclusion -- behind the case in general is the sharply declining level of margins on wholesale electric sales, also called off-system sales, that the company believes it's now able to make and will be able to make in the future as compared to the unusually high margins that were in effect for sales in the years 2000 and especially 2001.

The company's evidence will demonstrate clearly that the wholesale market for electric sales is declining dramatically and for a variety of reasons will continue to do so, including the reasons that have already been mentioned, the precipitous decline in the price of natural gas, the advent of new generation facilities that can compete economically with the company's coal-fired generation in the wholesale market, the present economic recession in the United States, and a resulting falling off of demand and many other factors.

The company's witnesses will address these factors in detail in their testimony; and, finally, the company, of course, also takes issue with the

conclusions as to the appropriate rate of return that Mr. King has testified to. Our testimony will show that the appropriate and reasonable rate of return on equity is 12.75 percent and an actual cost of debt in the yield to maturity basis is 9.222 percent with a resulting overall rate of return of 10.7 percent.

There are, as has been mentioned already, several other minor issues in the case, but these are the major points, and with that I will ask Mr. Fox to -- to take the stand, and I will -- I don't need to use those yet.

C. WAYNE FOX,

having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. PEARCE:

Q. Would you state your name and your business address, please?

A. My name is Wayne Fox, 400 North Fourth Street, Bismarck, North Dakota, 58501.

Q. And what is your position with Montana-Dakota Utilities Company?

A. President of Montana-Dakota Utilities.

Q. And how long have you been in that

position?

A. August of 2000.

Q. And how long have you been employed by the company?

A. Since June 1980.

Q. And I believe you have a summary of testimony that you would like to make, and I would ask you to just go ahead and read that into the record.

A. I do. Should I proceed?

Q. Yes.

A. In my direct testimony I explain the company's position regarding the North Dakota Public Service Commission staff's recommendation for electric rate decrease and introduce the other witnesses who sponsored testimony on behalf of Montana-Dakota in this proceeding.

It is our position that there is no basis to reduce Montana-Dakota's electric rates at this time. The staff case does not take into account a number of necessary adjustments in making an appropriate determination regarding the reasonableness of the existing electric rates.

Our direct testimony filed on January 11th, 2002, indicated that there is a revenue

deficiency of $710,000. Our surrebuttal testimony filed on February 19th, 2002, reflecting an update to 2001 actual information consistent with the staff position, indicates a revenue deficiency of $1,727,000.

The testimony of the other witnesses addresses the necessary adjustments to the staff position. Montana-Dakota's electric rates were last changed in February 1987. From 1987 to 2001 the Consumer Price Index has risen 59 percent.

In spite of this significant increase, we have been able to hold our electric rates flat for this entire period by finding ways of operating our businesses more efficiently and taking advantage of new technology where it makes sense to do so, and that's maintaining a consistent focus on providing reliable and safe electric service to our over 70,000 electric customers in North Dakota at reasonable and at competitive prices.

My direct testimony contains examples of what we did to take advantage of technology and operate more efficiently. We also continue to look for other opportunities to operate our businesses more efficiently and to reduce cost.

In the years -- excuse me. In the years

since 1987 our earnings have sometimes fell below the authorized level set by the Commission and sometimes above that level. A regulated utility on average and over time should be able to earn at or near its authorized return. A regulated public utility is only afforded the opportunity to earn a reasonable return on its investment and facilities dedicated to the public utility service. There is no guarantee.

The earned return levels for the last few years that gave rise to this proceeding were caused primarily by a single element, the selling of power in the wholesale market as the opportunities arose. It was a market anomaly that afforded us and other utilities across the country the ability to temporarily obtain significantly increased revenues and margins from sales of electric energy into the wholesale market in the last few years.

Those opportunities, we believe, peaked in 2001 and will be significantly reduced in the year 2002 and beyond. The reasons for the loss of opportunities are described in the testimony of Mr. Blinsky, Mr. Gaske, Mr. Wilkinson and Mr. Schiffman.

In short, the last few years were an

unusual period of time in the energy markets where high gas prices, high demand and a strong economy converged to create high demand and high prices for wholesale power. These conditions have now changed and are not likely to be present in the near future, and those reasons are explained in the four witnesses I just mentioned.

What this means for Montana-Dakota is that we will no longer be able to sell power in the wholesale market at the higher prices that we have seen in the last few years. This translates to a significant downturn in our earnings and our returns. The effect of this on our earnings is quantified by other witnesses.

In addition to the wholesale sales levels, there are other changes in cost levels from the year 2000 basis and now the year 2001 basis which staff has adopted that the Commission needs to take into consideration in determining the reasonableness of our electric rates. These changes are discussed in detail by other witnesses.

So in view of the above, in my opinion there is no basis to reduce our electric rates at this time. That represents a summary of my testimony.

MR. PEARCE: I have no questions for this witness.

MR. HOBERG: Did you want to introduce your exhibits or offer your exhibits at this time, Mr. Pearce?

MR. PEARCE: I think I'll wait until -- the summary that Mr. Fox did was separate from our bound and marked exhibits, so I think I'll wait until our first witness -- I mean, our next witness.

MR. HOBERG: Oh, okay. Thank you, Mr. Pearce. Mr. Binek, did you have any questions of Mr. Fox?

MR. BINEK: No.

MR. HOBERG: Mr. Fahn, did you have any questions of Mr. Fox?

MR. FAHN: Just one, I guess.

EXAMINATION

BY MR. FAHN:

Q. MDU is not asking for a rate increase at this time?

A. Not at this time.

Q. Why not?

A. Well, we've bit the bullet several times over the last decade. If you look at Mr. Diller's

first slide on his exhibit, you'll see that the company failed to earn its authorized return for about a four- or five-year spread there, and when I say bite the bullet, what we did in those particular cases, we froze our labor rates, which is a significant portion of our cost. We looked for efficiencies of operation, and that's outlined in my testimony, a list thereof.

So we're going to continue to look for ways of operating our business more efficiently and take advantage of new technology. So I'm not ready at this point to give up on it, but there clearly is, from my testimony and the testimony of Mr. Ball and other witnesses in this case, that there exists a likely revenue deficiency for 2002 -- or based upon the test year -- I'm sorry, based on the test year 2001 as adjusted.

Q. Do you have anything in mind for the efficiencies that you were talking about, to save money in the future?

A. Well, one we haven't implemented yet, but I think it's already recorded in the case, is the Itron hand-held meter reading. We found that Itron is now going to support the method that we have adopted here several years ago. It's more

efficient, and so we think that we'll probably go to the hand-held technology that's now available to us. We'd like to go to even a higher technology, but we can't see the economics of doing so, but that's just one example.

Joint meter reading with municipalities -- again, we reflected some of that in the case. We started doing that for the towns here in Richardton -- and there's one other town that I forgot the name of it already -- that we're enjoying joint meter reading right now, but we're looking for other opportunities to do that.

Joint trenching is allowing us to provide service to other customers that we couldn't otherwise do, especially with the telecommunication companies. That's helped us get service into areas that we couldn't, but the list actually just goes on, but some of them are not real material but you kind of add them up over time, but that's how we've stayed away from this Commission as far as asking for a rate increase since 1987, is trying to do those type of things.

Q. Will any of those things be implemented in the test year, the 2002?

A. Like I said, they're already reflected I

think in this 2000 case because we're looking ahead on the 2001 cost adjustments.

MR. FAHN: Okay. Thanks.

MR. HOBERG: Thank you, Mr. Fahn. Commissioner Wefald, did you have any questions of Mr. Fox?

COMMISSIONER WEFALD: I have no questions for this witness.

MR. HOBERG: Commissioner Reinbold.

EXAMINATION

BY COMMISSIONER REINBOLD:

Q. Mr. Fox, it sounds as though you subscribe to the idea that the wholesale market is kind of a guessing game, you don't know what it's going to be now or in the future?

A. Well, I tell you, I think it's an unknown, and we struggle with that ourselves in the sense of what is going to happen. Terry Blinsky, who is our operator and trying to take advantage of sales as they come along, he's really reacting, if you will, to opportunities that are out there. He doesn't really know what's going to come down the pike, but when it does, he's going to try to make the best deal that he can.

I've talked with experts, American Gas

Association, we've talked with other people, including the Edison Electric Institute. As Mr. Diller's done, we watch the news and take advantage of that, as well, but the reason I brought in three experts today is so that you and I can get a better handle on what might be a reasonable determination of wholesale levels in the future, and these folks are here to help us understand that.

COMMISSIONER REINBOLD: That's all I have.

MR. HOBERG: Thank you, Commissioner Reinbold. Commissioner Clark, please.

COMMISSIONER CLARK: I have no questions. Thank you.

MR. HOBERG: Thank you, Commissioner Clark. Any further questions then, Mr. Pearce?

MR. PEARCE: No.

MR. HOBERG: No further questions? Thank you, Mr. Fox.

THE WITNESS: You're welcome. Thank you.

MR. HOBERG: Your next witness, Mr. Pearce, please.

MR. PEARCE: I'll call Dr. J. Stephen Gaske.

COMMISSIONER REINBOLD: Who?

MR. HOBERG: Dr. Gaske.

MR. BINEK: Dr. Gaske.

MR. HOBERG: Please be seated. Is it Gaske or Gaske.

THE WITNESS: Gaske.

MR. HOBERG: Dr. Gaske, I think you heard the admonition I gave earlier in regard to perjury; is that correct.

THE WITNESS: Yes, I have.

(Witness sworn.)

MR. HOBERG: Thank you. Mr. Pearce, please.

J. STEPHEN GASKE,

having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. PEARCE:

Q. Dr. Gaske, I'm going to show you a bound book that's labeled Exhibit 6 and Exhibit 7 and just ask you to identify that your previously-filed testimony appears in those two books.

A. Yes. Yes, it does, with --

Q. Go ahead.

A. Okay. There was one schedule omitted from the surrebuttal testimony.

Q. And I believe that's been marked as

Exhibit 8 -- of the Commission exhibits. It's your JSG-4, Schedule 1, I believe. I think I must -- I have it here.

MR. HOBERG: You marked something as a separate exhibit?

MR. PEARCE: I think we marked that as a separate exhibit. I think it was inadvertently omitted from the --

MR. HOBERG: Oh, yes. Exhibit 8. Part of the surrebuttal?

MR. PEARCE: That's right.

Q. (MR. PEARCE CONTINUING) I'm showing you also what's been marked as Exhibit 8. Is that the schedule that was inadvertently omitted from your rebuttal testimony?

A. Yes. This was a data request -- or a response to a data request that I provided to Mr. King.

Q. Do Exhibits 6, 7 and 8 appear to contain your original rebuttal testimony and surrebuttal testimony as filed in this case?

A. Yes, they do.

MR. HOBERG: Just for the Commission's information, 6 and 7 contain all of the direct and all of the surrebuttal of MDU.

COMMISSIONER WEFALD: Yes.

MR. PEARCE: And with the Commission counsel's agreement and the hearing officer's agreement, I think what I would suggest doing is I'll offer Exhibits 6, 7 and 8, offering 6 and 7 with the proviso that as each witness testifies, I will ask him if that is his testimony as filed.

MR. HOBERG: I think that would be acceptable. Mr. Binek, is that all right?

MR. BINEK: Yes.

MR. HOBERG: Okay. So you're offering in total then Exhibits 6, 7 and 8.

MR. PEARCE: 6, 7 and 8, yes.

MR. HOBERG: Any objection, Mr. Binek?

MR. BINEK: I was just taking a look at 8 here. No, I have no objection.

MR. HOBERG: Okay. 6, 7 and 8 are admitted, and just for the record, Dr. Gaske's direct and surrebuttal are Dockets 49 and 63. Mr. Pearce, please.

Q. (MR. PEARCE CONTINUING) Dr. Gaske, first I would ask you to -- and you may simply read this from the first couple of pages of Exhibit 7, if you wish -- to summarize your background and experience.

A. My educational background is that I hold a Bachelor's degree from the University of Virginia. I hold a Master's of business administration degree from George Washington University, and I hold a Ph.D. from Indiana University where my major fields of concentration were public utilities, financing and microeconomics.

My professional experience is that subsequent to receiving my MBA I worked at the consulting firm of H. Zinder & Associates for several years as a research associate and director of -- later as director of research.

I left there and worked for a year with Olson and Company and then went back to school to get a Ph.D. During that time I continued to do independent consulting. I also taught a number of different courses, including public utilities and transportation. I also during that time was the coordinate to the Edison Electric Institute rate course.

In 1986 I went to work for Trinity University as a professor of finance and left there in 1988 to come back to H. Zinder & Associates where I've been since then as a consultant.

Q. And have you previously testified in rate

proceedings?

A. Yes. I've testified or submitted testimony in, I believe, more than 40 proceedings.

COMMISSIONER REINBOLD: Could you speak up a little bit, please?

MR. HOBERG: Could speak up a little bit please, Dr. Gaske?

THE WITNESS: Yes.

Q. (MR. PEARCE CONTINUING) Drawing your attention, Dr. Gaske, just for a moment to Exhibit 7, I believe there was a number correction that needed to be made there on line 17 of page 20 of your surrebuttal. That would be Exhibit 7.

A. Yes. That refers to the Montana-Dakota estimate of the margins that will be available. The number shown shows 7.2 million. The corrected number that's in the surrebuttal testimony of Mr. Blinsky is 6,429,778.

Q. With that correction does your -- your testimony as contained in Exhibits 6 and 7, is that true and accurate and complete as you --

A. Yes.

Q. Now you heard the testimony of Mr. King here in this proceeding this morning, I think, have you not?

A. Yes.

Q. Would you respond to the issues and the comments that Mr. King has made?

A. Yes. I guess I'll take them one at a time, in the same order that Mr. King addressed them, and I guess I should say at the outset that most of what I'm going to say is in my surrebuttal testimony.

During Mr. King's response he mostly repeated what was in his rebuttal testimony and appeared to not address almost anything that was in my surrebuttal testimony. So much of what I'm going to say actually is in written form in the surrebuttal testimony and will respond to what Mr. King said while he was on the stand.

The first issue as to the debt cost is that the accounting based approach that he advocates is equivalent to disallowing a portion of the company's debt cost, and the reason it is is that the accounting based approach does not reflect the effective cost of the debt, what it really economically costs and what the company needs to recover to recover its costs.

In particular, if you focus on the reacquisition cost issue, by having Montana-Dakota

recover reacquisition costs, you know, as they're being amortized for accounting purposes, you're essentially assuming that the reacquisition costs are going to be incurred this year and next year and the following year, when in fact the company actually wrote the check for the reacquisition costs many years ago.

The company spent the money, the cash is outstanding, and when you use the accounting approach, you're making an entry, a simple book entry each year, to spread that cost over a number of years, but that does not reflect the fact that the money was already spent many years ago, and essentially they lose the carrying value of the dollars that they spent. It's equivalent to no allowed rate of return on the reacquisition costs. So when you use his approach, you are going to effectively disallow a portion of the true cost of the debt.

As to the reasonableness of the debt cost, in my surrebuttal testimony I have a calculation where I show that the debt issuances that occurred since April of 1992 have an average cost of about 7.31 percent. That's right in the same ballpark with the costs of Otter Tail and Northern States

Power. In fact, it could even be lower than theirs in that the 7.31 reflects the yield to maturity approach for calculating cost, and we're not entirely sure how, for example, the Otter Tail costs were calculated. I asked for a calculation of those costs from Mr. King. He said he did not know how they were calculated, either.

So the debt that has been issued since 1992 has basically the same cost or possibly even a lower cost than the other utilities in the state.

The real issue with regard to the debt cost has to do with reacquisition costs and the high cost of debt that was issued really initially in the late Seventies and early 1980s. At that time Montana-Dakota had several things going on, but the biggest thing was that they were building an electric plant, and anyone who remembers that time period remembers that very suddenly interest rates went to extremely high levels and stayed there throughout the early Eighties.

So the company had a very large need for financing at the same time that interest rates were very high. It issued a very high cost debt at that time, and I think Mr. Mahowald will talk about this in more detail, but it had to refinance those

high -- or it found it advantageous to refinance those costs in 1986, but the fact of the matter is that once you have very high cost debt out there, in order to get it back from investors and get them to, you know, give up the high interest rates that they were getting on that debt, you have to pay a fair amount to get the debt back, and there was a lot of money involved.

They -- the company refinanced in 1986 to get the cost down, and -- but they still had high cost debt that in 1992 they again refinanced. So what you really see on the books of Montana-Dakota today is -- are debt costs that are right in line with everybody else except for the fact that they have some high reacquisition costs that have been carried over quite a number of years and date really from a time period that they needed to build a new plant and raise a lot of money at high interest rates.

The plant is still in service. It provides, as I understand it, very economical service to the ratepayers, but the fact of the matter is is that plant was built at a high cost in terms of what they had to pay for interest at the time.

So I -- when you look at the overall circumstances and delve into them a little bit -- and Mr. Mahowald will be able to go into more detail, I think, than I can, you find that their debt costs are perfectly reasonable considering the circumstances under which they were incurred.

They're higher than other utilities, and at some point in the future as the reacquisition costs are paid down and the current debt that those reacquisition costs are associated with, as that disappears off their books, they will -- their costs will drop down to a level that's probably commensurate with everybody else. If they were to refinance today, they would still have those reacquisition costs hanging over them in one form or another.

So the second -- and really it was a whole set of issues that are related to the return on equity. One of the major differences between the two of us is the use of proxy companies and what we consider to be comparable companies for measuring the cost of -- the cost of equity for investing in electric utility operations. That -- that's really the issue in this case.

We're not talking about combination

companies or highly diversified companies, but we're trying to come up with cost of common equity for investing in electric utility operations, and the issue between us is probably best understood if you were to turn to my Exhibit JSG-2, Schedule 3.

MR. HOBERG: Is that in --

MR. PEARCE: That's in 6, Exhibit 6.

MR. HOBERG: Thank you.

COMMISSIONER WEFALD: That's in your direct testimony?

MR. PEARCE: Direct testimony.

THE WITNESS: In the direct testimony, yes, ma'am.

COMMISSIONER REINBOLD: What page?

MR. HOBERG: What page was it again?

THE WITNESS: This is Schedule 3, page one, and it's towards the back of the direct testimony. The -- for the most part the data shown here are taken from Mr. King's exhibits. He provided -- with one exception. He provided all of the basic numbers that went into these. I just combined two of his exhibits in one place and then sorted the numbers. I calculated the percentage of revenue from electric operations and then just sorted them from highest to lowest.

In the left column underneath where it says "King company," I've designated where it's an electric company in his group with an E or whether it's a combination company with a C. The companies in bold are companies that I've used in my analysis.

The thing to point out is that Mr. King has decided not to use electric companies. So, for example, where you see Southern Company and Kansas City Power & Light with 98 and 95 percent of their revenue from electric operations, he has concluded that these are not appropriate companies for setting -- or making a comparison to the risk of electric operations and setting rates for electric operations. So he has calculated a cost of capital for those companies, but he's thrown those results out, they're not relevant.

If you look about halfway down, you'll see the last three -- or actually the last three that have Cs next to them -- and actually Madison Gas & Electric, which he would -- he indicates that he would have used except he couldn't get an analyst forecast or growth for them. These are companies that he would use in setting the electric rates because they're combination companies. He would

use them for setting electric rates for Montana-Dakota.

These companies have approximately 73, 68, 68 percent, and actually Madison Gas & Electric has 62 percent of its revenues associated with electric operations. So I basically objected to and disagree with the idea that when you're in an electric rate case, you would throw out a company like, say, Kansas City Power & Light that's getting 95 percent of its revenues from electric operations and replace it with a company like, say, Alliant or Consolidated Edison where you're getting 73 or 68 percent from electric -- or electric operation.

This has a very real impact on the results in a couple of ways, and I guess probably the best way to look at the results would be to turn to Mr. King's direct testimony, and in particular page 18 of his direct testimony. Actually, let me take that back. Since he updated his rate of return, his rebuttal testimony has the newer numbers, and those appear on Exhibit CWK-3R, which is at the back of his rebuttal testimony.

MR. HOBERG: That's Exhibit 5, rebuttal testimony.

THE WITNESS: Looking at the companies

that I just referred to, you have, for example, Pinnacle West, which has about 95 percent of its revenues from electric operations. He doesn't consider that to be relevant, but the DCF return is 12.9 percent, and it's virtually an all-electric company. He threw that out and replaced it with, say, a company like Consolidated Edison with a rate of return of 9.6 percent, which only gets 72 percent of its revenues from electric operations.

Similarly, he threw out up above where you have Great Plains Power, which used to be Kansas City Power & Light. They get 95 percent of their revenue from electric operations, and they have a required return of 12.9 percent. He considers that to not be reasonable -- to not be relevant to this proceeding and instead replaces it with a company like, say, Energy East with a required return of 10.9 percent.

I maintain that the best way to approach this problem is to include all of the companies that get at least 75 percent of their revenue from electric operations. You can see that back on the Schedule 3 of Exhibit 6 that we were talking about a few minutes ago. I believe it's appropriate to include those companies and include companies that

get 98 percent of their revenue from electric operations even if they don't have a gas operation.

Now, one of the big differences in us is Mr. King believes that the required rate of return for an electric company somehow is affected by whether or not it's owned by a combination company. You have the ability to more or less offset good years in the gas business with bad years in the electric business, and he's right. That's true for every company.

If Montana-Dakota were to merge with Qwest, their electric operations, maybe they have a bad year there but their telephone operations have a good year and the two things offset each other. The question you have to ask yourself is: Does that mean that it's more attractive to invest in new utility plant to serve people in North Dakota if the company merges with Qwest?

Or the alternative way of looking at this is if Montana-Dakota were to spin off its gas operations, would it suddenly be less attractive to build a new utility plant, new electric generating plant to serve people in North Dakota, and my answer to that is, no, that the risk really doesn't change between the two.

Now another component of his testimony goes to this question of, well, if you're an electric-only company, investors require a higher rate of return because you don't happen to also own a gas distribution company or have that rolled in there to work out or offset some of the risks.

Well, if you look at a company like Southern Company that gets 98 percent of its revenues from electric operations, if I'm an investor and I really believe that the cost of capital is lower if -- if in fact you have some gas operations, I'll go out and I'll buy stock in Atlanta Gas & Light and Alabama Power Company, which are in the same -- I'm sorry, Alagasco, which are gas distribution companies that are in the same territory. So now I as an individual investor own stock in both the gas distribution companies in that area and the electric company in that area.

Does this mean that my cost of capital for the electric utility has suddenly gone down? Well, I probably have a diversified portfolio now, but I think that I still perceive the risk in the electric company the same way. If I was concerned about the risk and thought that having gas distribution stocks would eliminate the risk, then

I could buy some gas distribution stocks and put them in my portfolio.

Investors are smart enough to figure this out. So if there is a benefit to having stock in both companies, that's already reflected in the required rate of return for Southern Company or for Kansas City Power & Light. They can accomplish this diversification on their own.

So what you're left with is a rate of return that investors require for investing in electric operations with the full knowledge and ability to also buy natural gas stocks in their portfolio to eliminate whatever risk natural gas distribution companies do eliminate for the companies, and so in almost every respect you get a true rate of return for an electric company that also considers the possibility of owning gas stocks to eliminate the risk.

Now, one of the points that he makes is that, well, gas and electric compete with each other, and therefore if the same company owns both, it really is indifferent as to what happens and that somehow reduces the risk of investing in one or the other. That's not true for several reasons.

First, and by far the most important one,

is the fact that when you sit down and you try to -- to decide whether to invest in, say, a new generating plant or a transmission line, you look at the risks that that faces. You look at the electric market, you look at competitive alternatives, and you make the investment.

If the investment later goes bad and you lose your money, you know, that's part of the risk, but it's the risk of the electric operation that you're considering when you make your electric investment. It's not the risk of the combination company, because when you're investing in the gas business, you sit down separately and say, what's the risk of investing in the gas business, and you make investments there, and they may or may not pan out.

On both sides of the coin there are significant examples. In the early 1980s utilities all over the country ended up having to write off massive investments in generating plants that they started and had to cancel, and, you know, whether they were a combination company or not a combination company, they had to do that, and those were really big risks that they still face today that somehow they'll start a plant and the market

will change on them or -- and in some respects they may face even greater risks today because of the possibility of deregulation in the future, that you build a plant and four, five years from now the market is opened up for competition and they lose their shirt on the plants that they've built. So they face that, and it's an electric-related risk.

In the gas business quite a few companies -- this applied more to gas pipelines than gas distribution companies, but in the past they've lost an awful lot of money by signing contracts to buy gas and -- and then finding that the markets changed on them and industrial customers in particular won't buy their gas.

So each type of investment basically needs to be evaluated differently. Mr. King said that I strenuously object to the use of combination companies. However, if you look at Schedule 3, I don't really object to the use of combination companies. I include combination companies, but what my criterion is is that you have 75 percent of your investment from electric operations, and he objects to that, but he was very happy to include a number of companies that have a smaller percentage of their revenues from electric operations.

I think I've picked a reasonable and indicative group. There are three in particular that he objects to, IDACORP, American Electric Power and Cleco, and in my surrebuttal testimony I quote from the Value Line page for IDACORP where it talks -- talks about the fact that IDACORP makes sales for resale and has made some fairly decent amount of money in recent years on their sales for resale, but in 2001 those sales were down significantly, and Value Line and investors expect those sales for resale to go down quite a bit more next year in 2002 because the prices in the market for power have more or less crashed.

Well, I look at something like that and I say, what's the issue in this case? The issue in this case is -- I mean, the really big issue in this case is the sales for resale by Montana-Dakota, and if you're looking for companies that are comparable to Montana-Dakota, I can't think of a company that would be more comparable than one that is making sales for resale, in addition to having a high percentage of their revenues in the electric business.

So -- and the same thing is true with American Electric Power and Cleco. They have some

unregulated operations, but as this table indicates, all of them still are getting at least 75 percent of their revenue from regulated electric operations, or at least that's according to Mr. King.

So these are overwhelmingly primarily regulated electric companies who also are making some sales in the sale for resale market and some unregulated electric sales which makes them even more comparable to Montana-Dakota.

So for all of those reasons, I think that I've got a reasonably representative proxy group company for setting electric rates in Montana -- excuse me, for Montana-Dakota in North Dakota.

COMMISSIONER REINBOLD: Did you misspeak and say Montana?

THE WITNESS: Pardon?

COMMISSIONER REINBOLD: Did you say Montana?

THE WITNESS: Well, I started to say for Montana-Dakota and I stopped at Montana.

COMMISSIONER REINBOLD: Pretty dangerous in North Dakota to make any reference to Montana.

THE WITNESS: Where is it located? I guess the next area that I'll address is the

flotation cost adjustment, and I addressed this in my surrebuttal testimony, but initially I'll say one thing about it is that Mr. King keeps using the number 6 million dollars, and for purposes of this case the impact is approximately $365,000. So I think that'll probably put that more in perspective. 6 million sounds so large when you're talking about electric operations that have only a rate base of 128 million, but the fact is the impact is 365,000.

More importantly is the reason that a flotation cost adjustment is needed and necessary. Both of us agree that if you apply the DCF adjustment -- approach and you come up with a cost of common equity, the value of the electric operations should be equal to their book value, and he testified to that earlier.

So if I'm Montana-Dakota and I go out and I raise a dollar to invest in my electric operations, I raise that dollar, I pay 5 cents of it to brokers and investment bankers and other people who have their hand out in the process, I've got 95 cents left to invest, but I -- and I go and I invest it in my electric operations and I've got 95 cents worth of electric plant, but I had to go

out and I had to raise 1 dollar to invest 95 cents in my electric operations.

Your DCF result when you apply that rate of return sets the book value of the plant that you bought for 95 cents, sets the market value equal to that also. So you have a value of 95 cents for your plant, but you had to spend 1 dollar to get that, and the flotation cost adjustment is designed to recognize that fact.

Now, the other crucial point is that in setting the cost of capital for common equity it's a little bit different from almost any other component in your cost of service. The other components in your cost of service are really -- you can look up on the accounting books and you can see what they are and you can make adjustments for various things, and -- and they're right there, but the return on common equity has to be a forward-looking number.

The courts have had fundamental tests that it must be sufficient to attract capital in reasonable terms. Now, that doesn't say only -- only sufficient if you need to actually raise capital. The point is that if it's reasonable, it's reasonable to raise capital whether you need

to do so or not, and that's why the going back and measuring what they've spent on flotation costs over the last several years misses the main point of the flotation cost adjustment.

It's just like having a good credit rating. I'll worry about getting a good credit rating when I need to borrow money, but if I don't need to borrow money right now, I'll maintain a bad credit rating. It just doesn't work that way. You need to be in that position at all times that you can raise capital on reasonable terms.

Now, it's not -- this is not a completely ridiculous notion. In my surrebuttal testimony I have quotes from several leading treatises on the subject of setting public utility rates and the cost of capital, and I point out that I'm not the only one who advocates those.

The point that Mr. King made about Montana-Dakota having a book value in -- or a market value in excess of book value -- and that's really for MDU Resources, their publicly traded stock, but when they go out and they issue new stock and perhaps they issue it at a price above book value, they get that money and they have several options.

If they invest it in electric operations at -- that really have a value of 95 cents after that I have raised the dollar and spent their money on flotation costs, they've -- they've essentially lost some value to their entire company, and that value comes out of the pockets of the stockholders.

If on the other hand they take that dollar and they pay the 5 cents to the brokers and they have 95 cents to invest, they go out and they invest it in industrial assets, they can create value for their stockholders, and the average market-to-book value for industrial companies is about 6. So they could turn that 95 cents into nearly 6 dollars if they invest it somewhere else.

So the other point about flotation costs is that, sure, their market value is above book value. They have other operations, and yet their overall market-to-book ratio is pretty low compared to other industrial companies, even though Montana-Dakota has industrial operations.

If they invest the dollar -- or actually the 95 cents in industrial operations, then Mr. King is right. They can maintain the value of their company with no dilution. If on the other hand they invest it in the regulated electric

operations, they're going to dilute the market value of the company.

Now, in his statement earlier he kept referring to the book value, they can increase the book value, but they're actually going to reduce the market value; that the investors in the company will be hurt if Montana-Dakota takes that money and puts it in electric operations and reduce the value of it. So there's a disincentive, and essentially the rate of return would be inadequate if you don't recognize the flotation cost.

The next area -- it's a fairly small area, but I addressed this also in my surrebuttal, but it probably is worth going into here -- is why I have a .625 adjustment to the dividend yield in the DCF model that I apply, and I guess probably the best way to describe the difference between us, if you don't mind, I'd like to write on the board behind me.

MR. HOBERG: As long as you're explaining as you go for the record so we --

THE WITNESS: Yes. I --

COMMISSIONER WEFALD: You can take the microphone with you.

MR. HOBERG: Yeah. You probably should,

in fact, so we can all hear you.

THE WITNESS: Yeah. People keep telling me I talk too softly. There are several concepts that get rolled in together when you're looking at this adjustment for the dividend yield, and the math is fairly complicated. It would fill several pages of algebra, but the intuition is really very simple.

You've got one concept which is the idea that you have a timing of your dividends, and if you look on a time line that's measured in years, you might get your dividend or your dividend increase immediately, which would be at time zero, or you might get is one year from now at time one. Well, on average, you would look at this and the average timing of your dividend would be at 0.5 years or half a year.

And Mr. King and I both agree on that. We're in absolutely complete agreement, and my number reflects that assumption and he says that assumption is correct.

Where we differ is that he stops there. He thinks that's all there is to the DCF model, but when you work through the math of it, the crucial insight in a DCF model is the fact that there's a

time value to money, that a dividend received today is more valuable than a dividend received a year from now.

So to see what the impact on the DCF model is you need a second line, which would be your present-value line, and if you received one dollar right now, it's worth one dollar in present-value terms, and that would be reflected in the stock price if people expected to receive the dollar right now.

If, on the other hand, you were to receive that 1 dollar a year from now, the present value of the 1 dollar would have to be discounted and you'd have to take into account the time value of money, and say your cost of capital is 11 percent. You would divide that 1 dollar by 1.11 and you'd have a value of 90 cents.

COMMISSIONER WEFALD: Is that because of inflation that it's discounted or is there another reason?

THE WITNESS: No. It's -- if you could get your one dollar now, you could invest it and earn 11 percent. So --

COMMISSIONER WEFALD: I could? How do you come up with that 11 percent number?

THE WITNESS: I just made it up for --

COMMISSIONER WEFALD: Example?

THE WITNESS: -- for an example.

COMMISSIONER WEFALD: All right. Thank you.

THE WITNESS: But, you know, in this case your bond yields -- say, they're nine percent.

COMMISSIONER WEFALD: They're not right now.

THE WITNESS: Yeah. But if you had something that was nine percent -- well, actually if you had bonds that yield an 11 percent, the way they get that 11 percent is by discounting back to the present to come up with a price that you would pay today in order to get 1 dollar a year from now, and as it turns out, if you were buying a stock that was going to give you a dividend a year from now of 1 dollar, you would pay 90 cents today, and a year from now when you get -- actually get 1 dollar, you're -- the 90 cents you paid for today when they give you 1 dollar, you've earned 11 percent.

COMMISSIONER WEFALD: But you're just using 11 percent as an example. It could be any number. It could be 3 percent.

THE WITNESS: Yes. It could be any number at all.

COMMISSIONER WEFALD: All right.

THE WITNESS: As we both agree, on average you end up in the middle -- or as to the timing of when you get your dividend. So the average present value over the course of that year would be 1 dollar plus 90 cents divided by 2. So one plus .9 over 2, which is equal to -- what am I at? Yeah -- and actually you've got to multiply it by your probability, but on average you end up with something like -- yeah --

COMMISSIONER WEFALD: .95.

THE WITNESS: Yeah, .95. So it -- you don't end up with 1. You end up with .95 if it's in the middle of the year.

COMMISSIONER WEFALD: If you guess that it's going to be an 11 percent return.

THE WITNESS: Yes, yes.

COMMISSIONER WEFALD: Thank you.

THE WITNESS: As long as there's any kind of cost of capital that pays interest or requires a time value, that will be true.

Now, if you knew that you're getting your dividend here, the -- your dividend adjustment

factor would be 0. If you knew that your dividend was going to be here, it would be 1, and if on average it's going to occur halfway through the year at this point, it's not halfway between 0 and 1. Because of the time value of money the fact that this is .95 and not 1 as the average, your dividend adjustment factor is .625. The reason it's not the .5 that you had for the timing halfway through the year has to do with the time value of money, and it's .625.

I hope I haven't thoroughly confused you with this, but mathematically that's the way it works out, and intuitively that's why it is not .5.

Now, Mr. King also commented on my risk premium approach to more or less measuring or setting a benchmark for the rate of return. The numbers I used for any risk premium approach are the -- come from the -- what I would refer to as the famous Ibbotson & Singfield study. It was referred to this morning as the infamous study.

However, it's quite famous. It's used by investment analysts, it's used by mutual funds in talking to people, it's used for a variety of purposes to estimate the average premium that stocks have earned over bonds over a long period of

time.

Now, it's hard to imagine a better stand-alone independent estimate of what kind of a risk premium you need at any given point in time to invest in the average common stock than this long historical period unless you use a DCF approach.

In my mind a DCF approach is really how you estimate the cost of common equity, but this number does provide a good benchmark for determining whether or not -- you know, is this in the kind of ballpark that anybody in their right mind would think companies need to earn, and so I use this approach as a benchmark to more or less see whether I'm in the right ballpark. Well --

COMMISSIONER WEFALD: Can you tell me what page that's on where you discuss that? It's in your first direct testimony, I believe, of January 11th.

THE WITNESS: Sure. It's in my direct testimony. The summary of all of the approaches is in the -- is on page 46.

MR. KING: That's 33 through 34.

THE WITNESS: And on page 46 I've looked at risk premium varies different ways, the historic premium over treasury bonds that large company

stocks have earned, and that's 13.3 percent. Small companies of the size of the Montana-Dakota electric operations are 17.6 percent, and if you compare it to corporate bonds and the premium that common stocks have had over corporate bonds, the number is 14.8 percent for large companies and the companies the size of Montana-Dakota electric operations, it's 19 percent.

So at least to my mind this is an independent check on whether or not the rate of return is reasonable. It's not definitive. It doesn't absolutely answer the question, but it does tell me that, you know, I don't have a number that's wildly out of line with the kinds of premiums that have been earned over a long period of time in the past.

The second check that I have is my alternative equity investment approach where I look at the returns that companies have actually learned in recent years, and those returns are 20.7 percent on average for the S&P 500 and 20 --

COMMISSIONER WEFALD: What are those years?

THE WITNESS: Those would be in this testimony '96 through 2000. Now that time period

is exceptionally high. I mean, those were some of the best years ever, and so, you know, you wouldn't place too much weight on those.

COMMISSIONER WEFALD: If you use the most recent three years, I wonder what your numbers would be.

THE WITNESS: Oh, even higher. Well, because these are returns actually earned on the book value, you know, if you looked at the -- what the company earned, not what stockholders earned. Stockholders -- the price of their stock went down for a lot of companies and they didn't make much money, but the companies themselves have made very substantial profits on their book values. I don't expect this upcoming year or -- and it's quite possible 2001 is going to come in much lower, but I don't have those numbers yet.

But this gives you a general idea of the kinds of returns that are available on average -- for an average company and have been in recent years.

Mr. King's response to this is that investors don't have access to book value returns, and that's not really true. Investors in common stocks of these companies don't have direct access

to this. They've bid up the price of the stock to the point where what they really get on their stock is something less than 29 percent, but numbers like this are relevant if you're asking the question of does Montana-Dakota have an alternative place to put its capital rather than putting it in electric operations? Could it go out and build, you know, additional mining facilities and earn a 30 percent return on those or can it put the dollars directly into the electric operations and earn 12-and-three-quarters, which is what I've recommended.

So it is relevant in terms of looking at the kinds of returns and options that are available to investors who actually go out and build plant, actually build the facilities, and usually that's within a company and the company has capital budgeting processes that it goes through where each year it will sit down and it will look at what projects could we do and which ones will give us the best return for the risk and whatnot, and then they make those investments.

Within most corporations these -- these are the kinds of returns that you can get on nonregulated industrial-type investments, and they consider that possibility that they could get that

kind of a return and compare it to what they could get on their electric.

So it has some relevance. Again, it's not definitive because, you know, the fact -- the fact that they earn these returns is one reason they have such high book values. These returns are really higher than the cost of their capital, but, you know, if I can make more than my cost of capital, I'm happy to invest in something like that, and that competes with whether or not I'm going to build another electric generating plant for the people of North Dakota.

So in that respect the allowed return that you grant is -- needs to be competitive with these other returns, but I don't place heavy emphasis on these because particularly in the last several years they've been so high.

I believe that completes my comments on Mr. King's testimony.

MR. HOBERG: Mr. Pearce --

THE WITNESS: And most of this, I think, you'll find in my surrebuttal testimony.

MR. HOBERG: Mr. Pearce, is this the witness that needed to be at the airport.

MR. PEARCE: No, no. I do have one more

question for Dr. Gaske.

MR. HOBERG: Okay.

Q. (MR. PEARCE CONTINUING) Dr. Gaske, in your surrebuttal testimony, I think it starts on page 20, this is Exhibit 7, I believe, you discuss some of the factors affecting sales for resale margins. In that frame of work do you have any comments on Mr. Diller's testimony from this morning on that issue?

A. Yes, a few points. One is that if you look at the general economy, several comments have been made about whether we're in a recession or not in a recession, but a few days ago data on industrial production came out, and in January, once again, the industrial production had gone down. So that sector of the economy is shrinking and continues to shrink and that's a major source of demand.

The data on this are actually shown in a graph that's on -- or data that supports this are on a graph that's in Exhibit -- what is JSG-4 numbered?

Q. That would be 8, I believe.

A. 8. Schedule 2, page two, where it's a bar graph showing manufacturing production.

Q. I'm sorry. That's actually in the book. That is in the book. I'm sorry. That's not a separate exhibit.

A. Oh, yeah, yeah. That is in the book.

MR. HOBERG: In his direct or rebuttal?

THE WITNESS: In the rebuttal.

MR. PEARCE: It's in the surrebuttal. It's JSG-4, Schedule 2, page one of six.

THE WITNESS: Actually I'm addressing right now page two.

MR. PEARCE: Page two.

MR. HOBERG: So Exhibit 7, the surrebuttal?

MR. PEARCE: Yes.

THE WITNESS: Yes.

COMMISSIONER WEFALD: Is it -- did you say it's JSG-4?

THE WITNESS: Schedule 2, page two, and it -- it looks like this.

COMMISSIONER WEFALD: All right.

THE WITNESS: You may not have a colored copy.

COMMISSIONER WEFALD: This one?

THE WITNESS: Yes.

COMMISSIONER WEFALD: Thank you.

THE WITNESS: Yes. If you see what was happening with manufacturing production, it was rising fairly rapidly and peaked in the third quarter of the year 2000 and since then has declined regularly and steadily, and the forecast declined throughout 2001, and the forecast for 2002, as you can see, is quite a bit lower than, say, the average for the 2000 and 2001 time period. So that -- that's one factor.

COMMISSIONER WEFALD: Is this national?

THE WITNESS: This is national, yes, and in -- just as an aside, in the last couple of months almost every other week it seems you're hearing another -- one of the car manufacturers announcing massive layoffs, and that continues to happen. So we have been in a recession for -- since the middle of last year. The level of manufacturing production projected for next -- for this upcoming year is quite a bit less than it's been over that 2000, 2001 time period.

The second point that I would like to make goes to some of the discussion that occurred this morning, in particular regarding the use of futures prices to forecast the margins for the upcoming year. The one point I want to make most strongly

is that when you use a futures numbers, it's not the same as a forecast. It's not a guess. It's something that you could realize today.

In other words, the price that Montana-Dakota will sell its electricity at next October it could sell in -- it could sell it at the futures price right now, today, and lock that in.

So we're not -- we're in part talking about forecasting, but when you're using futures prices, those are real prices that you could actually sell next October's electricity at right now, today, and in that way it's not the same thing as sitting down and trying to come up with some model to forecast. It's a real market price for that power next October.

It's equivalent to, say, asking the question what could I buy MDU Resources stock for today? Well -- you know, or approximately what could I buy it for today? I could take two approaches. I could use an econometric model and figure out what the valuation is and come up with a price, or I could look it up in The Wall Street Journal and see what it's trading for right now.

One approach is similar to forecasting, and you use all these different techniques to kind

of make your best guess, and the other is, you know, looking up and seeing exactly what people are buying and selling next October's electricity for.

So in that sense the data that Mr. Blinsky has put together on prices should be given a great deal of weight and should not be confused with the uncertainty and vagaries of forecasting. They're real prices.

MR. HOBERG: Any further questions, Mr. Pearce? Oh, are you done?

THE WITNESS: No. I was going to make just a couple of other points. All of -- all of the witnesses on this issue will address this, and different ones of us will address different portions of this fact, but anybody that's been reading the newspaper over the last couple of years is well aware that in 2000 and 2001 the energy markets in the United States went haywire, and those were extremely unusual conditions where a lot of different factors came together simultaneously to drive rates to very, very high levels.

Nobody truly expects the next couple of years to be anything like they were in 2000 and 2001, and if you just take actual results during that time period, you'll get a very poor, you know,

forecast going forward for setting your rates.

Now, Mr. Diller made the point that gas prices and electric prices sometimes correlate, but last year MDU's margins seemed to stay high even after gas prices dropped in the latter half of the year.

Mr. Blinsky will really talk about this in more detail, but the fact is that early in the year they had a power contract, they sold power for next summer later in the year in January at essentially the futures prices that were available early in the year. So they locked in a high price. I think it was a price of like -- well, it's in his testimony, but something along the order of $140 a megawatt-hour.

So later in the year when the power markets tanked and the price was $40, they were selling for $140. That to a large extent explains why you didn't see, at least in the MDU data, this correlation between the gas prices dropping dramatically and the electric margins dropping dramatically.

If they hadn't just gotten lucky and signed a longer term contract for the power that year, you would have seen that correlation. You

would have seen the margins that they were getting dropping just like the gas prices.

So -- and that continues to be true today. The gas prices are down quite a bit below the unusual prices they reached during that time period and are forecasted to continue to do so.

I've got -- at the back of my surrebuttal testimony there's a graph on gas prices. These are -- once again, these are average nationwide prices, but generally over the last decade gas prices have been around the two dollars -- low two-dollar level, and on average they spiked up to over four dollars in 2000 and 2001.

COMMISSIONER CLARK: Excuse me. Is this page one of six on Schedule 2?

THE WITNESS: Yes. I'm sorry. It's page one of six. So you can see the -- the checkered -- or the triangle colored -- or pattern graph are the gas prices, and you see them getting very, very high. The slashed pattern bars all refer to coal prices, and the coal prices stayed fairly flat during that time period, and as a result if you had coal power to sell, you got huge margins all of a sudden, but those margins are projected, at least in 2002, to go back down to a lower level and

possibly even be lower than they were in even '98 and '99.

So I think that concludes all of my comments on Mr. Diller's testimony.

MR. HOBERG: Mr. Pearce, anything --

MR. PEARCE: Yeah. Just maybe one or two questions, I guess.

Q. (MR. PEARCE CONTINUING) In your -- in your surrebuttal testimony, Dr. Gaske, you did also mention the coming on of large amounts of new efficient electric generation in the near future. Is that a part of your conclusion that margins will go down?

A. That plays a role, but I think Mr. Schiffman is the one who will really be addressing those dynamics in the electric markets.

MR. PEARCE: I think I have nothing further of Dr. Gaske.

MR. HOBERG: Thank you, Mr. Pearce. Let's take a recess at this time of about 10 to 12 minutes.

COMMISSIONER WEFALD: Do you need -- one of the people has to go to the airport, but do they need to be a part of these questions?

MR. BINEK: Well, he will be here for a

while yet.

COMMISSIONER WEFALD: Okay.

MR. HOBERG: Let's go off the record.

(Recess taken.)

(Exhibit 13 was marked for identification.)

MR. HOBERG: Okay. We're back from a short recess, and we were about to begin the cross-examination by Mr. Binek, but, Mr. Pearce, you say you have at least one more question.

MR. PEARCE: Yes, Judge. Just one more question really, if I may.

Q. (MR. PEARCE CONTINUING) Dr. Gaske, would you just very briefly summarize your response then to the question of resale sales margins?

A. Various factors that contributed to the high margins in 2000 and 2001 are not likely and not forecast to continue in the upcoming year. In particular the ones that I was addressing had to do with the manufacturing production, which has an impact, the general overall economy, which is in recession, and natural gas prices, which are down, and in particular down relative to coal prices, and in addition, I discussed the fact that futures prices are real prices in the sense that you could

do a transaction right now at those prices to sell your power over the course of the next year at those prices.

So they're considerably more reliable than just a forecast, and I think that that would sum up my testimony. Other witnesses will be addressing other aspects of those issues.

MR. PEARCE: Thank you. I have nothing further.

MR. HOBERG: Thank you, Mr. Pearce. Mr. Binek, did you have some questions of Dr. Gaske, please?

MR. BINEK. Yes, I do.

CROSS-EXAMINATION

BY MR. BINEK:

Q. First of all, on the sales for resale, have you done any in-depth study of this issue?

A. Not of the sales for resale market. I look pretty closely at the gas price market.

Q. You testified concerning the manufacturing production, a reference to your JSG-4, Schedule 2, page two, and you talked about the manufacturing production being down from 2001. According to the chart you have here, in fact the projection is for the manufacturing production to increase in 2002,

isn't it?

A. What I was talking about is that in 2002 if you look at the average level of it --

Q. I realize that --

A. -- it's projected to increase from where it is right now.

Q. Right.

A. But over the course of this --

Q. That was my question?

A. Yeah. And over the course of this entire year, though, it would be quite a bit lower.

Q. But it is increasing?

A. That's the projection.

Q. Okay.

A. We hope that in the next few months we won't continue to have manufacturing production declining as it did last month.

Q. When you talked about use of the futures market, you said that's not a forecast, and I understand the discussion that you had, but aren't futures prices established using estimates in forecasts? They don't just pick a figure out of the air and say, this is what we're going to pay in September 2002.

A. Implicitly in -- within the prices that

people are willing to pay is a forecast or their guess, and so basically you have a buyer and a seller who are both trying to pick what the price will be and they come together and that's what it is, but the -- so, yes, implicit in that is probably a forecast of both the buyer and seller, and when their forecasts agree, they do a transaction, and to the extent there are people in the market who dramatically disagree with the forecast, they have opportunities to jump into the market and either buy or sell, depending on whether they think it's too high.

So overall it represents an unbiased estimate by all the players in the market, even the people who don't get into the market because they might stay out because they think, yeah, that's a fair price. If they thought it was traumatically unfair, there would be opportunities for huge profits for them.

Q. I'm going to kind of jump around here a little bit, if it's all right with you.

A. All right.

Q. First of all, you talked about Mr. King's 6.3 million dollars being the wrong figure, and your reference was to CWK-1R, I believe, from Mr.

King's testimony. Why is his 6.3 million figure wrong?

A. The -- the rate base in this case is 128.9 million dollars. The -- in percentage terms or in terms of what the cost of capital difference is for common equity between having a flotation cost and not having it, I've recommended 12.75 percent. If you took out flotation cost adjustment, you'd have 12.17 percent. The difference is that -- so essentially we're talking about 0.58 percent is the value of the flotation cost adjustment.

Now, not all of the rate base is financed by common equity. 48.87 percent of the rate base is financed by common equity. So if you take 128 -- or 128.9 million dollars in rate base, multiply it times .4887, the equity component of that, and then multiply that times .0058, which is the flotation cost adjustment to the equity return, you have $365,000 as the amount that would be included in the cost of service.

Q. Would you please go to Exhibit 1R, CWK-1R?

COMMISSIONER WEFALD: And that's found in?

MR. BINEK: That is in --

MR. HOBERG: Exhibit 5.

MR. BINEK: -- Mr. King's rebuttal

testimony. Right.

COMMISSIONER WEFALD: Thank you. His surrebuttal or his rebuttal?

MR. BINEK: His rebuttal.

COMMISSIONER WEFALD: Thank you.

MR. BINEK: Mr. King's.

COMMISSIONER WEFALD: Okay.

Q. (MR. BINEK CONTINUING) Is the -- looking at line 23 -- are you at that exhibit?

A. Yes.

Q. Is the figure of 0.58 percent correct?

A. Yes, it is. That's what I just said earlier, was the flotation adder, 0.58 percent.

Q. All right. And is the -- Mr. Gaske, is it true that if .58 percent is applied to the total company -- total book equity, that the figure that Mr. King used is correct, the 6.3?

A. Mathematically it's correct, but it's not what I've proposed in this proceeding and it's not -- essentially when the company decides whether or not to raise capital for, say, an unregulated part of its operation, it looks at the cost of capital for the unregulated part of the operation and it would have to consider flotation costs for that, but in terms of providing an allowed rate of

return of 68 million dollars to their unregulated operations, those are not at issue in this proceeding.

So the $365,000 number that I mentioned earlier, that does total out in dollars that are at issue in this proceeding.

Q. Would you agree that the -- that the 6 million flotation charge is more than the total flotation cost for the company for the last five years?

A. Yes, I would.

Q. Okay. Thank you. And if you scale it back to North Dakota, the same relationship would exist?

A. Yes, in terms of what actually was incurred during that period of time. As I said before, what we're -- we're dealing with a forward-looking approach of what rate of return do they need to attract capital.

Q. Do your book value returns under alternative investments measure the return available to new investment?

A. No. They measure the return that's available to all of the investment.

Q. To the embedded investment?

A. Yes, sir.

Q. I'd like to refer you to page 2 of -- this is your surrebuttal testimony -- page 2, lines 11 and 13. I'd like -- where did Mr. King admit that he had incorrectly calculated debt cost?

A. I have different line numbers in mine, but --

Q. Well, it's just under debt cost, the first question, and you started out with your answer that in his rebuttal testimony Mr. King concedes that he had incorrectly calculated the cost of debt for Montana-Dakota in his direct testimony, and then in 13, "Nevertheless, he recommends that the PSC adopt his admittedly incorrect debt cost," and my question to you is: Where did Mr. King admit that he had incorrectly calculated debt cost?

A. It comes in a -- that conclusion comes from the combination of his direct testimony and his rebuttal testimony. In his direct testimony he indicates that he used the accounting based approach, and he indicates that the reason he used that was it matched the FERC accounting regulations.

In my direct testimony in response to that I pointed out to -- to him and to the record that

FERC's accounting regulations don't require a calculation of the rate of return on the debt, that you have to go to its regulation regarding rate filings, and in the regulations regarding rate filings they specify that in calculating the cost of debt you use the yield-to-maturity approach.

So the reason in his direct testimony that he provided for -- for the number that he came up with was that this is the way the FERC regulations say to do it.

When I pointed out that he had gotten the wrong part of the regulations, he came back and he said on -- on his -- in his testimony -- and this would be his rebuttal testimony -- on page 2, lines 13 to 15, he says, "Dr. Gaske is correct that the yield-to-maturity procedure is the conventional method of calculating the cost of debt. Indeed, I am informed that the North Dakota Commission staff normally uses that procedure," and I take that to be a concession that indeed I was right, that that was the right way to calculate the cost of debt, and in fact it is the right way to calculate the cost of debt.

Q. Is the word "incorrect" ever mentioned in Mr. King's testimony?

A. This may be quibbling quite a bit, but let me -- let me again read directly what he says on page 2, line 13 of the rebuttal testimony. "Dr. Gaske is correct that the yield to maturity procedure is the conventional method of calculating the cost of debt."

So to answer your question, the answer is, no, he does not say "incorrect" -- he did it incorrectly. He says that when I pointed out that he had done it incorrectly, I was correct, and it's a very small --

Q. And he says --

A. I mean, I might not understand your question because the word "incorrect" in one context and the word "correct" in this context are exactly the same thing.

Q. Well, let's stop splitting hairs here. Didn't Mr. King state in his testimony that NSP used the accounting method, so it -- while yield to maturity may be the conventional method, he also says on line 14, I am informed that North Dakota Commission staff normally used that procedure, but in fact NSP didn't use -- in the NSP case the accounting method was used. So we aren't splitting hairs here. There is a difference between what

you're saying and what Mr. King is saying.

A. Now, I don't believe -- I don't believe that's true, but let's go to the NSP case that you just brought up. If indeed they used the accounting based method, and as Mr. King noted earlier, that will come up with a lower number -- or lower cost than the yield-to-maturity approach, the correct way of doing it is the yield-to-maturity approach, and if you use the accounting base approach, you will not recover your flow debt costs. It's equivalent to a disallowance.

If NSP calculated their costs that way, they inadvertently did it wrong and they should probably come back in the next rate case with the yield-to-maturity approach because they're not -- they don't have a component in their costs that would fully recover the debt cost.

Q. Or maybe NSP intended to do that.

A. I don't know. I can't put myself in their place.

Q. You're speculating.

A. Yes.

Q. Okay. If this commission provides MDU with a yield-to-maturity debt cost return as you proposed, what incentive will the company have to

examine the feasibility of refinancing its debt to a lower cost?

A. Good management, and that's sort of a loaded question, and I'll -- if you don't mind, I'll answer the full load of the question. As we've talked about earlier --

Q. Well, the question is: What incentive do they have?

A. Right. And as we talked about earlier, their opportunities to greatly reduce that debt cost are limited or nonexistent, and that's because a big part of the difference in the debt cost is the hangover from the long-term debt that they had to issue many years ago, and once that's gone, the cost will go down.

In general regulatory theory a company always has an incentive to keep its costs down in between rate cases, but the fact of the matter is that -- and I think Mr. Mahowald will address this -- they don't have many opportunities to reduce that cost of debt at this point in time.

Q. In terms of incentive wouldn't it be to MDU's advantage to lock in its high debt cost in this rate case and then refinance its debt to a lower rate?

A. I don't believe so because what we're really talking about is their share of the overall MDU Resources capital structure and debt obligations, and if you go to my Exhibit -- it's one of the exhibits with my direct testimony, and it's Exhibit JSG-2, which is in my direct, and that's Exhibit No. -- is that 6?

MR. HOBERG: Oh, no. That's Exhibit --

MR. PEARCE: It's 6.

MR. HOBERG: Yeah, 6. That's right.

THE WITNESS: Okay. On Schedule 4, page one, down towards the bottom, that schedule shows assets and operating revenues and operating income for my electric utility proxy companies, but down towards the bottom it shows the -- on the very last line it shows Montana-Dakota's electric utility operations as a percent of the total MDU Resources Group operations, and you can see that the assets are about -- of the electric operations are about 13 percent of the whole.

If MDU Resources were to go out and refinance that debt, the scenario you just described would make money for them on 13 percent of their operation and lose money on 87 percent of their operation.

So, frankly, their biggest incentive is -- would have been to do that as soon as they possibly could, possibly years ago if they could have done it profitably, but I think as Mr. Mahowald will tell you, because essentially they're carrying over these high costs and high refinancing costs from many years ago, there are not a lot of opportunities to get rid of that carryover, and so there are not a lot of opportunities to get a better debt rate, but the incentive for them given that only 13 percent of their assets -- and even only 8.6 percent of their revenues are in the electric utility part of MDU Resources, they have huge incentives to do that as soon as they possibly can, and there's not much to the -- not much to be gained from the -- from postponing it for an electric rate case and then losing out on those savings for, you know, 87 percent of their operations.

So, yeah, the question for MDU Resources, I'd say, no, they don't have any incentive to do that when you look at the total benefits to the company.

Q. (MR. BINEK CONTINUING) Do you have any empirical data that would demonstrate that failure

by a commission to provide for flotation costs in a return to equity has resulted in an inability to sell common stock at net proceeds less the book value of that stock?

A. I'm not aware of any company that has specifically said we didn't issue common stock this year because we didn't have a flotation cost adjustment.

I'm aware of utilities that have said we're not issuing stock at this time because our stock price is too low, which could be the result of flotation costs -- the absence of the flotation cost adjustment, and I'm aware of companies that have issued stock at less than book value essentially because they had an inadequate rate of return, which may or may not be just flotation costs. It could be flotation costs and other factors, but they've gone ahead and issued it and really taken a loss on the issuance and invested it in public utility operations because they felt that they had a -- or at least the things that I read at the time when this was happening -- they felt they had a public service obligation to continue to provide reliable service, even when the Commission did not grant them an adequate rate of return, and

that happened in the late 1970s in several instances. A lot of companies needed to build plants, or at least felt they needed to build plants, and their stock prices were below book value.

Q. Do you believe that most years regulatory commissions do not allow flotation costs?

A. I haven't done a complete survey. I -- I would agree that -- yes, I would agree with that. Probably a majority. It's a split thing.

Q. Do you have any evidence that there are any MDU investments in either electric or gas operations that have become stranded by reason of loss of market?

A. Not at this time.

Q. Isn't it true that the wholesale sales at issue in this proceeding are those made from the same generating facilities that provide the retail power for which this Commission sets rates?

A. Yes.

Q. Wholesale sales from generating units that might be owned by MDU that are altogether outside of its retail service territory would be excluded from this case, would they not?

A. Yes.

Q. I'd like to refer you to Mr. King's rebuttal testimony, and in his -- Exhibit CWK-2R talks about Value Line reports for IDACORP?

A. Yes.

Q. Do you have that in front of you?

A. Yes, I do.

MR. HOBERG: That's Exhibit 5.

MR. BINEK: Right.

Q. (MR. BINEK CONTINUING) First of all, do you know where Mr. King got this Value Line information?

A. I don't have his exact exhibit in front of me. I have the November 16th Value Line, but I presume that's what he has because it had the same quote that he had.

Q. Okay. Yes, that is the same.

A. Yes.

Q. Would you read the lead paragraph in Value Line's write-up about IDACORP?

A. "IDACORP's noncore enterprises are an important source of income. The wholesale energy subsidiary, which operates in 31 states, Canada, and Mexico, will likely be a major profit driver over the next three to five years."

Q. Why don't you read the whole paragraph?

A. Oh. "Too, IDA invests in affordable housing, which generates profits through income tax credits. It also has an interest in 12 unregulated hydro plants that are steady contributors to net. Other subsidiaries" -- do you want me to just keep on reading?

Q. Yes. That whole paragraph?

A. Actually I'll read the whole thing, if you'd like.

Q. That whole first paragraph.

A. Okay. "Other subsidiaries, still in start-up stages and not expected to be profitable for a few years, include a telecommunications unit and a provider of energy-related products and services. Finally, the company owns 70 percent of a fuel cell business that has a patent on four reformers that convert hydrogen fuels into electricity. It already has contracts for 3.5 million for the sale of 110 units of the Bonneville Power Administration, and it is pursuing orders in Japan and France. Those varied activities will likely produce 40 percent of company profits by 2004."

Q. Thank you. Now I'd like to reference you to page 19 of your rebuttal -- or, yes, your

rebuttal -- your surrebuttal testimony. Is that marked as 8 or 7?

MR. HOBERG: 7. It's 7.

Q. (MR. BINEK CONTINUING) Okay. And I would ask you to look at lines 15 through 17, and please read that sentence. It starts with "An allowed rate of return."

A. I was looking at something else. Could you give me the reference again?

Q. Okay. It's page 19.

A. Of my surrebuttal?

Q. Right.

A. Yes.

Q. And starting on line 15, would you please read that sentence, and then tell the Commission whether you have any empirical data that would support this statement?

A. "An allowed rate of return established by the DCF method should make the value of the electric operations equal to the book value of those operations in the absence of a flotation cost adjustment."

The theoretical underpinning of the DCF approach is that that in fact is true.

Q. Well, my question is whether you have any

empirical data that supports the statement. That's the question.

A. No, I don't.

Q. Going back to the -- your earlier testimony you talked about -- you were responding to what Mr. King had said, and you talked about debt cost, and in talking about the reasonableness of the debt cost and the -- the -- you talked about the situation that occurred in the -- I believe it was the late Seventies, early Eighties when MDU was having to borrow money at high rates, and it was in the process of -- one of the main reasons was, as I understood it, it was in the process of building a power plant.

A. Yes. The Coyote plant.

Q. Okay. Otter Tail Power Company was a partner with MDU in the building of the Coyote power plant, weren't they?

A. I'm not aware of that. Mr. Mahowald can probably address that.

Q. Okay. Thanks. When you were talking about the use of proxy companies and you were -- you have disagreements with Mr. King about the -- his decision not to use electric companies and to use combination companies. MDU is a combination

company, isn't it?

A. MDU Resources Group, yes, it is.

Q. Well, isn't -- okay. You said -- you made a statement that in -- concerning -- you were talking about investment portfolios, and you were talking about electric companies, gas companies and combination companies, and you said that investors -- if they -- if they are concerned about electric investments, they can invest in gas, you know, vice versa, but if they -- if there's a combination company, they can invest in that, and don't they reduce their risks by making the investment in a combination company?

A. And the answer to that is that the company probably reduces its risks, but it doesn't reduce the cost of capital to the electric operations.

Q. You also mentioned the possibility of deregulation as a risk. Is there any move towards deregulation in North Dakota?

A. It's my understanding that it's being studied at this time.

Q. Do you know if there's any move toward deregulation?

A. I don't know what the definition of "move" is in the context of it's being studied, which

implies to me that somebody must think it's worth thinking about.

Q. Well, who's studying it?

A. Let's see.

COMMISSIONER CLARK: Page 43 of your original testimony is the spot you're looking for.

THE WITNESS: Apparently there -- the legislature has an Electric Industry Competition Committee.

Q. (MR. BINEK CONTINUING) Do you know if they're doing anything at this point?

A. No, I don't know.

Q. I've got to find the right testimony here. On pages 12 and 13 of your direct testimony you discuss --

MR. HOBERG: Exhibit 6.

MR. BINEK: Pardon?

MR. HOBERG: Exhibit 6.

MR. BINEK: Yes.

Q. (MR. BINEK CONTINUING) You discuss economic factors that affect the cost of capital, and you state that in recent months the economy has been shrinking and is in a recession. Isn't it true that with a shrinking economy or a recession that investors are looking more favorable at

investments in companies such as MDU where rates are regulated and risks are limited?

A. I think Mr. King indicated this morning, and I agree with him completely, that in recent months people have been very concerned about utility investments, and in fact that was part of the reason for him revising his rate-of-return study.

During -- during difficult times or recessions or when there's more uncertainty in the economy, they may move their money into utility stocks, but unfortunately utility stocks aren't what they were 20 or 30 years ago. They're now considered to be relatively risky investments.

What more often happens and the thing that really affects the capital markets is that they start holding cash and cash equivalents, and there's been an enormous increase in the holding of cash and cash equivalents in the last year.

Q. But you would agree, wouldn't you, that an investor during -- during times when there's an economic downturn, utility stocks are a more favorable investment, you know, granted that there is more risk to utility stocks just as there is more risk to every other kind of stock?

A. Yes. I would agree with that, and I think given the fact that we have a down turn and what you've just described, the DCF analysis that I've performed reflects that because it reflects the recent stock prices, and so 12.75 percent would reflect exactly the phenomenon that you've just described.

(Exhibit 14 was marked for identification.)

MR. BINEK: That's Exhibit 15?

THE REPORTER: 14.

MR. HOBERG: 14.

MR. BINEK: 14.

Q. (MR. BINEK CONTINUING) You're familiar with Public Utilities Reports?

A. Yes, I am.

Q. I show you Advance Sheets of the Public Utilities Reports dated December 15, 2001, and I also show you an Exhibit 14, and could you tell me if you would agree that Exhibit 14 is a copy of the preliminary statement and an annual summary -- or annual survey of electric and gas utilities as compiled by the Public Utilities Reports?

A. Yes, it looks like it's a correct copy.

Q. Have you reviewed the results of that

survey that's contained in the Public Utilities Reports?

A. No. But I'll do so --

Q. Okay.

A. -- as quickly as I can for your benefit.

Q. Okay. I guess before doing that, would you just read into the record the first paragraph of the first page, the Roman numeral -- small I or small 1?

A. "The following pages present the results of our latest annual survey of authorized rates of return or common equity for state-regulated energy utilities. This year's survey covers orders issued by state regulatory commissions during the period October 1, 2000, through September 30, 2001."

Q. Would you -- yeah. I think that's sufficient.

MR. HOBERG: Are you offering that, Mr. Binek?

MR. BINEK: Yes, I will offer it at this time.

MR. HOBERG: Okay. Exhibit 14, the Public Utilities Report, Advance Sheets, December 15, 2001, do you have any objection to that, Mr. Pearce?

MR. PEARCE: No, I wouldn't -- I wouldn't agree that it's relevant, but I have no objection to it being accepted for what it is.

MR. HOBERG: Okay. Exhibit 14 is admitted.

Q. (MR. BINEK CONTINUING) The actual survey begins on the third page; is that correct? For -- I won't ask you to count the number of companies, but would you accept, subject to check, that there are 46 companies listed here?

A. Yes.

MR. BINEK: I would like to point out that I noticed that Public Utilities Report does have an error on page seven of their survey. Under North Dakota they show Otter Tail Power Company Electric and below that they show Otter Tail Power Company Gas. It's the same case number, same decision date, and I think that everyone here can agree that that is a mistake, that there is no Otter Tail Power Company Gas and that it's just a duplication of the prior Otter Tail Power Company Electric, and I would ask that that -- Mr. Pearce if he would stipulate to that.

MR. PEARCE: Yes. I'll agree that there's no Otter Tail Power Company that provides gas.

Q. (MR. BINEK CONTINUING) Okay. So that leaves 45 companies then in this list.

A. Yes. Or I'll accept that subject to check.

Q. Okay.

A. I'll take your word for it.

Q. Now I've -- if you'll notice, I have highlighted some companies in there hopefully to help you with the questions I'm about to ask. Okay. Out of these 45 companies can you tell me how many of those companies have an authorized rate of return on common equity greater than the 11.7 percent ROE recommended by staff in this case, and for -- for your convenience and your help, those are the companies that I've highlighted in yellow.

A. Thank you.

COMMISSIONER WEFALD: Higher than 11.75?

MR. BINEK: Pardon me?

COMMISSIONER WEFALD: Higher than what?

MR. BINEK: 11.7.

COMMISSIONER WEFALD: Higher than 11.7. Thank you.

MR. BINEK: If I said 11.75, that was my mistake.

COMMISSIONER WEFALD: No, no.

THE WITNESS: It appears 11 companies in that time period.

Q. (MR. BINEK CONTINUING) Okay. Now, looking at page five of that report, would you agree that two of these companies are located in Minnesota and that the ROE for those two companies is 11.71 percent or one-one-hundredths of a percent higher than the staff recommended ROE in this case?

A. For back in that time period, yes.

Q. I mean, that's what the survey says; right?

A. Right. I'll kind of make that --

Q. That's all that I'm asking.

A. Yeah. I'll continue to make the distinction about the time period, but yes.

Q. Okay. And two of the companies -- and I'll refer you to page seven. Two of the companies are NSP Electric and Otter Tail Electric in North Dakota that are at 12 percent. Those are the companies that Mr. Diller referred to earlier with performance-based regulation?

A. Yes. I'll --

Q. I think if you'll look at the footnotes, it does talk about the performance-based regulation.

A. Yes.

Q. And the third -- there's also a Northern States Power Company Gas, and that's the 11.5 percent ROE that Mr. Diller talked about earlier, the rate case with Otter Tail.

A. Yes.

Q. Okay. That brings us down to the remaining seven companies. Would you agree with me that six of those remaining companies are all located in Wisconsin, the last page, and that the ROEs there range from 12.1 to 12.9?

A. Yes.

Q. The seventh company is -- on page five is Cleco, or however you pronounce that, in Louisiana. Cleco is one of the companies that you included as a proxy and that Mr. King says shouldn't be included as a proxy; is that correct?

A. Yes, that's correct.

Q. Okay. And their rate is at 12.25 percent?

A. Yes.

Q. Okay. Out of these 45 companies listed, how many of those companies have a -- an authorized rate of return on common equity equal to or in excess of the ROE of 12.75 percent that is proposed by you in this proceeding?

A. In that time period the Wisconsin companies -- there were two at 12.9 and one at 12.75, the same number.

Q. Okay. So 3 out of 45 companies had ROE at equal to or greater than your recommended ROE for MDU?

A. In that time period, yes.

Q. So to summarize, would you agree that this annual survey conducted by Public Utilities Reports for the period of October 1, 2000, through September 30th, 2001, shows 3 out of 45 companies with ROEs equal to or greater than MDU's proposed 12.75 ROE and 34 out of 45 companies have ROEs less than the 11.7 percent ROE proposed by staff; is that true?

A. Yes, in that time period.

MR. BINEK: I have no further questions.

MR. HOBERG: Thank you, Mr. Binek. Mr. Fahn, did you have any questions of Dr. Gaske?

MR. FAHN: No questions. Thank you.

MR. HOBERG: Thank you, Mr. Fahn. Commissioner Wefald, did you have any questions of Dr. Gaske?

COMMISSIONER WEFALD: I have just a couple.

EXAMINATION

BY COMMISSIONER WEFALD:

Q. On futures it's my understanding that we may know the futures price today for what the futures price -- what someone will pay or sell for today for that -- in that futures market but that it's awfully hard to predict what that futures price is going to be tomorrow or next week; would you agree?

A. Yes.

Q. And so sometimes a company -- let's say they purchase electricity. Their price of electricity right now on the futures market may be low, but do you know what it's going to be next week for this summer? Do we know what -- we know what the futures price today is if you were purchasing electricity for July, but do you know what the futures price for electricity is going to be next week?

A. No.

Q. And do you know what it's going to be in May --

A. No.

Q. -- for that same -- for that same June period?

A. No. The futures price at any given point in time reflects the best estimate of the market as to what it will be in the future, and as you get closer and closer to a time period or as -- in people's perceptions of the market change, that can change.

Q. For example last fall, didn't the -- there was a time period when there was a prediction there was going to be an exceptionally cold winter, I believe it was the end of October, and the futures price for natural gas went way up, and, I mean, went up considerably in a blip, but then two months later the futures price was down considerably because it wasn't happening, that cold weather wasn't developing. Do you agree that there are -- that there are changes in the futures market based on predictions of the weather or other indications of market supply and market demand and those other factors?

A. Absolutely. The point of my comments earlier --

Q. You said there was certainty about the futures market, you said, about today's price.

A. Right. So you could lock in that price right now today.

Q. Yes. But you don't know if that's the correct price because tomorrow it may go down or it may go up, and that's part of the guesswork of the futures market.

A. Right. You can lock that price in if you actually do the transaction.

Q. Oh, I know you can, but you have to guess then -- or make your decision is that market going to go up or is it going to go down?

A. Right.

Q. I know in the -- otherwise if everyone knew what was going to happen in the futures market, it really wouldn't be a futures market. It would be -- it would -- there wouldn't be any guesswork about it, do you agree, because when you make a decision today, you're making a calculated risk that you think you're getting the very best deal today.

A. Right. People like MDU, if they don't sell on a long-term basis in the sales for resale market or if they don't sell a futures contract, they take a risk that the price will either go up or it will go down, and so --

Q. So if they waited -- even if they waited till next week, they might get a higher price for

their electricity if they didn't sell it today at the low price.

A. Right. For purposes of trying to figure out how much money they're likely to make over the next year, though, the current futures prices is the best available evidence.

Q. Well, what if we were holding this case next week and the price was way up?

A. Then --

Q. Then would that be the best price? If that price was going to make them 20 million dollars this year, would that be the price you were arguing was the best price?

A. Yes.

Q. It would be? Even though -- but today you're arguing that price is a lower price, and so therefore you're saying that that's the best price today and it's, you're saying, 6 million dollars or whatever would be made this year?

A. Right. I'm not arguing for a specific price, but I am saying that if you as a regulator have to make a decision as to what the most likely price is to be over the next year, there's nothing that can beat those futures prices as the best estimate at this point in time, and if you had to

make your decision right now at this point in time or based on the record available at this point in time, there is nothing that would be a better -- in my mind, a better predictor or estimator for what price and margin they'll be able to achieve.

Q. I appreciate your opinion on that.

A. Okay.

Q. Okay. And then on page -- the manufacturing production, that's that schedule you referred to, Schedule 2, of page two of six.

A. Yes.

MR. HOBERG: Which exhibit?

COMMISSIONER WEFALD: It's Schedule 2, page two of six.

MR. HOBERG: In his direct.

COMMISSIONER WEFALD: It's in surrebuttal testimony.

MR. HOBERG: Okay. Exhibit 7. Thank you.

Q. (COMMISSIONER WEFALD CONTINUING) That shows national manufacturing production. How does this relate to our MAPP region?

A. Well, I think other witnesses will probably address that even more than I will, but MAPP and the adjacent regions are all tied together in a large transmission network, and a huge portion

of the manufacturing production is occurring in the Upper Midwest, in Illinois and Wisconsin and Detroit -- or in the Michigan area and in Indiana, and so those are relatively nearby areas.

To the extent utilities between here and there can't sell electricity to those areas, they would compete directly with MAPP in selling electricity and they wouldn't -- there wouldn't be demand for their electricity.

So that would, you know -- in a very general way the electricity that's being sold in MAPP that perhaps moves east has to compete with electricity that -- and prices in those adjacent regions, and I think Mr. Schiffman talks about the link between the adjacent regions and MAPP and how that plays into the prices in MAPP.

Q. Who has MDU traditionally sold its electricity to up in the Upper Midwest in these contracts?

A. I don't know exactly. Mr. Blinsky is the witness on that.

Q. Okay. Thank you. And then on the -- on the previous page, Schedule 2, page one of six, that's the average annual U.S. energy prices, but again this is nationally -- the national chart;

right?

A. Right.

Q. And then in the Upper Midwest in the MAPP region, did we have -- this is for U.S. energy prices. This shows natural gas, right, and then it shows coal prices, but in the Midwest did we have those same high natural gas prices in -- does this reflect the whole year or what does this reflect?

A. This reflects an average over the year. You had periods in, oh, November, December of 2000, January, February of 2001 where the price was nine, ten dollars.

Q. Okay. And so that's the average of the whole year for that period then?

A. Right.

Q. Well, in 1999, though, on the chart that Mr. Diller gave us, it shows that --

MR. HOBERG: Which one is that?

COMMISSIONER WEFALD: This is on the back of his --

MR. HOBERG: His presentation?

COMMISSIONER WEFALD: -- rebuttal testimony.

MR. HOBERG: Okay. Exhibit 2.

Q. (COMMISSIONER WEFALD CONTINUING) Your

point is that high gas prices can translate into higher revenues for off-system sales?

A. Yes, that's correct. Or that's one of the factors that --

Q. One of the factors, but in 1999 Mr. Diller's chart shows that Montana-Dakota Utilities made $8,772,000 on off-system sales, and that's a year when gas prices were at $2.50 average. The next year, in the year 2000, when gas prices were up to, let's say, 4-and-a-quarter, they made $9,900,018. So there wasn't -- there was a million dollars -- not quite -- a little more than a million dollars difference that they made on those -- between those two years.

Would you agree that there's -- they made considerably more in 1999 than they did in 1998 on off-system sales even though gas prices were pretty much the same as they were in 1998 as they were in 1999?

A. Yes. And that was not driven by gas prices. I think Mr. Schiffman will address this in his testimony --

Q. All right.

A. -- that it had to do with nuclear plants shutting down.

Q. Thank you. And then I think I have just one more question.

A. Okay.

Q. You mentioned -- this was on your page one of nine, Schedule 4. This is in the direct testimony filed January 11th, 2002, under your name, and it's Schedule 4, page one of nine, and you mentioned that if Montana-Dakota Utilities Group chose to refinance right now, that 13.2 percent of its assets would be in electricity, around 97 percent would be in their other portions of their company. So is it possible for MDU Resources Group, Inc., to only refinance its electricity debt?

A. No. This is overall debt of the company that's, as I understand it, been allocated to the electric operations.

Q. But my question is: Is it possible for only the electric portion to refinance its electricity debt?

A. I don't believe so, no.

Q. Why not? Why couldn't you just take those bonds or whatever and --

A. Because those are actually bonds of MDU Resources Group, at least that's my understanding.

Q. But you said they had to do with building electric plants back in the early Eighties.

A. Exactly. That was the time period when the company issued it, when they needed a whole lot of additional capital.

Q. So --

A. And MDU Resources, I don't think, was nearly as diversified as it is today. So the reason that the debt was issued was to raise a lot of capital at that time when they were -- when they needed to build plants for the utility operations, but overall, MDU Resources, as I understand it, this is their debt, it's the parent company debt. Mr. Ball can probably talk to this more directly.

COMMISSIONER WEFALD: Thank you. That's all I have right now. Thanks.

MR. HOBERG: Thank you, Commissioner Wefald. Commissioner Clark, did you have any questions for Dr. Gaske?

COMMISSIONER CLARK: I do, just a couple.

EXAMINATION

BY COMMISSIONER CLARK:

Q. One is a followup on some things that Commissioner Wefald was asking, and that is about the futures market and any potential predictive

value that they have, and you had commented that nothing is a better estimator of what could be happening down the line here a little bit, and I'm wondering if you're aware of any studies that contract statistically the predictive value of the futures market and how often they're wrong or right. Or in the absence of that maybe just anecdotally. Looking at the run up to 2001 where we had on the gas side such high prices in January, did the futures market a year before that or however many months before that predict that that was going to happen?

A. I think the futures market is virtually never correct in terms of how things actually turn out, but if you want the best unbiased estimate of what is most likely to happen, it's the futures market, and if you actually do a transaction in the futures market, if you actually sell your power in the futures market, then it's absolutely guaranteed that that's what you will make.

So right now today you could absolutely guarantee it, but I think, as with virtually any prediction, it -- it would be almost uncanny if it were actually ever right, but people make decisions based on that. Yeah. I was suggesting that this

is the best basis for a regulatory decision.

Q. Okay. On page 41 of your direct testimony -- you may not --

MR. HOBERG: Exhibit 6.

Q. (COMMISSIONER CLARK CONTINUING) Exhibit 6. If this is a question that's better given to another witness, just let me know, but since you brought it up in your testimony, the Territorial Integrity Act or TIA, I think you used that as an example of kind of potential risk factors that -- that impact Montana-Dakota, but it got me wondering, and just out of curiosity have you or MDU, that you're aware of, ever calculated the effects of TIA, being that you had brought it up in your testimony, and what that is on net income and what then translating that through the potential impact could be on other ratepayers?

A. No, no. That really would be a long-term -- or its effect is sort of on the long-term dynamic of the market of -- for their product, but I'm not aware of any study that's quantified it.

COMMISSIONER CLARK: Okay. Thanks. That's all I have.

MR. HOBERG: Thank you, Commissioner

Clark. Mr. Pearce, did you have any further questions?

MR. PEARCE: Just very few, as lawyers say, but actually I mean it, just a very few.

REDIRECT EXAMINATION

BY MR. PEARCE:

Q. Looking at Exhibit 14, the PUR report, Dr. Gaske, I don't imagine it would surprise you, would it, that in a report like this ranging over the whole country there would be ranges in return on equity from 9.98 to 12.9?

A. No.

Q. And given the fact --

A. I'm surprised that there are any as low as 9.8, but it wouldn't surprise me that there's a range.

Q. And that's taking into account the fact that there are test years ranging from '98 to 2001 here, I think, as well.

A. Yes.

Q. And it wouldn't be your advice to a commission, would it, to pick a return on equity looking at other returns around the country at diverse and different companies?

A. No. And the reason I continually stated

"in that time period" was that Mr. King and I agree on this, and he talked about it this morning, that since September 11th and since Enron, the investors have looked at utilities very differently, and we both believe that the cost of capital is now higher than it was for utilities prior to that time period, and the -- these specifically -- the results in Exhibit 14 specifically end in decisions that were issued September 30th. So I have to think that the record in those decisions closed before September 11th.

Q. Now turning just briefly back again to the DCF method, you were asked whether you had any empirical evidence to support your conclusion that allowed rate of return established by DCF should make the value of the electric operation equal to the book value. Isn't that simply an underlying assumption of the DCF methodology, so you wouldn't expect empirical data needed to support that?

A. Yes. And there's a little more to it than that, and that is that what you would have to be able to do is set a -- set an allowed rate of return, come back and see how companies are doing and be able to do that in a clean, pure environment where nothing has changed and it was a clean

company and didn't have other operations, the cost of capital hadn't changed in the meantime, maybe interest rates hadn't changed, and ultimately, yeah, it would be very difficult to do an empirical study that would prove or disprove the theory. Virtually everyone agrees with the theory. Mr. King and I agree on that. I think he said very specifically this morning that the DCF approach would produce a market value equal to book value.

MR. PEARCE: That's all I have.

MR. HOBERG: Thank you, Mr. Pearce. Mr. Binek, anything further?

MR. BINEK: Yes, just a couple.

RECROSS-EXAMINATION

BY MR. BINEK:

Q. Has MDU entered into any futures contracts for 2002?

A. I'm not aware of any. I'm not the right witness to answer that question.

Q. Who would be the right witness?

A. Mr. Blinsky.

Q. I forgot to ask you one question. It's not all that important, but this dividend yield -- I glanced up and saw that up on the board yet, and you spent a considerable time -- amount of time on

that. My recollection is that Mr. King said it really doesn't make much -- any difference. Do you agree with that; it really doesn't make any difference?

A. It's a small difference. I just -- it makes some, but it's a small difference, and I didn't want to leave, you know, that unrebutted since mathematically it's just simply not true.

MR. BINEK: Okay. Nothing further.

MR. HOBERG: Thank you, Mr. Binek. Mr. Fahn, anything further?

MR. FAHN: No questions.

MR. HOBERG: Commissioners? Commissioner Reinbold, you didn't get a chance to ask questions.

COMMISSIONER REINBOLD: No questions.

MR. HOBERG: Okay. Any further question? Okay. Thank you, Dr. Gaske. In view of the fact that we'll be back tomorrow, might this be an appropriate time to -- I don't know if your next witness is a long one, Mr. Pearce. What's your thought?

MR. PEARCE: Well, it always depends, of course, on the cross-examination. We were proposing to put on Mr. Wilkinson as a short -- he's got about ten pages --

COMMISSIONER REINBOLD: Who?

MR. PEARCE: Paul Wilkinson. -- today, which we could finish 15 minutes on direct. I'm not sure what he might have on cross.

COMMISSIONER WEFALD: I think we should move ahead until five o'clock.

MR. HOBERG: Okay. We'll try and get Mr. Wilkinson today then.

MR. PEARCE: I'll call Paul Wilkinson.

MR. HOBERG: Okay. Mr. Wilkinson, were you here earlier when I gave the admonition regarding perjury?

THE WITNESS: Yes, I was.

(Witness sworn.)

MR. HOBERG: Thank you. Mr. Pearce, please.

PAUL L. WILKINSON,

having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. PEARCE:

Q. Mr. Wilkinson, I'll show you Exhibit 7, which I'm opening to what appears to be an opening page of your surrebuttal testimony. I would ask you to look at that testimony and -- ten pages, I

think, and is that -- does that appear to be your surrebuttal testimony as previously filed?

A. Yes, it does.

MR. HOBERG: Just for the record, that's Docket No. 60.

Q. (MR. PEARCE CONTINUING) Would you please state your name, please?

A. My name is Paul L. Wilkinson.

Q. And by whom are you employed and in what capacity?

A. I'm employed as vice president of policy analysis at the American Gas Association. I've been an AGA vice president since January of 1995, and I've been employed by AGA since June of 1980. I'm responsible for all analytical activities at AGA. These activities include energy markets in general, natural gas markets in particular, including issues related to energy supply, energy demand, energy prices, energy data and information collection and dissemination. I've also been heavily involved in environmental issues that affect energy markets. In all of these areas I conducted research and prepared and published analyses either directly or by supervisor of AGA employees or contractors.

Q. Would you please briefly describe your educational background and professional experience?

A. I hold a Bachelor's degree in economics from the University of Maryland and also a Master's degree in economics from Catholic University of America. I've also completed numerous graduate-level courses in economics, energy and the environment at Georgetown University and George Washington University between 1974 and 1977.

Q. On whose behalf are you testifying in this cause?

A. I'm testifying on behalf of Montana-Dakota Utilities, a division of MDU Resources Group, Inc.

Q. And what is the purpose of your testimony?

A. I will be addressing natural gas market conditions in the 1990s and during the 2000-2001 winter season, as well as future market conditions.

Q. Can you describe the natural gas market conditions during the winter of 2000-2001?

A. The natural gas market was extremely tight during the winter of 2000-2001. Demand had increased significantly in 2000, and gas production capability had trouble keeping up with the demand increase. As a result of this pressure on gas supplies, prices increased substantially. In fact,

as reflected on Exhibit PLW-1 attached to my testimony, the gas price hit ten dollars per MMBtu, by far the highest level in a decade. All classes of consumers, residential, commercial, industrial and electric utilities, paid more for gas than in recent years. This was true in all parts of the country.

Q. How did these conditions compare with previous winter periods during the 1990s?

A. Most of the 1990s can be characterized by the term surplus deliverability. That is, the decade of the Nineties was in general one in which the ability to produce and deliver gas exceeded the demand for that gas, and as a result wellhead gas prices remained in a fairly narrow range with an equilibrium price of roughly two dollars MMBtu for most of the 1990s.

In fact, when adjusted for inflation, gas prices in the 1990s were about one-third less than in the mid 1980s. The early portion of the winters in the 1990s tended to show some upward price movement. However, this upward movement was, in general, rather modest and it tended to fall back quickly in the later winter periods.

Q. Were there any price spikes during the

1990s comparable to the one we saw during the winter of 2000-2001?

A. No. The NYMEX price of gas at the Henry Hub hit 10 dollars per million in December of 2000, and this was twice as high as any spike in the prior 10 years. There were relatively modest spikes in December of 1996 and October of 1997 when the price of gas hit 4.57 per MMBtu and 3.80 per MMBtu. However, in both cases the prices retreated back to about 2 dollars per MMBtu fairly quickly. In general, the price of gas fluctuated in a relatively narrow price band around 2 dollars per million for the decade of the 1990s.

Q. How could a more normal weather pattern have affected prices during the 2000-2001 winter?

A. Prices were in the mid-4-dollar to mid-5-dollar range for most of the 2000 summer. They had a temporary peak of $5.54 on October 13th but then fell back to 4.48 by October 30th. I believe that if we had seen normal or warmer than normal weather in November and December instead of extreme cold, the price would have shot downward from the 4.48 level instead of rocketing upwards.

Q. To what do you attribute the market conditions during the winter of 2000-2001?

A. The marketing conditions during the winter of 2000-2001 were attributable to supply factors, demand factors, and what I call market factors. These individual factors combined in an unusual pattern to put extreme upward pressure on gas prices.

On the supply side the critical factor was a serious decline in drilling for gas. We like to see the number of gas rigs operating nationally at 600 to 800 rigs or more. For most of 1998 we were at the lower end of this range. However, in the spring and the summer of 1999 there was a severe reduction in the number of gas rigs operating as a result of low wellhead gas prices. The number of operating rigs fell off to the 300 to 400 range, and the impact of this drilling decline was masked in 1999 due to extremely mild weather that moderated gas demand. However, when demand surged in 2000, it was clear that production capability had fallen to a critical level.

A second factor on the supply side was the amount of gas held in storage. Gas withdrawn from underground storage satisfies about 18 percent of gas demand during the heating season. The volume of gas in storage was at a relatively normal level

in the spring of 2000. However, gas prices began to rise in the summer of 2000, and some storage operators reduced their storage injections in an expectation that prices would fall off.

Also, the demand for gas for electricity generation was increasing in response to a hot summer, reducing the volume of gas available for storage. As a result, storage volumes in the late summer and the early fall were running 8 to 10 percent behind normal based on the 5-year average, and this deficit approached 30 percent by the end of the year due to extremely heavy early winter storage withdrawals.

The key variable on the demand side was the weather. The summer of 2000 was significantly warmer than normal, increasing the demand for air conditioning and thus the demand for electricity. Gas is being used increasingly for electricity generation due to both economic and environmental factors. The hot summer was followed by a very cold, early winter. Energy demand switched from air conditioning to heating as we moved into the coldest November and December period on record.

An often overlooked demand factor is economic activity. The economy was very strong for

most of 2000 with an annual GDP rate of 4.8 percent in the first quarter and 5.6 percent in the second quarter. This strong economic activity translated into strong gas demand to fuel factories and commercial establishments throughout the country.

Normally, the relatively high gas prices that were experienced in mid 2000 would have resulted in fuel switching from gas to oil and large industrial establishments with dual fuel capability. These large facilities switched back and forth between gas and oil depending on the relative fuel prices, thereby offering a price relief valve when prices increase. However, oil prices had roughly tripled from their level from 18 months earlier, and this relief valve was effectively eliminated.

Finally, in addition to the supply and demand fundamentals, there was a market factor that further exacerbated the high prices of 2000 and 2001. The gas market is a real-time market traded on the NYMEX in a very robust fashion.

There is very limited real-time information regarding gas supply or demand on a real-time basis. Thus, it tends to move on the basis of incomplete information and speculation.

That real-time information that is available tends to be overemphasized, gas storage information, weather information, storm activity in the Gulf of Mexico.

As indicated above, the gas market in 2000 became very tight and supply was struggling to keep pace with demand. Speculation and overreaction to incomplete market information at a time when the market was very tight resulted in significant price volatility.

Q. To what extent was weather a contributing factor to the market conditions during the winter of 2000-2001?

A. Weather was a critical factor. In fact, it was the most important factor on the demand side of the gas market equation. It was important both in the summer of 2000 and the winter of 2000-2001. The summer was warmer than normal, which increased the demand for air conditioning, which in turn increased the demand for natural gas to generate electricity.

The winter was colder than normal, particularly the early winter, driving up the demand for gas as a heating source. These increases in demand at a time when markets were

already tight and prices were relatively high forced prices even higher.

Q. How warm was the summer of 2000?

A. On a national average basis it was about 7 percent warmer than normal. However, parts of the south and west were 15 to 20 percent warmer than normal. This is key because most of the electricity generation that uses gas is located in the South and the West. In addition to pushing up the overall demand for gas, using gas for electricity generation in the summer also diverts gas that otherwise would be injected into storage. When storage levels are lower than normal, as was the case in the summer of 2000, market uncertainty increases and prices tend to move higher.

Q. How cold was the winter of 2000-2001?

A. The winter of 2000-2001 was extreme by any measure. In particular the early winter, November and December, was the coldest on record on a national basis. Not only was it cold, but it was extremely cold, it was cold early and it was cold everywhere. Oklahoma, Arkansas, Missouri all had the coldest November and December on record.

Across the country the last two weeks of November were 36 percent and 33 percent colder than

normal, respectively. Further, it was colder than normal in all ten geographic regions during these two weeks. Such uniform cold is very unusual. Although temperatures moderated in January and February, the damage with respect to gas prices was already done.

Q. Were these general market conditions isolated in specific geographic areas?

A. No. The natural gas market is in essence a national market. The tight market and the high prices were experienced in all parts of the country. Consumers buying gas are essentially paying for two things, the cost of the gas commodity and the cost of delivering that gas to them. The cost of the gas commodity went up dramatically in 2000-2001 irrespective of where that gas was consumed. The cost of gas delivery is a function of distance and various operational factors and thus it does vary by location. However, delivery charges are regulated and they did not fluctuate in 2000-2001 as did the commodity charges.

Q. Have you or other employers of the American Gas Association addressed the market conditions of the 2000-2001 winter in the service

territories of other local gas utilities?

A. Yes. This is a national issue, and we have addressed it in various forums all over the country. We have spoken to legislators, regulators, media and customer groups from Louisiana to New York to Washington and California. The problem was universal and it was extreme.

Q. What is your outlook for the near-term natural gas market?

A. First, let me say that AGA does not perform short-term price projections for antitrust reasons. However, I can comment on some of the factors that do affect gas prices.

The retreat in gas prices following the 2000-2001 winter was as dramatic as their rise. Prices have been in the low two-dollar range for several months now. We have moved from a situation of high demand and low supply to one of low demand and high supply. This situation is expected to continue throughout 2002.

On the demand side, the economy remains sluggish and expectations are that this will continue for most of the year. In addition, weather has been very mild, and the long-term forecast of the National Oceanic and Atmospheric

Administration suggests that heating and cooling demand in 2002 will be normal or less than normal.

The volume of gas in storage, one barometer of the supply situation, remains at a very high level. As of February 8, 2002, there was 43 percent more gas in storage than the prior five-year average.

Given the economy and the weather conditions, this surplus is expected to carry into the 2002-2003 winter season, thus continuing downward pressure on gas prices.

Q. Do you believe others share your view on near-term market conditions?

A. Yes, I do. The short-term energy outlook of the U.S. Energy Information Administration, EIA, projects that wellhead gas prices will be less than $2 per thousand cubic feet for the second, third and fourth quarters of 2002, and that they will range from $2.24 to $2.76 for 2003. Similarly, future gas prices on the NYMEX are in the high $2 to low $3 range for all of 2002 and 2003. These prices are in short contrast to the $10 peak we saw last winter.

Q. How about natural gas prices in the longer term?

A. Going out to 2010 I expect prices to remain generally below four dollars. Between 2004 and 2010 I expect prices to move within a band of two dollars to four dollars, although temporary movements outside this band are certainly possible.

Q. And do other experts share this view, as well?

A. I would say that in general, yes. While there's certainly no unanimity in long-term energy price projections, the long-term outlook of the EIA projects wellhead gas prices of $3.65 per thousand cubic feet in 2010. We can also look at the NYMEX prices and see that they do not exceed $3.75 going out to December of 2007. Prices are not available beyond this point in time.

Q. Does this mean that natural gas market conditions in the future can't repeat the 2000-2001 experience?

A. The prices we saw in the winter of 2000-2001 were extreme and attributable to a number of factors that all came together at once as I previously mentioned. Some refer to last winter as a perfect storm scenario. A recurrence is certainly not impossible but it is unlikely, and I would certainly not use last winter as a baseline,

nor would I suggest that last winter was in any way normal or representative of future likely market conditions.

Q. One additional question. You referred several times to the NYMEX price or NYMEX price at the Henry Hub.

A. Yes.

Q. Could you just very briefly explain what that means?

A. Well, if you look at the Exhibit PLW-1, that shows the NYMEX Henry Hub futures. That's at the specific dates that are indicated on the lower axis, how much you could contract for gas 30 months in advance and that there are buyers and sellers willing to make a deal at that price at that point in time.

Q. Does this complete your testimony?

A. Yes, it does.

MR. PEARCE: I have no further questions.

MR. HOBERG: Thank you, Mr. Pearce. Mr. Binek, do you have any questions of Mr. Wilkinson?

MR. BINEK: Yes.

CROSS-EXAMINATION

BY MR. BINEK:

Q. Mr. Wilkinson, what is AGA?

A. AGA is American Gas Association. We represent local gas utilities across the country. We represent 187 local gas utilities that deliver gas to 50 million -- 52 million residences and commercial establishments throughout the country.

Q. What do you mean by you represent?

A. What do I -- we provide services to these member companies based on their advocacy needs and also their informational needs or other operational needs.

Q. How are the operations of AGA financed?

A. They are financed based on the dues of these member companies.

Q. Is MDU a member company?

A. Yes, it is.

Q. On page four of your surrebuttal testimony, beginning on line three, you talk about market conditions and market factors during the winter of 2000-2001. One of the critical supply side factors that you talked about was the serious decline in drilling for gas. With the current decline in natural gas prices has there also been a decline in drilling activity?

A. There has been a decline. We are currently a little under 800 rigs, so certainly

nowhere near the decline that we saw, the 300 to 400 range, back in '98, '99.

Q. And doesn't decreased drilling activity generally occur with falling gas prices or low gas prices?

A. Yes. There is a correlation between gas prices and drilling activity.

Q. So if the low prices continue, would you anticipate there will be a further decline in drilling?

A. Well, low price is a relative term. There was a period in 1999 where we had, I believe, nine months in a row of gas prices between roughly $1.50 and $2, and right now we're at about $2.30. So prices are certainly low today relative to what they were a year ago. They are certainly not low relative to what we saw two years ago.

Q. Do you agree that most new electric-generation facilities that have come on line or that are being constructed are fueled with natural gas?

A. Natural gas has been the fuel of choice in recent years for new generating capacity.

Q. Won't that drive up the demand and price for natural gas again?

A. Price is a function of supply and demand. As demand increases to meet that load, if there was not a -- an increase in supply of an equal amount, prices would move upward. Certainly, increased demand does mean upward price pressure to some extent.

Q. Aren't many experts saying that economic recovery has begun or will begin in the near future?

A. I think that in general most economists are saying that the economy is sluggish at best through the end of this year.

Q. If the economy does rebound and we had the projections from the last witness concerning manufacturing projections and that showed that the projections were increasing for 2001, won't that drive up the demand and the price for natural gas?

A. Economic activity is one factor that affects industrial gas demand. As industrial gas demand goes up, there would be upward price pressure until supply response.

Q. On page five of your surrebuttal -- or your rebuttal testimony -- I guess it is surrebuttal, beginning on line -- line eight of your surrebuttal testimony, you state that the key

variable to the market conditions or market factors during the 2000 -- during 2000-2001 was the weather. Isn't it true that the unusually warm and mild winter we're experiencing throughout most of the United States at the present time has contributed significantly to the current reduced demand and lower prices of natural gas?

A. Yes, that's true.

Q. On page 6, line 18 of your surrebuttal testimony you state weather was a critical factor. In fact, it was the most important factor on the demand side of the gas market equation. That statement applies today just as it did in 2000-2001, doesn't it?

A. Weather is the critical variable, particularly with respect to residential and commercial markets.

MR. BINEK: Thank you. I have no further questions.

MR. HOBERG: Thank you, Mr. Binek. Mr. Fahn, any questions?

MR. FAHN: Yes.

EXAMINATION

BY MR. FAHN:

Q. On page six of the testimony -- of your

testimony you talk about market factor and you talk about limited real-time information regarding gas supply or demand, and I'm wondering if people that are in the futures market -- that's what they're seeing, right, limited real-time information? They're making their decisions based on real-time information?

A. Yes, I would agree with that.

Q. And I'm wondering if you could tell us more about why you describe it as limited.

A. You cannot find information in the marketplace today that tells you how much gas was consumed last week or how much gas was produced last week. You can -- you can find information on how much gas was injected into storage last week. So in terms -- because there is no supply demand data available, other than on a monthly basis with significant time lags, I think that there is an overemphasis on that information which is available. For example, you'll hear that there's a storm coming into the Gulf and you'll see the NYMEX shoot up as a reaction to that, when in fact most of those rigs rarely stop operating, even in severe storm conditions.

Q. I don't think you'll know the answer to my

next question, but I'll ask it anyway. Would you think the same -- we have the same problem in the electric business? The people that are buying futures in the electric business, would they have limited real-time information?

A. I'm really not an expert on that, so I won't comment on it.

MR. FAHN: Thank you.

MR. HOBERG: Thank you, Mr. Fahn. Commissioner Wefald, did you have any questions for this witness?

COMMISSIONER WEFALD: Yes, I do, a couple here.

EXAMINATION

BY COMMISSIONER WEFALD:

Q. Mr. Diller this morning in Exhibit 3 laid out a whole group of factors that could affect future resale margins.

A. Electricity.

Q. Do you have a copy of those?

A. No, I don't.

Q. Can you get a copy of those?

MR. HOBERG: Mr. Pearce, can you provide him a copy of -- or somebody over there?

Q. (COMMISSIONER WEFALD CONTINUING) You

mentioned with natural gas that the key variable on the demand side was weather. Do you think that's the key variable in this list, as well, affecting through to resale markets?

A. I don't want to portray myself on as an expert on electricity markets, and so I really would not speculate on that.

Q. All right. Why do you think you were brought in today to be an expert? Because it's -- natural gas prices is only one of all of these factors that's listed out of the 20-some factors. Why do you think you were brought in today?

A. Well, I think that the assumption is, and I think it's a correct assumption, that the amount of electricity that can be sold into the market is heavily dependent on the price of natural gas. If you are a coal-based electric utility, then certainly the price of natural gas going into your competitors' boiler units is a critical factor. I don't know whether it is the most critical factor out of this list. This is a long list, but it's certainly a very important factor.

Q. Is it more important than how much generation capacity is available in the region?

A. I would say that they are both very

important factors.

Q. Is it more important than the role of weather when you have -- let's say you have, you know, a period of really high peak demand in the middle of the summer and there's -- and you have a real need for electricity. Is it more important than weather?

A. Well, it -- it may be, but then the -- it's also reacting to weather.

Q. How about is it more important than plant outages that occur? Let's say a whole bunch of plants go down and there's a need for electricity to avoid a brownout.

A. Probably not.

Q. So there's a bunch of different factors, and you're here to just represent one of those --

A. That's correct.

Q. -- that could be important.

A. That's correct.

COMMISSIONER WEFALD: Thank you. That's all.

MR. HOBERG: Thank you, Commissioner Wefald. Commissioner Reinbold, please.

COMMISSIONER REINBOLD: I have a question.

EXAMINATION

BY COMMISSIONER REINBOLD:

Q. Do you know Eric Weiss?

A. Yes, I do.

COMMISSIONER REINBOLD: Well, that's a point for you, and when you see him, you tell him I got him into the transcript of a very big case. That's my only question.

MR. HOBERG: Thank you, Commissioner.

COMMISSIONER REINBOLD: Oh, I have one more question.

Q. (COMMISSIONER REINBOLD CONTINUING) Are you on the stand tomorrow morning, too?

A. No, I don't think so.

Q. Are you done today?

A. I hope so.

COMMISSIONER WEFALD: Unless you've got a bunch of questions.

COMMISSIONER REINBOLD: Oh, no, no, no.

COMMISSIONER CLARK: I haven't gone yet, Commissioner Reinbold.

COMMISSIONER WEFALD: Commissioner Clark may have a whole bunch of questions.

COMMISSIONER REINBOLD: Okay. We'll leave it up to Commissioner Clark.

MR. HOBERG: Thank you, Commissioner Reinbold. Commissioner Clark, please.

COMMISSIONER CLARK: I have no questions. End of the suspense.

MR. HOBERG: Okay. Anything further of Mr. Wilkinson, Mr. Pearce?

MR. PEARCE: No, I have none.

MR. HOBERG: Mr. Binek?

MR. BINEK: No.

MR. HOBERG: Mr. Fahn, anything further?

MR. FAHN: No.

MR. HOBERG: Okay. Thank you, Mr. Wilkinson.

COMMISSIONER REINBOLD: Excuse me. I've got one more question to ask you.

Q. (COMMISSIONER REINBOLD CONTINUING) Is this your first trip to North Dakota?

A. Yes, it is.

Q. How do you like it? We put on a little blizzard for you.

A. I appreciate that.

COMMISSIONER REINBOLD: Good to have you here.

THE WITNESS: Thank you.

MR. HOBERG: Okay. Thank you, Mr.

Wilkinson --

COMMISSIONER WEFALD: And we also ordered up some cold weather for him.

COMMISSIONER REINBOLD: That's right.

MR. HOBERG: Okay. Does it look like quitting time until tomorrow? Approximately what?

COMMISSIONER WEFALD: Should we say 8:30?

MR. HOBERG: 8:30, is that fine?

MR. PEARCE: That's find with us.

COMMISSIONER WEFALD: Would that be okay, Commissioner Reinbold?

COMMISSIONER REINBOLD: 8:30 tomorrow, fine.

MR. HOBERG: Okay. We'll stand in recess then until 8:30 tomorrow when we'll continue with MDU's case, and that will be your third witness then.

MR. PEARCE: Right.

MR. HOBERG: Okay. We'll stand in recess.

(Recessed at 5:02 p.m., Monday, the 25th day of February, 2002.)

RECEIVED
MAR 13 2002
NORTH DAKOTA
PUBLIC SERVICE
COMMISSION
EXECUTIVE SECRETARY

STATE OF NORTH DAKOTA

PUBLIC SERVICE COMMISSION

Montana-Dakota Utilities Co. 2000 Electric Operations Annual Report	: : :	Case No. PU-399-01-186

TRANSCRIPT OF

HEARING

VOLUME II

Taken At
State Capitol
Public Service Commission
Bismarck, North Dakota
February 26, 2002

BEFORE ALLEN C. HOBERG
-- PROCEDURAL HEARING OFFICER --

EMINETH & ASSOCIATES
Court Reporters
BISMARCK, NORTH DAKOTA
(701) 255-3513

RPR
Registered
Professional
Reporters

ORIGINAL

A P P E A R A N C E S

COMMISSIONERS PRESENT:

COMMISSIONER SUSAN E. WEFALD
COMMISSIONER LEO M. REINBOLD
COMMISSIONER TONY CLARK

MR. WILLIAM W. BINEK
Public Service Commission
State Capitol
600 East Boulevard Avenue
Bismarck, North Dakota 58505-0480

FOR THE COMMISSION STAFF.

MR. WILLIAM P. PEARCE of
Pearce & Durick
Attorneys at Law
314 East Thayer Avenue
P.O. Box 400
Bismarck, North Dakota 58502-0400

-- and --

MR. DOUGLAS W. SCHULZ of
Montana-Dakota Utilities Co.
Attorney at Law
400 North Fourth Street
Bismarck, North Dakota 58502-4092

FOR MONTANA-DAKOTA
UTILITIES CO.

MR. PATRICK FAHN
Public Service Commission
State Capitol
600 East Boulevard Avenue
Bismarck, North Dakota 58505-0480

COMMISSION ADVISOR.

C O N T E N T S

	Page No.
Opening comments	271
Motion to dismiss by Mr. Pearce	485
Resistance to above motion by Mr. Binek	486
Discussion regarding proposed findings of fact, conclusions of law and order	486
Closing comments by the Commissioners	489
CERTIFICATE OF COURT REPORTER	491

WITNESSES:

Roger J. Schiffman

Direct examination by Mr. Pearce	272
Cross-examination by Mr. Binek	306
Examination by Mr. Fahn	318
Examination by Commissioner Wefald	323
Examination by Commissioner Reinbold	337
Examination by Commissioner Clark	340
Redirect examination by Mr. Pearce	341
Recross-examination by Mr. Binek	343
Redirect examination by Mr. Pearce	345

Terry L. Blinsky

Direct examination by Mr. Pearce	346
Cross-examination by Mr. Binek	358
Examination by Commissioner Wefald	364
Redirect examination by Mr. Pearce	365

Douglass A. Mahowald

Direct examination by Mr. Pearce	369
Cross-examination by Mr. Binek	375
Examination by Mr. Fahn	382
Examination by Commissioner Wefald	384
Examination by Commissioner Reinbold	391
Examination by Commissioner Clark	392
Further examination by Commissioner Wefald	394
Redirect examination by Mr. Pearce	394
Recross-examination by Mr. Binek	396

C O N T E N T S (Continued)

Douglass A. Mahowald (Continued)

Further examination by Commissioner Wefald	400

Richard A. Espeland

Direct examination by Mr. Pearce	407
Cross-examination by Mr. Binek	417
Examination by Mr. Fahn	425
Examination by Commissioner Clark	426
Examination by Commissioner Wefald	428
Recross-examination by Mr. Binek	429

Donald R. Ball

Direct examination by Mr. Pearce	430
Cross-examination by Mr. Binek	442
Examination by Commissioner Wefald	446
Examination by Commissioner Clark	449
Redirect examination by Mr. Pearce	452
Recross-examination by Mr. Binek	460
Further examination by Commissioner Wefald	468
Further examination by Commissioner Clark	471
Redirect examination by Mr. Pearce	474

Rita A. Mulkern

Direct examination by Mr. Pearce	475
Cross-examination by Mr. Binek	479
Examination by Commissioner Wefald	480

EXHIBITS:

No.	Description	M	O	R
15	Table 1, Completed and Sited New Power Plants in MAPP	271	302	302

(The following proceedings were had and made of record herein, commencing at 8:33 a.m., Tuesday, the 26th day of February, 2002:)

(Exhibit 15 was marked for identification.)

MR. HOBERG: It's February 26th in the year 2002. This is the second day in the hearing of the matter of the North Dakota Public Service Commission Staff complaint regarding Montana-Dakota Utility Company and its year 2000 electric operations annual report.

Yesterday we completed the presentation of the state's case, the PSC staff's case, and we were on the -- we completed the second witness of MDU's case, about to take the third witness.

Are there any preliminary matters we need to discuss before we go into the evidentiary portion of the hearing again? Commissioners, any preliminary matters that you have?

COMMISSIONER REINBOLD: Nothing.

MR. HOBERG: Mr. Binek?

MR. BINEK: Nothing I'm aware of.

MR. HOBERG: Mr. Pearce?

MR. PEARCE: No.

MR. HOBERG: Would you call your next

witness, please.

MR. PEARCE: I call Roger Joseph Schiffman.

MR. HOBERG: Okay. For the benefit of Mr. Schiffman and all the other witnesses who will be testifying today, I'll give the admonition I'm required to give by law, and that is that the maximum penalty for perjury in this state is a Class C Felony, punishable by a maximum 5 years imprisonment, $5,000 fine, or both.

(Witness sworn.)

MR. HOBERG: Thank you. Mr. Pearce, please.

ROGER J. SCHIFFMAN,

having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. PEARCE:

Q. Would you please state your name, your business address and your position?

A. Yes. My name is Roger Joseph Schiffman. My business address is 3100 Zinfandel Drive, Suite 600, Rancho Cordova, California, 95760. I'm a principal consultant in the Energy and Water Practice of Navigant Consulting, Incorporated.

Q. Would you please describe NCI's business and your role and responsibilities?

A. NCI's a national management consulting firm specializing in the energy industry. The Energy and Water Practice provides services to all segments of the restructured energy industry and is a leading provider of planning and engineering services to the water industry.

MR. HOBERG: Excuse me, Mr. Schiffman. Could you maybe move the mike in front of you a little bit? I'm having a little trouble hearing you over here.

THE WITNESS: Sure. Our existing energy sector client base includes most of the largest utilities in the United States, most of the independent power producers, and a number of municipal utilities. NCI is active in all North American electricity markets.

Within NCI, I manage a group that focuses on electricity market assessment and analysis. My first exhibit lists my detailed experience. One of the key services provided by my group centers on wholesale electricity market price forecasts derived using detailed computer simulation models.

Within the last four years I have prepared

forecasts of electricity market prices in all North American regional markets, including the Mid-Continent Area Power Pool. These forecasts have been used by consulting clients for several purposes, including supply portfolio planning and procurement, contract evaluation, asset valuation, and feasibility analysis.

A number of the forecasts have also been used to support revenue projections underlying project financing deals for new merchant power plants.

Within the last year I have also been heavily involved in NCI's engagement with the California Department of Water Resources in that agency's efforts to structure a portfolio of power supply contracts and to obtain a targeted 13 billion dollars in new financing. Preparation of detailed forecasts requires constant attention to supply and demand fundamentals in each of the North American market regions, in addition to careful evaluation of regulatory and market developments.

Q. Would you please describe your professional experience before joining NCI?

A. From 1998 through March 2000 I was employed as a senior consultant by Henwood Energy

Services. My duties at HESI were similar to those at NCI and included electricity market assessment, electricity market price forecasting, generating assets valuation, gathering market analysis and intelligence, and completing a variety of financial and cost evaluation projects for consulting clients.

From 1990 through '98 I was employed as a financial analyst at the Public Service Commission of Wisconsin. My job responsibilities included policy development and analysis, economic and cost analysis, evaluation of competitively bid power supply proposals, integrated resource planning, advising the Wisconsin Commission on rate of return and capital structure, and conducting specialized studies concerning public utility finance, economics and regulatory policy.

Q. Would you please describe your educational background?

A. I earned a Bachelor of business administration in finance, investment and banking from the University of Wisconsin-Madison in 1988. From 1988 through 1990 I engaged in graduate studies in finance also at the University of Wisconsin-Madison.

Q. And on whose behalf are you testifying this morning?

A. I am testifying on behalf of Montana-Dakota Utilities, a division of MDU Resources Group, Incorporated.

Q. What is the purpose of your testimony?

A. I will address wholesale bulk power market conditions over the past several years as well as the outlook for 2000 and more specifically the impact of those conditions on the level and profitability of Montana-Dakota's off-system sales. While many of these conditions are common across the United States, I will also address the conditions in the market that Montana-Dakota sells into, which is the MAPP region.

Q. And what are your conclusions?

A. Staff witness, Mike Diller, proposes that the level of off-system sales margins experienced in 2000 be reflected in rates that will be in effect in 2002 and beyond. However, 2001 was hardly a normal or average year in any respect, and conditions in both natural gas and electricity wholesale markets changed in very significant ways throughout the year. As in all competitive markets, the fundamental demand and supply

conditions explained the 2000 to 2001 experience and define the outlook for 2002.

Q. What are the primary determining factors of Montana-Dakota's off-system sales revenues?

A. In simple terms, Montana-Dakota's margins from off-system sales are determined by the level or quantity of sales and the profit margin, which is revenue minus cost, that it's able to obtain from each sale.

The opportunity to make off-system sales is created by the gap between the price of purchases and sales opportunities in the spot market in Montana-Dakota's cost of powering its own generating units, which are primarily coal fired.

Spot market prices in the MAPP region where Montana-Dakota operates can vary substantially with the price of natural gas and with the fuel efficiency of units on the margin. For Montana-Dakota to make a profitable sale the gap, or profit margin, must be sufficient to offset incremental operating costs and to provide adequate incentive to increase production levels and to compensate for any risk associated with the transaction. Thus, the profit margin is the primary determinant of the quantity of off-system

sales that Montana-Dakota is able to make in a given period.

The margins that Montana-Dakota is able to obtain are determined by the size of this fuel cost differential as well as fundamental demand and supply conditions that affect the markets that Montana-Dakota is able to reach. Demand and supply conditions are important because the so-called spark spread, the difference between wholesale electricity and natural gas prices, will vary in response to changing demand and supply conditions.

Q. What markets does Montana-Dakota sell into?

A. Montana-Dakota sells primarily into Upper Midwest wholesale markets in the MAPP, MAIN and Southwest Power Pool regions. The northern MAPP region where Montana-Dakota's generators are located can be characterized as a relatively low-cost market. Trade patterns in the Upper Midwest are such that energy tends to flow from the northern and western MAPP region toward higher cost markets in eastern MAPP, MAIN and SPP.

MAPP power markets are sometimes impacted by transmission constraints which limit export opportunities, particularly the amount of energy

that can flow simultaneously in the easterly direction toward the Wisconsin Upper Michigan Systems subregion of MAIN, and in the southerly direction toward the St. Louis area.

Q. What factors do you consider important when comparing wholesale power market conditions from year to year?

A. Wholesale power markets operate in a competitive landscape where numerous influences combine to create changes in the market environment. Weather, fuel prices, economic growth, generation mix, and the supply demand balance all play important roles in defining trends in the broader wholesale power markets.

Indeed, these are all important quantitative inputs in the complex computer models many companies use to forecast power pricing and are critical factors in real-time market operations.

Q. How have fundamental market conditions evolved in North America power markets over recent years?

A. U.S. wholesale power markets have undergone significant evolution in recent years in response to deregulation policies implemented in a

number of states and in response to continued efforts by the Federal Energy Regulatory Commission to establish fair and open transmission access. The extent of market reforms has varied by region.

During this period of transition toward competitive markets, wholesale electricity prices have exhibited considerable volatility. The levels of price volatility have also varied by region and have sometimes resulted primarily from rapidly changing supply and demand conditions.

In some circumstances the levels of volatility witnessed in regional markets have also been due to the temporal exercise of market power by suppliers or due to institutional inefficiencies in organizations and market rules meant to regulate market operations in a particular region.

Q. Would you please expand on the experience of price volatility in the Midwest region?

A. During the summer of 1998 and 1999 significant price volatility was first seen in Midwest power markets. Several fundamental supply conditions contributed to the price volatility seen in that period. In the early to mid 1990s development of new generating supply had lagged in many Midwest markets as the future role of

investor-owned utilities in the generation market became uncertain with the advance of deregulation.

With uncertainty over which entities would be responsible for serving native load customers and significant risks of stranded cost exposure in the face of declining demand levels, utility companies and their investors became reluctant to make large investments in new capital-intensive power plants. As such, demand growth during that period outpaced growth in the supply base in many regions.

Beginning in late 1997, several nuclear plants in the Upper Midwest region faced extended outages to repair cracks that surfaced in steam generators. At the same time the Nuclear Energy Regulatory Commission began a rigorous review of its safety regulations governing nuclear plant operation.

The combination of physical repairs and more stringent safety regulations resulted in extended outages of an unprecedented amount of Midwest nuclear capacity during the summer of 1998 and 1999.

Those supply conditions were further exacerbated when similar concerns with safety

compliance forced several nuclear plants in Ontario, Canada, into extended outage. That net result was critical supply shortages in the Upper Midwest during that period with over 7,000 megawatts of nuclear capacity out of service in the Midwest and an additional 5,000 megawatts of nuclear capacity out of service in Ontario.

Those outages led to significant price volatility during the summer months. At their peak, reported wholesale power prices reached $1250 per megawatt-hour in July 1998 and $1426 per megawatt-hour in July 1999 in the MAPP region.

With return to service of the nuclear capacity in the MAIN and ECAR regions and additional generating supply coming into Midwest prices -- or into Midwest markets, price volatility returned to more normal levels during 2000.

Q. What fundamental market conditions occurred during 2001 that indicate it was an abnormal year?

A. As discussed by Mr. Blinsky, Mr. Wilkinson and Mr. Gaske, the key factor underlying electricity market dynamics in 2001 concerned the unprecedented increase in natural gas price witnessed during the last quarter of 2000 and the

first two quarters of 2001. During that period, high natural gas prices resulted in significantly increased spot market electricity prices throughout the United States. That pattern is illustrated in Mr. Wilkinson's Exhibit PLW-1.

Within the MAPP region natural gas fuel generators have been playing an increasingly prominent role in establishing spot market clearing prices. This pattern occurs because a significant portion of new entry in MAPP has been fueled by natural gas, and those new resources operate as intermediate and peaking resources. Gas-fired generators in MAPP now occupy an expanding segment of the supply curve that represent the marginal resource with increasing frequency.

The correlation between MAPP electricity and natural gas prices has been increasing in recent years due to this factor and will continue to strengthen as gas-fired resources represent an expanding portion of generating supply.

In addition to the run-up in natural gas prices seen in late 2000 and the first half of 2001, the supply crisis in western U.S. power markets, and particularly in California, also played an important role in electricity price

discovery in other U.S. markets.

While the power systems in the eastern and midwest U.S. operate asynchronously to those in the western U.S., the level of sustained abnormal prices seen in California had an impact on price discovery in all domestic power markets. The extent of the crisis that arose in California was beyond anyone's expectations and drew significant attention throughout the world.

From a risk management perspective, market participants in all market regions were required to reevaluate their hedging strategies in response to the magnitude of prices and reliability difficulties seen in California. The financial distress faced by the California investor-owned utilities were also factors that far exceeded prior expectations.

The supply crisis reached a level so serious that the State of California was required to step in and assume the role of spot market broker and financier. Absent that step, frequent and sustained blackout periods would have occurred during the first half of 2001 and perhaps throughout the year. A crisis of that magnitude was clearly an abnormal event.

Q. What steps did energy market participants take in response to increased natural gas price levels and in response to market uncertainties created by the supply crisis in California?

A. Market participants that faced significant price risk in electricity and natural gas spot markets early in 2001 took actions to mitigate a portion of that risk on a going-forward basis. In the short-term, risk mitigation measures involved entering into short-term or intermediate-term bilateral contracts designed to create improved price certainty and to hedge against extreme upside price volatility. This type of hedging activity was a rational response to extreme uncertainties in both natural gas and electricity markets.

Because of the level of volatility seen in both natural gas and power markets during late 2000 and early 2001, the risk premiums underlying such hedging arrangements were quite high by historical standards.

A concrete example of the hedging activity I am describing is illustrated in Mr. Blinsky's surrebuttal testimony and has direct relevance to projecting the margin on Montana-Dakota's off-system sales.

As described in Mr. Blinsky's testimony, Montana-Dakota entered into a sales agreement in March of 2001 which locked in summer electricity prices and sales revenue based on the prices of futures contracts in place at that time. When spot market natural gas and electricity prices declined during the last half of the year, Montana-Dakota enjoyed a higher profit margin based on its contracting position than it would have earned selling power directly at spot market prize.

Under current market conditions contracting opportunities such as that enjoyed by Montana-Dakota are no longer available because the premium between contract and spot market prices is substantially smaller.

Q. What impact have these fundamental energy market conditions had on market prices in late 2000 and 2001?

A. The price spikes we observed recently in the winter of 2000-2001 were clearly an anomaly. In fact, winter peak wholesale power prices have historically varied between 25 and $35 per megawatt-hour and had only ever reached around $40 per megawatt-hour in the winter of 1999-2000.

With higher natural gas prices and greater

market uncertainty, wholesale power prices in MAPP reached $142 per megawatt-hour during the on-peak period of December 12, 2000. This level was, in fact, higher than the previous and following summer peaks of $120 per megawatt-hour reached in August 2000 and August 2001, respectively.

Off-peak pricing also increased during the winter of 2000 to 2001, reaching slightly more than $47 per megawatt-hour for the first time in recent history. Normally, off-peak pricing in MAPP runs between 10 and $15 per megawatt-hour.

Since natural gas resources are really marginal in the MAPP region during off-peak periods, this level of off-peak prices suggests significant risk premiums being priced into wholesale electricity prices. Exhibit RJS-2 illustrates daily spot market electricity prices in the MAPP region for the period beginning January 1996 through February 2002.

Q. How have the electricity price levels seen in late 2000 and the first half of 2001 impacted the margin earned on off-system sales by Montana-Dakota during that period?

A. With continued coal price stability, the run-up in natural gas prices and risk premiums

priced into short-term and intermediate-term bilateral transactions resulted in abnormally high profit margins for coal-fired generators throughout the first months of 2001.

That pattern can be seen in Exhibit RJS-3, where daily coal-based and natural gas-based spark spreads were plotted for the period January 1996 through February 2002. Exhibit RJS-4 plots the spark spread data on a monthly basis for the same period, while Exhibit RJS-5 plots the same monthly spark spread data for just the period January 2000 through February 2002.

The spark spread represents the margin above fuel costs achievable by operation of a given power plant. In estimating the spark spread, we have assumed market heat rates of 7,000 Btus per kilowatt-hour for gas-fired generation and 12,000 Btus per kilowatt-hour for coal-fired generators.

The coal-based spark spread measure provides a representation of the margin that Montana-Dakota could be expected to earn on off-system sales but does not net out additional costs attributed to nonfuel operations and maintenance. As shown in Exhibit RJS-4 and Exhibit RJS-5, the coal-based spark spread departs

significantly from the natural gas-based spark spread during the period of high natural gas prices experienced in the fourth quarter of 2000 and in the first half of 2001.

During the last half of 2001 and the first two months of 2002 when natural gas prices returned to equilibrium levels, the two spark spread measures returned to their normal historical pattern and tracked each other closely.

The abnormal departure of coal-based and natural gas-based spark spreads illustrated in Exhibit RJS-5 directly corresponds with the period of abnormally high margins and off-system sales enjoyed by Montana-Dakota during 2001. As shown in this exhibit, coal- and natural gas-based spark spreads track each other very closely throughout the second half of 2001.

Q. Are current natural gas and electricity market fundamentals such that you would expect repeated electricity price spikes and continued abnormally high profit levels on Montana-Dakota's off-system sales?

A. No. Market fundamentals for 2002 and subsequent near-term years suggest a period of improved stability in wholesale power markets. As

discussed by Mr. Blinsky, Mr. Wilkinson and Mr. Gaske, natural gas prices have returned to more normal levels, and the current outlook is for natural gas price stability.

In wholesale electricity markets, a combination of new supply coming on-line, reduced demand from target and conservation programs, and institutional market reforms have contributed to price stability again in the western U.S. market. That stability has been bolstered by a return to normal or perhaps wet-year hydro conditions in the western U.S. and by the increased use of bilateral contracts entered into to hedge against upward price volatility.

In Midwest power markets supply expansion is also expected to improve supply demand margins and to contribute to electricity price stability. Exhibit RJS-6 lists estimated historical and 2002 projected reserve margin levels in the MAPP, MAIN and SPP market regions. As shown, reserve levels reached their floor during 1999 and 2000 and are projected to continue their rebound during 2002.

This combination of factors points to lower and more stable wholesale electricity prices in the MAPP region for 2002 compared to the price

and volatility levels seen over the last four years and particularly during the first half of 2001.

As discussed by Mr. Blinsky, this expectation of reduced-price volatility is reflected in current market expectations and prices of NYMEX futures contracts for on-peak power delivered into the energy hub. Buyers and sellers in futures markets place great weight on their fundamental supply and demand issues.

Q. Given your expectation of likely 2002 wholesale power market conditions in the Midwest region, do you believe Montana-Dakota will enjoy profit margins on off-system sales that are comparable to the levels earned during 2001?

A. No. With lower and more stable natural gas and electricity prices, profit margins on off-system sales will be correspondingly lower. Reduced price volatility will result in lower risk premiums being priced into wholesale market transactions.

In addition, as supply expands and supply demand balances improve, Montana-Dakota will face greater competition for off-system sales. With lagging electricity sales due to the current economic downturn, that competition will only be

greater and Montana-Dakota might face reduced volumes of off-system sales, in addition to lower profit margins on those sales.

As discussed above, natural gas and electricity price volatility created the increased margins for Montana-Dakota in the winter of 2000-2001 because Montana-Dakota retained its relatively flat cost structure relative to natural gas-burning competitors. With more stable prices going forward, the margins available in off-system sales will be lower.

In summary market conditions toward the end of 2001 are significantly more representative of what can be expected in 2002 and for the foreseeable future.

Q. Do you believe that the approach used by Mr. Blinsky for forecasting margin on off-system sales is reasonable?

A. Yes. I believe Mr. Blinsky uses a reasonable approach. Forecasting energy market prices is always a difficult exercise, and using the prices of currently traded futures contracts is a reasonable way to assess current market expectations of spot market prices that will prevail during the relevant months of 2002.

Q. Showing you what's been marked as Exhibit 9, Mr. Schiffman, would you identify what that is and explain what it shows?

A. Yes. Given some of the -- some of the questions that have been raised about the NYMEX futures contracts and the role that they play in forecasting forward prices, we also took a look at alternative sources of forward electricity prices, which came from the Intercontinental Exchange, which is an exchange that's been in place for maybe two years and records bilateral transactions and bid-and-offer prices between entities in the power markets.

We put this in as an alternative look at what the forward curve is like. Exhibit 9 lists the prices from the Intercontinental Exchange as of February 16th, 2002. You'll see that the prices are roughly comparable, maybe slightly lower than what was listed in Mr. Blinsky's exhibit from the February 16th NYMEX futures contracts quotes. These are both for delivery at the Cinergy hub, and as I understand it, Mr. Blinsky will be presenting an updated view of the off-system sales margins based on this curve, as well, for the Commission's consideration.

Q. Would you for purposes of clarification just remind us what's meant by the Cinergy trading hub?

A. That's -- Cinergy is located in the Ohio, Indiana region. It's one of the places that participants in the electricity markets have chosen to price their transactions against as sort of an index, and so the prices here are for delivery at that location.

Q. And that's a widely used reference in the industry, isn't it?

A. Yes.

Q. Did you prepare Exhibit 9, Mr. Schiffman?

A. Yes.

Q. And to the best of your information and belief, are the data in Exhibit 9 true and correct?

A. Yes, they are.

MR. PEARCE: I will offer Exhibit 9.

MR. HOBERG: Any objection, Mr. Binek?

MR. BINEK: No objection.

MR. HOBERG: Okay. Exhibit 9 is admitted.

Q. (MR. PEARCE CONTINUING) Mr. Schiffman, I've handed you also Exhibit 11, which is already in evidence, and Exhibit 13 and Exhibit 15. Exhibit 11 is the NERC report that's been admitted

into evidence, I believe it's a two-page report. Exhibit 13 is a longer MAPP report that we will be having you testify to, and Exhibit 15 is an additional -- several additional schedules that were not included in your prefiled direct testimony. Would you comment on --

MR. HOBERG: Do you mean his surrebuttal? I don't think he had direct, did he?

MR. PEARCE: I'm sorry. I called it direct. Surrebuttal, yes.

Q. (MR. PEARCE CONTINUING) Would you -- the exhibits -- well, all of these exhibits relate, I believe, to generation and generation capacity in the MAPP region. Would you comment on these exhibits and discuss what they show, if you would?

A. Yeah. I prepared these exhibits in response to Exhibit 11, which had provided a little bit of confusion for me because of the amounts of new capacity that they have listed in there as likely to come into the MAPP market in the 2001 to 2010 time frame.

They're indicating in Exhibit 11 that there will be an additional 5,108 megawatts of capacity during that period, from 2001 through 2010, and this again was a report from the North

American Electric Reliability Council.

Exhibit 13 is a different report that's published by MAPP itself, and the focus of it is on transmission planning, and they've got a list of projects, new generating projects under development in the MAPP region. Within that report --

MR. BINEK: Your Honor?

MR. HOBERG: Yes.

MR. BINEK: I don't have a copy of Exhibit 13.

MR. PEARCE: Oh, I'm sorry. I thought I had furnished them.

MR. HOBERG: I thought he had, too.

MR. PEARCE: Does the Commission have 13?

MR. HOBERG: No, I don't think they do.

COMMISSIONER REINBOLD: Do we want them?

MR. PEARCE: It doesn't talk about recession. Well, maybe it does indirectly.

MR. HOBERG: This is Exhibit 13.

MR. PEARCE: 13.

Q. (MR. PEARCE CONTINUING) Would you go ahead?

A. Yeah. Beginning -- it's at table 2.4 beginning on page 14. They go through quite an extensive list of new power plants that have either

entered the MAPP market or that are under development in the MAPP market as of the date of this -- of the preparation of that report, which was November 30th of 2001.

What I've done in Exhibit 15 is identified the plants that are just in the MAPP region because in the report itself there are some that also targeted for MAIN, and I've tried to -- to then add those up and reconcile the differences in capacity, because the amount of capacity that is shown in Exhibit 13 is significantly higher than the amount of new capacity that's shown in Exhibit 11 by -- it's roughly twice the amount by the 2010 time frame, and most of it occurs in the early time frame.

What appears to be going on is just that the reliability councils themselves have been having a lot of difficulty with their reliability assessments in the last four or five years as the markets have evolved and the planning responsibility for new generation has become less clear.

I think if you looked at these reports maybe three or four years ago, they would show huge capacity surpluses when the utilities were

following kind of their traditional history of putting in plant resources to meet in MAPP, for example, the 15 percent reserve margin target.

That created kind of a disconnect because they would put the resources into the reliability reports, but they weren't taking any active steps to actually procure the new supply. So the reports would keep coming out showing adequate resources, but there was no generation under development, which is part of what led to some of the supply crises we had in the late 1990s.

So then through time, the utilities stopped basically putting in resources unless they were under development, and most of the new projects that were coming in were either being developed as merchant power plants or were being developed without a purchase contract connection with the IOU, so it wasn't clear who was responsible and how much capacity was coming in.

So the reliability councils in recent years have been having a lot of difficulty struggling with the issue of how much new capacity to include in their reliability assessments.

The reconciliation of these two reports, it seems to be, that the MAPP region itself has a

list of generators that are under development, some of which have come into the market, some of which have -- have been going through permitting and planning and siting and have sites identified, and they're including a greater amount of new capacity in, for example, their transmission planning report than what NERC is including as new capacity in their reliability assessment.

If you look at Exhibit 15 on, I guess, table one, page three, if you look over to the far right side, you'll see at 2005 there's 6500 megawatts of new capacity listed in the MAPP report as likely to come into the markets by 2005, and that's a greater amount than the whole period listed in the NERC report.

The difference is kind of illustrated -- or the amounts of capacity in the MAPP report are listed on what I've labeled as Exhibit RJS-10, figure 1, where it shows graphically the three different categories of new power plants that MAPP has identified and the amounts completed and unsited, which are the first two bars in the chart. You'll see that it's about 6,000 megawatts by 2005, and that looks like about 7,000 megawatts by 2010 if you don't include the unsited generation. If

you include the unsited generation, it's in excess of 10,000 megawatts by 2010.

The last -- the last schedule in Exhibit 15 compares the forecast to demand in the most recent MAPP EI-411 report. It lists in the second column the change in demand that's projected, and then it lists side-by-side projected changes in new generation that are listed in again Exhibit 13 and indicates in there that the generation additions are projected to outstrip the demand growth.

So I put this in really just for the Commissioners' information, to illustrate that there seems to be some uncertainty. I think Commissioner Wefald yesterday was concerned that we were headed for supply deficits, which whether or not that's true, I don't personally believe it's true because, you know, the MAPP region has pretty stringent penalties for not hitting their reserve targets. The utilities are actively developing new projects.

There's some uncertainty, I guess, about how many of the new projects that are at some stage of development are actually likely to come into the market, and these two reports seem to take quite a different view of that, you know, which is somewhat

odd given that they come out of primarily the same entities or organizations.

The other point I would make is, you know, there's a fair amount of capacity in these schedules also that's listed as unsited. If you look at what I've labeled -- again in Exhibit 15, what I've labeled inside of that as Exhibit RJS-9, this is the source of capacity that's listed as not being sited in the MAPP transmission planning report. Normally that type of capacity would not be counted. People would look at it as, well, they haven't really identified a site so we won't pay any attention to it.

The reason in this instance that I would pay some attention to it is you'll see that there's a number -- the ones listed in here as various RFPs by Xcel are essentially capacity that NSP is scheduled to go out and procure through its regular RFP process and bidding process that's been approved by the Minnesota Commission, and so I think a number -- or an amount of that capacity is likely to be real capacity. It's just that they haven't identified who the winning birds are at this stage.

Q. Mr. Schiffman, did you prepare Exhibit 15?

A. Yes, I did.

Q. And to the best of your information and belief are the data in that exhibit true and correct?

A. Yes.

Q. And Exhibit 13 you took from a regular printed material in the normal course of MAPP business; is that right?

A. Yes. I just downloaded that report from the MAPP web site.

MR. PEARCE: I'll offer Exhibits 13 and 15.

MR. BINEK: No objection.

MR. HOBERG: Exhibits 13 and 15 are admitted.

Q. (MR. PEARCE CONTINUING) Finally, Mr. Schiffman, would you elaborate somewhat on the correlation between electricity and natural gas prices in the MAPP market?

A. Yes. The -- there's been a number of questions raised about the relationship between electricity prices and natural gas prices I guess in power markets in general and in the MAPP region in particular. The -- maybe the primary idea to take away from that discussion is that the

correlation between power prices and gas prices is increasing in MAPP.

The reason for that is that there was not a significant portion of gas-fired generation in the MAPP market, say, four, five years ago. It was basically with the additional capacity additions, the portion of resources that burn natural gas or are fueled by natural gas has been increasing in the last four, five years and will increase through time, at least with the current outlook, because all of the new generation that's coming into the market is gas-fired.

Similarly, a lot of the wholesale prices that are seen in MAPP and are experienced by Montana-Dakota in their off-system sales opportunities are influenced by the supply characteristics and the demand characteristics in other markets, particularly the markets that occur in northern Indiana -- or northern Illinois, in Wisconsin, in the St. Louis area, and the supply characteristics in those regions historically have been more influenced by natural gas, particularly in the Illinois and Ohio and Indiana regions because there's always been a greater portion of gas-fired capacity that is in those markets and

that in turn influences those markets from power plants in the southeast United States.

Similarly, to MAPP only more drastically, there's been a lot of gas-fired capacity that's come into the MAIN region in the Chicago area and northern Illinois area and into the ECAR region in recent years.

So basically through time in recent years the correlation has been increasing, and in future periods it will increase even more drastically.

The other thing that's tricky about it, though, is the correlation is basically very high at times when gas-fired resources are setting the marginal price, and by setting the marginal price that just means that the people that are bidding at a given hour for -- to sell their output and where they're finding buyers in that hour, they tend to be using similar technologies, so that most of the resources will be gas-fired in a particular hour primarily during the on-peak periods. In off-peak periods gases are rarely marginal so there's not much correlation in the MAPP prices between coal and natural gas.

But then the other element is that the correlation isn't just a constant. It varies by

season. So in the winter months and in the summer months the correlation of electricity prices and natural gas prices will be much higher just because there's a greater reliance on the gas-fired resources as demand levels are higher.

Q. Finally, Mr. Schiffman, turning back to Exhibit 9 for a moment, which was your table on the NYMEX and Intercontinental Exchange prices, showing the differences, based on the last column in that exhibit, your difference between the two prices, would you anticipate that a projection of futures prices using the Intercontinental Exchange figures would come to about the same result that Mr. Blinsky reached using the NYMEX futures?

A. Yes. I think it would be roughly the same, and as I indicated, I think Mr. Blinsky has an update of that for the Commission's consideration.

MR. PEARCE: Thank you. That's all I have.

MR. HOBERG: Thank you, Mr. Pearce. Just for the record, Mr. Schiffman's surrebuttal testimony is found in Exhibit 7, and it's Docket No. 61 in the PSC docket. Mr. Binek, do you have any questions of Mr. Schiffman, please?

MR. BINEK: Yes.

CROSS-EXAMINATION

BY MR. BINEK:

Q. Mr. Schiffman, on page nine of your testimony you mentioned the peak wholesale power price of $1250 per megawatt-hour in July of 1998. How long did that -- did that peak price exist?

A. Just for a few hours, and as I understand, the liquidity or volumes that were traded at those price levels were quite small.

Q. And the $1426 per megawatt-hour in July 1999, how long did that peak wholesale power price last?

A. Similarly. The prices were very spiky in those periods and they weren't at sustained, high levels.

Q. Do you have any average price for peak power purchases for, say, the month of July 1998 and the month of July 1999?

A. I have that data. I don't know that I have it immediately at my fingertips. I could get that for you.

MR. BINEK: I think that would be helpful.

MR. HOBERG: Can you provide that as a delayed exhibit, Mr. Pearce?

MR. PEARCE: Yes.

MR. HOBERG: Just mark it as perhaps what, RJS number -- what would it be, 10?

MR. PEARCE: I think we're at 11.

MR. HOBERG: 11 for his?

MR. PEARCE: His last page on 15 I think was 10.

MR. HOBERG: Okay.

THE WITNESS: I'm sorry. Just so I'm clear, you want monthly prices for just that period or for what period?

Q. (MR. BINEK CONTINUING) Well, those are two that you referred to in your testimony, so I'd like those. Also on page 12 of your testimony you reference $142 megawatt-hour during the on-peak period of December 12, 2000. Probably that -- the average for that month might be helpful, too.

MR. HOBERG: Okay. That would be -- it would be RJS-12. You had 11 on your Exhibit 15.

MR. PEARCE: That's right.

THE WITNESS: All right. Thank you. Yes. I can provide that.

Q. (MR. BINEK CONTINUING) Okay. Then also on page 12 you talk about a $47 per megawatt-hour for -- that was reached the first time in recent

history for off-peak pricing in the winter of 2000-2001. When was that $47 per megawatt-hour reached? Was that an average you're talking about or just a one peak-time period?

A. I believe that was a one time, but I don't recall the frequency. Again, I could make that data available.

Q. Okay. I'd appreciate that.

MR. HOBERG: Do you want to just make that all part of the one exhibit?

THE WITNESS: Yes.

MR. HOBERG: Okay.

Q. (MR. BINEK CONTINUING) In your testimony you had listed several factors that affect the wholesale market environment. On page nine and also on this recent discussion you talked about the natural gas pricing, and on page nine, line eight, you talked about this unprecedented increase in natural gas pricing during the last quarter of 2000, the first quarter of 2001 as being a key factor underlying electric market dynamics in 2001, and you point out also on page nine that within the MAPP region natural gas generators have been playing an increasingly prominent role in establishing spot market clearing prices.

That's correct, isn't it?

A. Yes.

Q. And just in your conversation -- or the discussions you had after reading your surrebuttal testimony, you've emphasized the fact of all of this generation that's coming on-line in MAPP, and that generation for the most part is all natural gas, isn't it?

A. Yes, it is.

Q. That isn't -- isn't the fact that we're going to be having this increased demand for natural gas generation being created by all of this new generation, not just in MAPP, but isn't that also true throughout the country, that the new generation coming on-line for the most part it's gas fired?

A. Yes, most of the generation is gas-fired that's coming on-line in the U.S.

Q. And isn't it also true that all of this gas-fired generation is going to put an upward pressure on natural gas prices and demand for natural gas?

A. Well, relative -- I mean, all else fixed, yes, that's true. I mean, the idea or the fact that there's been a lot of electricity generation

coming in as gas-fired and likely to come in as gas-fired has been well-known for several years, though. So it's also reflected in the market expectations, say, for natural gas and is reflected in the fundamental price forecasts that people come up with for predicting natural gas prices going forward.

Q. And right now we're in a period of relatively low prices of natural gas; isn't that correct?

A. I would characterize it more as normal in terms of long-term history.

Q. Okay. When prices are normal or at a lower level, doesn't that also generally affect drilling activity?

A. I think I would defer to Mr. Wilkinson on that.

Q. Okay. And he talked about that yesterday. On page 15 of your testimony you talked about the 2002 market outlook. Your 2002 market outlook is based on projections, expectations and assumptions; isn't that correct?

A. Well, yes. It's based on -- based on looking at all of the market fundamentals that are in play and based on those fundamentals making an

assessment of what would we expect to see in the electricity markets during the coming months.

Q. And you've stated that the current outlook is for natural gas price stability. That may or may not happen; is that correct?

A. Yes, that's correct.

Q. You state -- and I'm not sure what page it is. It's toward the end of your testimony -- that price stability in the western U.S. market has been bolstered by a return to normal or perhaps wet hydro conditions in the western U.S. Isn't it true that reservoir levels are very low due to the drought that has persisted in the West for quite a long period of time?

A. Well, last year was quite a dry year, particularly in the Pacific Northwest. In the current winter we don't have the full story yet, but the first three months were actually 150 percent of normal in terms of -- in terms of precipitation, and then it's been closer to normal or perhaps a little dryer even in the recent months, so that we don't have the full story, but I think we'll be at least normal-type conditions, is what's currently being projected for hydro in the West.

Q. What -- what area of the West has this excess precipitation?

A. Northern California has had quite high snowpacks, and the Pacific Northwest as well, as I understand, has had significant rainfall this year, particularly in the early months.

Q. How about the Northern Rockies?

A. I don't know about the Northern Rockies.

Q. Are you aware of WAPA's projections about cutbacks in the amount of hydroelectricity that will be generated due to expected low -- or lower flows out of the Rockies?

A. I'm not aware of that. What I'm referring to here when I say western U.S. is primarily the California and the Pacific Northwest prices. Those are really not materially influenced by WAPA hydro conditions. They're influenced by what we see in northern California and what we see in Oregon and Washington and then up into British Columbia.

Q. Do you know how much hydroelectric -- electricity capacity there is in the Missouri system?

A. I haven't looked at that number. No.

Q. Are you aware of the fact, for instance, the water levels in Lake Sakakawea, which is the

lake behind the Garrison Reservoir, in North Dakota?

A. No. I have not reviewed hydro conditions in the Missouri region or the Missouri River Basin.

Q. On page four of your testimony, beginning at line four, you state that staff witness Diller proposes that the level of off-system sales margins experienced in 2001 basically were not normal or average. Were you present in the hearing room when Mr. Diller made his proposal to settle the resale issue by using an average of sales margins during the past three years for purposes of establishing rates in this proceeding?

A. Yes, I was present.

Q. What is your -- your response or your reaction to Mr. Diller's proposal?

A. Reaction in what sense?

Q. Well, I guess just that -- how do you feel about his proposal?

A. Well, I believe that using the last three years would likely still result in an overestimate because of the price volatility seen, you know, again in 2001 because of the increased gas prices and the increased risk premiums as discussed in my testimony and seen in the two previous years, or

particularly, I guess, you would pick up 1999 because of the volatility seen there that was left over from the nuclear capacity outages.

So relative to what I would project going forward in 2002, I would expect that it would still result in an overestimate.

Q. Won't MAPP's increasing reliance on natural gas cause electric energy prices to increase compared to historical levels?

A. Not compared to what we've seen recently in the historical prices because, again, the other fundamental supply and demand conditions basically are such that with the additional supply, with the lower natural gas prices, my expectation is that prices in 2002 will be lower than what we've seen due to those other volatility characteristics in recent years.

As indicated in Mr. Blinsky's testimony or if you look at the two forward price series in Exhibit 9, those are reflective of supply and demand expectations in the market for 2002, which includes the forecast of how much generation will be gas-fired, how much of that will be marginal, how much -- you know, what will the demand levels be, what do people expect as -- does the market

expect as the natural gas prices. So this reflects an expectation of those factors. The forward prices already take into account the idea that there's going to be more gas-fired generation.

Q. Your comparison, as I understood it, is to reach recent historical prices, the very high prices that have been talked about here.

A. Right.

Q. When you look at more average prices, then isn't this reliance on natural gas going to cause electric energy prices to increase?

A. All else fixed, an increased proportion of gas capacity would be expected to cause an increase in price. Now that'll depend on the mix of gas capacity. You know, I would indicate still that MAPP is primarily a coal-based market. It's not -- we haven't grown to the point in terms of gas supply -- gas-fired generation supply, that MAPP is dominated by gas. We expect it to be the marginal resource maybe 50, 60, up to 70 percent of the time on-peak and hardly of off-peak. So all else fixed, the answer to your question is yes.

Q. Isn't gas a more expensive fuel than lignite burned in mine-mouth plants?

A. Yes. Gas is more expensive, but the heat

rate -- you know, it depends on the gas technology we're bringing in, as well. If it's a simple-cycle unit, they've got a heat rate that's comparable to the coal units, maybe slightly less, and so then clearly there's a cost advantage. If you look at combined cycle technologies, they see higher fuel costs, but then they have improvements in thermal efficiency, so the proportional increase in production cost is smaller.

Q. I think you said you're from California?

A. Yes.

Q. How far ahead of time were you able to predict the problems in California?

COMMISSIONER REINBOLD: The earthquake?

Q. (MR. BINEK CONTINUING) The energy problem.

MR. HOBERG: Which problem, Mr. Binek?

COMMISSIONER REINBOLD: Not the earthquake?

MR. BINEK: No.

COMMISSIONER REINBOLD: Excuse me.

THE WITNESS: When you say "the problems," could you be more specific.

Q. (MR. BINEK CONTINUING) Well, the whole energy shortage that occurred in California the

last several months, all the brownouts, rolling blackouts.

A. Right. We were -- say, in the summer of 2001 we were predicting prices that were spiking up because the supply still was lagging in 2001-2002. So we were predicting prices in the maybe $200 per megawatt-hour region at the spike in August in California.

We weren't predicting anything near the magnitude of what actually happened, and partly what happened in California was just natural gas prices. We're talking about average gas prices here of five dollars and spiking at ten. Well, they were at least twice that level in California last year. We hit a spike of $50 per MMBtu for natural gas prices. You know, there were some generators that saw, because of a shortage of nox emissions credits, an additional $100 per megawatt-hour for nox credits.

So some of the impacts out there were based on just pure fundamentals, the same as what's been seen here in MAPP, and then some became, you know, just a function of the breakdown of the markets and of exercise of market power by suppliers, and then near the end by the financial

distress faced by the IOU so that no one was willing to sell into the market.

MR. BINEK: Looking at your final statement in your testimony, I agree with the portion of your statement that you make on page 17 where you say that forecasting energy market prices is always a difficult exercise. No further questions.

MR. HOBERG: Thank you, Mr. Binek. Mr. Fahn, did you have any questions of Mr. Schiffman?

MR. FAHN: Yes.

EXAMINATION

BY MR. FAHN:

Q. Earlier I heard testimony about -- I mean, a lot of the information that we have on the effects of gas pricing and energy demand seem to be a regional general view of things, and then I heard a few questions about -- well, about snowpack and snowpack in different areas of the country, and I'm wondering if it would be -- if it would be necessary -- if it is necessary or if it would be important for the Commission to know more about the demand for electricity or the areas where MDU is selling this electricity. Rather than a regional look, should we be getting into more detail so that

we can determine exactly spot -- like the spot market type of look so we can determine for sure what the impact would be in the future for MDU and sales for resale?

A. I'm not sure I understand your question completely. You mean in terms of focus on spot markets closer to MDU like North Dakota?

Q. Focus on the markets -- maybe we should be looking at the areas that purchased energy from MDU in those sales for resale and looking at those markets specifically to determine the future demand for MDU's sales for resale.

A. Well, I believe that the -- you can't look at those markets in isolation or at just the entities that, per se, MDU is selling to. I mean, Mr. Blinsky can probably describe in greater detail and I can in terms of who are the actual parties on the other sides of the transactions, but the dynamics of the markets and -- I mean, the dynamics of all of the power markets and all of the gas markets is that they're connected, so that what happens in -- you know, the reason we take regional looks is because it's all of the regional supply and demand conditions that result in what does the price end up at in a given hour.

You know, the historical pattern in MAPP markets has been -- they're lower cost because of the lower cost of lignite coal and the closeness to the Powder River Basin coal in Montana and Wyoming, and they've had, you know, a greater amount of particularly energy, sometimes capacity, but particularly energy.

And Montana-Dakota sells into an energy market. They're not long on capacity. As we've talked about, they've been barely meeting the 15 percent requirement for MAPP, but they've got a lot of coal-based generation so they're able to sell in a lot of hours, and basically the trade patterns have been that the energy that's available at lower cost in particularly the northern and western MAPP region basically ends up going towards some of the higher demand or greater industrial production regions, which are in northern Illinois and in the St. Louis area and in Wisconsin.

It may be that Montana-Dakota is selling to entities that are right next-door. I mean, I would imagine a lot of their sales are to NSP, but NSP's in a position where they're sitting kind of right on the cost of one of the prime transmission constraints that affects how much energy can flow

from the western MAPP region into these other markets.

And so we could look at just what's going in North Dakota, but the reality is that the price is going to filter up from these other markets and get brokered through somebody like NSP, and the supply and demand fundamentals in those other markets are what's going to ultimately determine, you know, the greatest portion of the price, and the only times that that won't be true is when the transmission constraints are binding.

So, say, there's only -- say you can only move 2,000 megawatts total of energy from MAPP into, you know, either the Chicago or St. Louis area and basically you hit a transmission limit. Well, what will happen then is you'll see a separation in the markets during that type of a period so that you'll see higher prices in those markets, in the Chicago markets and the St. Louis markets and you'll see lower prices in MAPP because they can't get the lower price generation out of the region.

Q. I guess I was thinking that if there are certain areas in the region that MDU sells to that are controlling the price, that are affecting the

price to a greater degree, perhaps the Commission should know the supply-and-demand situations in those areas and maybe that would give them a better picture of how, you know, the price for MDU's sales for resale would be affected, and I guess the question is -- what I've heard so far is that you're thinking that it might not be beneficial for the Commission to get into that much detail.

I guess I'll ask just one more time about specific -- you did mention that specific areas could control price, and so with that in mind, do you think it would be beneficial for the Commission to study specific areas?

A. I'm not sure the -- I mean, I'm not sure, first of all, what areas you have in mind, but my own view would be that if you want to look at, you know, reasonable projection of a spot market-type price, that it will take into account something that's broader than, say, an individual utility system or a small geographic area, because even if somebody is long in supply and looks like they don't need it, if somebody in an adjacent market does, you know, they're able to basically broker between the two.

So they'll take a spread on the

transaction and they'll move the power through their system. You know, similarly if they're short, you know, they'll buy from wherever.

But, I mean, the way the market works is everybody that -- I mean, they try to use the most efficient resources to meet demand, and there's transactions back and forth to do that so you get to the same point in terms of the clearing price, and again, the only time that that doesn't happen or wouldn't be expected to happen would be when transmission constraints would preclude the transactions.

MR. FAHN: Okay. Thank you.

MR. HOBERG: Thank you, Mr. Fahn. Commissioner Wefald, did you have any questions?

COMMISSIONER WEFALD: I have a couple.

EXAMINATION

BY COMMISSIONER WEFALD:

Q. Would you explain this chart? That is -- this is -- I don't know the exhibit number because it's not marked on mine.

MR. HOBERG: What's it say -- is it RJS-7?

COMMISSIONER WEFALD: It says Table 1.

THE WITNESS: It's Exhibit 9.

MR. HOBERG: 9.

Q. (COMMISSIONER WEFALD CONTINUING) Could you explain Exhibit 9 to me? I know the NYMEX futures strip. That's showing in March 2002 would be -- 21.10 would be what the price would be for the -- on the futures market for electricity on that date.

A. Right.

Q. Is that the date that that price was offered?

A. March 2002 would be the delivery period, so that would be for electricity delivered -- you know, in that example, for electricity delivered under the terms of the future contract for the month of March. So that's like an average on-peak price for March. I think it's what, 730 megawatt-hours during the month or something like that under the terms of the futures contract.

Q. Okay. So when would -- that could have been offered any time previous to March 2002; is that correct? So, for example, if you were purchasing electricity today from March 2002 and I wanted to -- I would enter into a futures contract for $21.10 for March 2002?

A. Right. And then that's the price you would pay for delivery of that energy in March.

Q. Okay. And then the Intercontinental Exchange forward price is another market that I could negotiate with for delivery at that time?

A. Right, exactly. And it's a similar product in terms of its on-peak energy for delivery in March.

Q. And these are all forward looking. Is there any -- you know, Commissioner Clark asked yesterday about what actual prices are for the electricity in the past compared to what the futures prices were. You haven't done any study overnight to show that?

A. You mean in terms of --

Q. Historically, how accurate the futures prices were to the actual price of electricity if you needed to buy it on the open market on that date?

A. No. I haven't completed a study to show that. No.

Q. Okay. Thank you. All right. And you mentioned about this projected demand, and in your testimony you said something about Xcel. Can you show me where it tells -- shows something about Xcel in your chart? This is RJS-8.

MR. HOBERG: Exhibit 15.

Q. (COMMISSIONER WEFALD CONTINUING) Exhibit 15.

A. Yeah. In the MAPP report that I referred to, which is Exhibit 13, they list -- or they categorize the capacity that's under development going to three different categories. One was the capacity or was the project completed and is in the market.

Q. And where is that? Where are you showing finding that on here, in Exhibit 15? Is it in Exhibit 15?

A. Yeah. In Exhibit 15 what I've done in, say, the first page, which is RJS-8, is I've left out the category -- I've left out one of the three categories that they include. So what I put in here is basically what would be viewed as the most certain capacity, which is something that's either already come into the market or something which is currently being developed as a site identified and they're actively in the permitting and financing stages and in some cases have proceeded to construction. In the report -- that's listed either as completed or as sited in the MAPP report. Then there's another category of capacity in the MAPP report that's listed as unsited. So somebody

has identified that they're --

Q. So, wait. I need to have a little help here. So up to 2001 that's the completed megawatts. That's through Winterset, is that right, Winterset, Iowa?

A. Yes. That's right.

Q. That's what's completed?

A. Right. And if you look over to the column entitled cumulative and it says completed megawatts --

Q. 1,774?

A. Right, exactly. And then after that is the -- is the capacity that is identified and which they list as having been sited but not completed. So presumably the stuff that's identified in 2001 in that category, you know, it was under construction but hadn't yet come on-line at the time that they had gathered all the data for this report.

Q. All right. And then you mentioned something about Xcel?

A. Yes. Well, then there's a third category. So if add up, say, at the bottom of what I've listed as Exhibit RJS-8, by 2010, for example, the very last number in the table is 7,614 megawatts.

So that's the amount of capacity if you add up all of the projects that's either come into the market or which has been listed and identified as under development but hasn't actually come into the market yet.

Then in addition to the capacity that's identified there, so in addition to these specific projects if you look at the next table, which is entitled RJS-9, there's another category of capacity that's identified in the report, which is characterized in there as unsited. So this is capacity that someone has said we're going to procure, we're going to develop, but they haven't said we're going to do it by building this generating plant at this site.

Q. I was curious about your comments about Xcel because at a meeting that the Commission held about --

MR. HOBERG: Could somebody get the door over there, please? Thank you.

Q. (COMMISSIONER WEFALD CONTINUING) A meeting we had about two weeks ago, a periodic information exchange meeting with Otter Tail, they were giving us information about how there's a proposed -- proposal to build a coal-fired -- coal

conversion to natural gas power plant in northern Minnesota, and they're trying to convince the legislature that they should mandate that all 3,000 megawatts would be purchased by Xcel.

So you said you thought that Xcel had already made a determination of where they would be getting their electricity. It doesn't sound like they have from that because they're still -- they're still considering mandating that Xcel would have to purchase 3,000 megawatts from this plant.

A. Right. The point I was trying to make is I understand Xcel, or as I have known them, NSP's supply procurement program, there's been a competitive bidding proceeding that's been partially mandated, partially approved by the Minnesota Commission in conjunction also with an integrated resource planning proceeding that they're still subject to, and what they do in that is they identify a schedule for we need this much capacity, you know, in this time frame and we think that it's going to be -- you know, say 500 megawatts of it is going to be intermediate-type capacity and 200 megawatts is peaking-type capacity, and then they go out regularly with RFPs to try to procure that capacity under that

schedule.

That process was set up basically because NSP at the time was trying to develop its own projects, and a lot of independent power producers were also interested in developing projects, and so the process was put in place to try to create a fair way for the utility portion of NSP to select the right projects, the best projects for the ratepayers.

Q. I understand the process.

A. Right. And as I understand it, they're still -- the numbers that are listed in Exhibit RJS-9, wherever it says in the categories entitled "name," where it says "Various RFPs by Xcel," those capacity requirements -- you know, NSP has submitted to MAPP a schedule of we will be responsible for this much capacity under this schedule.

Q. But my understanding is that that's why there's a lot of these power plant developments. Even MDU, as you know, is considering building a power plant.

A. Right.

Q. Why would they be building a power plant if there's an excess of power shown right in these

numbers? If you're telling us that these numbers show that there's -- not an excess of demand, but an excess of capacity and there isn't any need for additional power in the next few years, why would Montana-Dakota Utilities be thinking about building a power plant in North Dakota? Why would Otter Tail be thinking of building a power plant in South Dakota? Why would Great Plains be thinking of building a power plant in several locations in the Upper Midwest, and they're all hoping to sell to Xcel or to someone else that power and they're planning, and then this other project was being considered up in northern Minnesota to add 3,000 megawatts because they want to share in this need for additional demand that they see, and -- how do you explain that if this -- these numbers show that there isn't any needed demand in the MAPP region?

A. No. That's why I broke out separately the -- say in the first part of this table the cumulative and completed because, you're right, they're likely -- if you add up all of this capacity and say you get to the 10,000 megawatts by 2010, you know, there's going to be duplication between this category unsited and sited because some of the projects are being developed at least

in anticipation or hope that they'll sell power supply contracts to existing LBCs in the MAPP region.

I wouldn't characterize MAPP as a region where I would expect large excess supply because it's not the type of market that is that attractive to merchant plant developers just to come in and sell in the spot market. I mean, they're coming in in this region primarily either to sell capacity to hit the 15 percent reserve requirement that's needed on peak, or they're developing capacity, you know, largely with the hope of signing off-take contracts with the LBCs.

Q. And in the meantime, though, as this NERC study shows, that until those plants come on-line with base-load power, there could be some uncertainty in the market; would you agree with that or not?

A. Some uncertainty in terms of the supply demand balance?

Q. Yes.

A. In the next couple years I guess I don't see that much uncertainty just because the -- you know, the projects that are forecasted to come in in that time frame have either come into the market

or they're under construction. Once they start construction, they don't typically stop regardless of market conditions.

Q. I understand that, but some of them are going to take five to seven years to build.

A. If it's a coal plant.

Q. Yeah.

A. Yeah, sure. But I --

Q. That's what we're thinking of in the Upper Midwest.

A. Yes. I think they'll make that decision based on, you know, if -- I mean, I think that people weren't considering too much coal until the gas price spikes that we've seen in the last year, year-and-a-half, and, you know, whether they actually develop a coal plant or not will depend upon how market conditions evolve over the next couple of years.

I mean, there are always a lot of uncertainties about what supply is going to come in. What we've seen -- and MAPP is a region again where I wouldn't expect a lot of excess. You know, one of the -- one of the sort of oddities of deregulation in some of the markets that have been more developed, say in the Northeast, in

California, in -- even in the MAIN and ECAR region, is that once they deregulate the markets, there's actually been a glut of capacity under development, or in Texas, for example.

Q. Well, they just went to deregulation in January.

A. In Texas.

Q. Right.

A. Right. But the merchant plant development started about three years ago. So they'll actually be in -- it's like in the markets where deregulation has been imminent --

Q. But we're not in that market, are we, here in the Upper Midwest?

A. No. You're not in that market here, but it does permeate, as I was indicating before.

Q. But they're not selling into Texas, MDU isn't.

A. I'm not talking -- I understand that, but they are selling into like Illinois, into the MAIN markets.

Q. MAIN right now -- my understanding is that there's a deficiency in the MAIN as far as capacity?

A. A deficiency in MAIN?

Q. Capacity in MAIN.

A. That's not my understanding in terms of 2002 or 2003. There's been a lot of capacity that's --

Q. Then how come it says --

A. -- come into the market.

MR. HOBERG: Commissioner Wefald, I think you need to let him finish.

COMMISSIONER WEFALD: Okay.

MR. HOBERG: She's going to have trouble taking the testimony if you don't let him finish.

Q. (COMMISSIONER WEFALD CONTINUING) All right. Go ahead.

A. I mean, the larger point I'm trying to make is that in a lot of the markets there's been a lot of capacity that's come in when there's been, you know, expected profit opportunities, and that has -- in the 2002 through, say, 2005 time frame is when most of that capacity is projected and will come into the markets because it's under construction currently. A lot of it hasn't come in. It just started in MAIN, say, some of the peaking units and some of the combined cycle units came in in 2000-2001, and then there's an acceleration that will be happening in, say, the

New England markets, in some of the ECAR markets and some of the SERK markets in the next two to three years, and then on the development side, you know, you could forecast in a lot of regions where there's been a lot of deregulation, you know, big capacity surpluses in, say, the 2004 through 6, 7 time frame, and that's not a condition in MAPP that you would forecast right now.

Q. If we were to be thinking only in terms of the next, let's say, not 15 years but the next 3 years, is that a time of potential shortages or -- in MAIN and MAPP?

A. My own view is I think MAPP will be primarily in balance over that time frame, and I think in MAIN they'll see some of the -- they'll see some of the influences of surpluses that are coming into some of the New England markets, and within MAIN itself, and so I would expect probably some excesses or slight excesses in terms of the price discovery, the influence of some slight excesses in the MAIN region.

Q. Okay. I guess I'm curious about that because in this NERC report on page 44, the one that's labeled Exhibit 11, it says the ability to import power may be severely limited in the near

term because of the lack of external resource availability.

A. Yeah. Again, that NERC report -- I guess I'm curious about it myself because it seems to have taken a pessimistic view in terms of the projects under development in a number of the regions.

COMMISSIONER WEFALD: Thank you. That's all I have. Thank you very much.

MR. HOBERG: Thank you, Commissioner Wefald. Commissioner Reinbold, please.

COMMISSIONER REINBOLD: Couple questions, Mr. Schiffman.

EXAMINATION

BY COMMISSIONER REINBOLD:

Q. First, let me compliment you and the other witnesses' well-coordinated presentation here, past, present and future, as I look at the array of testimony givers here. Congratulations.

A. Thank you.

Q. When is the plant going to run on natural gas?

A. I'm not an expert on that.

Q. Oh, okay. We don't -- is there anyone else that you could ask?

A. Probably Mr. Fox.

Q. I worry a little bit at the rate natural gas is being consumed, but nobody seems to have an answer. When we talk about people in California learning from their mistakes, do you talk about the governor's office maybe, legislature?

A. Pretty much everybody in the whole market.

Q. Utility?

A. Yeah. It's pretty widespread.

Q. Regulators?

A. Yes.

Q. Everyone -- all of the above?

A. Yes.

Q. Okay. I've been accused of and complimented for brevity in my questions in proceedings, and I'm going to embark here upon the mother of all brevities, and you're my subject. Would you turn to page 16 of your testimony, your direct testimony? There's a paragraph and a word there that strikes me. It starts on line 7. Would you read that question, the question given by counsel?

A. I'm sorry. It was page 16?

Q. Page 16.

A. And line 7.

Q. Line 7, starting with "given."

A. It says, "Given your expectation of likely 2002 wholesale power market conditions in the Midwest region, do you believe Montana-Dakota will enjoy profit margins on off-system sales that are comparable to the levels earned during 2001?"

Q. And your answer to that was no --

A. Right.

Q. -- and you elaborated further?

A. Right.

Q. But starting with the word "given" and ending with a period after no, would you -- if that paragraph and that answer was absorbed, believed and adopted by this Commission, then we're pretty near home, aren't we?

A. In terms of the rate case proceeding?

Q. Yes, yes, yes.

A. Yeah. I think it's one of the more material issues or the most material issue.

COMMISSIONER REINBOLD: Okay. That's all I have at this time. Thank you.

MR. HOBERG: Thank you, Commissioner Reinbold. Commissioner Clark, please.

COMMISSIONER CLARK: Just one.

EXAMINATION

BY COMMISSIONER CLARK:

Q. We spent quite a bit of time this morning talking about competitors to coal. Natural gas and hydro are probably the two that we spent the most time on, but I didn't hear much conversation about nuclear, and although it's not a part of MDU's mix, it is probably most notably with NSP in this region here, and that, too, could be something that impacts future markets for MDU coal. Is it safe to characterize nuclear as kind of a wild card in this, depending on what happens with the Yucca Mountains and that whole situation?

A. In terms of the availability of nuclear?

Q. Well, in terms of the availability of nuclear power, which would then impact export markets for coal power if this nuclear being low-cost form of power were to be jeopardized or kind of threatened to go off-line.

A. Yeah. I mean, I think we saw that, you know, again in 1998 and 1999, that if a large portion of it came off-line, that you could have a significant impact. That depends really on the timing of when it came off-line. If it all came off-line right away, it could have a huge impact if

because we weren't able to get through the Yucca Mountains or weren't able to do relicensing or didn't want to do steam generator replacement, and we knew about that two or three years in advance, it wouldn't have nearly as material of an impact because people would have time to plan for it and procure replacement supply.

COMMISSIONER CLARK: Okay. Thank you. That's all I have.

MR. HOBERG: Thank you, Commissioner Clark. Any further questions by commissioners? Mr. Pearce, any further questions?

MR. PEARCE: Just one or two really.

REDIRECT EXAMINATION

BY MR. PEARCE:

Q. Commissioner Clark's question brings to mind just a question that -- I think from what you've testified to, the current future prices basically are a result of every relevant factor between nuclear generation and other kinds of capacity, hydro, weather conditions, gas prices, markets, everything; right?

A. Yeah. The futures prices and the forward prices are, you know -- they're a culmination of expectations of all the people in the market of

what conditions are going to occur, you know, in the -- you know, as we indicated here in the delivery period. So based on what do people think the demand levels are going to be, the fuel price levels, the amounts and types of capacity on-line during that period, what do they think the supply and demand conditions are going to be during that period and based on that what will be the clearing price.

Q. And then just one final question. You agreed, I think, there would be some -- or testified there would be some continuous upward pressure on gas as more use is made of gas for generation, but you wouldn't expect gas prices to ever reach -- or in the near future anyway to reach the 2001 levels, would you?

A. Well, not in the near future particularly or in 2002. I mean, we're kind of through the winter. So that's the period when you would normally see a spike in natural gas prices. I mean, I think gas prices typically are going to be pretty stable in the spring through summer time frame, and then, you know, there's some uncertainty in terms of what could happen in the fall and winter of next year.

MR. PEARCE: Thank you. That's all I have.

MR. HOBERG: Thank you, Mr. Pearce. Mr. Binek, anything further?

MR. BINEK: Yes, I do have a question.

RECROSS-EXAMINATION

BY MR. BINEK:

Q. Looking at your Exhibit 15 and listening to the discussion about the expectations and projections concerning the -- the shortages of capacity or the excess capacity of MAPP, and I'm looking through this -- this list, and when you're talking about the capacity that's needed, let's say that the projections are that there will -- that we'll need 10,000 megawatts of capacity by -- by the year 2010. Is that actually 10,000 megawatts of usable capacity that's needed? Is that what they're talking about? And what I'm getting at, I look at the list of projects here and I see at the bottom of page one in Nebraska, GCW Wind Farm, 110 megawatts.

We all know that the capacity from a wind farm -- if it's 110-megawatt wind farm, the capacity is considerably less than that. That's true of any kind of power plant. They don't -- you

know, the capacity is less than the total megawatt capacity of the unit, you know, the efficiency is less than that. So my question is, you know, when I look at this, I'm assuming that the 110 megawatts that's included for this wind farm is the stated capacity of -- or, I mean, the nameplate capacity; is that right?

A. I'm not sure exactly when they put this together. They do list it in their report as summer megawatts. So for wind whether they've done some derating to reflect the fact that the wind doesn't tend to blow on-peak, I don't know. For the gas-type units I think that these would be probably pretty accurate in terms of the actual dependable capacity that would be available in the on-peak period, you know, in the summer.

You know, they would be -- the gas plants, for example, would be derated by outages and would take a little hit for increased temperature depending upon, you know, whether they used chilling technology or something like that, but I believe these numbers probably reflect that for the gas units, at least that would be my expectation, but I don't know that for certain.

Q. Would you agree that NSP's RFPs are a

demand, not a supply?

A. Yes. In terms of what they publish in the RFPs, it's the need for power and then they go out and contract for that power.

MR. BINEK: Okay. Thank you. No further questions.

MR. HOBERG: Thank you, Mr. Binek. Mr. Fahn, anything further?

MR. FAHN: No.

MR. HOBERG: Mr. Pearce?

MR. PEARCE: May I have one final?

REDIRECT EXAMINATION

BY MR. PEARCE:

Q. Mr. Schiffman, I've shown you Exhibit 3, starting at the list of factors Mr. Diller testified are relevant to the question of the resale margin. You would agree, would you not, that all those factors are wrapped up in and relevant to the futures prices themselves? I mean, they all form a part of how that futures price would be determined?

A. Yes. There's some expectation of each of those factors that would get rolled into the final clearing price that's expected in the futures price.

MR. PEARCE: Thank you. That's all I have.

MR. HOBERG: Thank you, Mr. Pearce. Any further questions then of Mr. Schiffman? Okay. Thank you, Mr. Schiffman. Let's take a 10-, 12-minute recess here, please.

(Recess taken.)

MR. HOBERG: Let's go back on the record. Mr. Pearce, are you ready to call your next witness?

MR. PEARCE: Yes, I am. I'll call Terry L. Blinsky, please.

MR. HOBERG: Mr. Blinsky, I believe you heard the admonition I gave earlier in regard to perjury; is that correct?

THE WITNESS: Yes.

(Witness sworn.)

MR. HOBERG: Thank you. Mr. Pearce, please.

TERRY L. BLINSKY,

having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. PEARCE:

Q. Would you please state your name, business

address and position?

A. Yes. My name is Terry L. Blinsky. My business address is 400 North Fourth Street, Bismarck, North Dakota, 58501. I am the electric bulk power marketing coordinator for Montana-Dakota Utilities Company, a division of MDU Resources Group, Inc.

Q. And you also supplied some direct testimony in this proceeding that's been filed, didn't you?

A. Yes.

Q. What's the purpose of your surrebuttal testimony today?

A. The purpose of my surrebuttal testimony is to address concerns I have with the rebuttal testimony of staff witness Mike Diller as it relates to the area of wholesale sales.

Q. What concerns do you have with Mr. Diller's testimony?

A. My concerns with his rebuttal testimony relates to his comments on the correlation between gas price and wholesale electric prices, his characterization of off-peak sale margins and the price and his reliance on actual historic levels in light of the known changes and circumstances in the

current wholesale market.

Q. Would you please describe your concerns regarding the correlation between gas prices and sales for resale margins?

A. Yes. At page 9, lines 16 to 24, Mr. Diller discusses this point and concludes that natural gas prices declined throughout 2001 yet sales for resale margins did not decline correspondingly. We know that natural gas prices declined during 2001, and we know that our actual sales for resale margins in 2001 did not decline with the gas price decline. However, Mr. Diller has not recognized the cause for this lack of correlation in 2001.

Very simply, the reason that sales for resale margins remained up in 2001 was that Montana-Dakota was successful in entering into a contract with a buyer in March 2001 that covered the summer season of 2001. At the time the contract was executed, prices of gas and electricity were still relatively high and the buyer agreed to pay essentially the futures price that existed at the time the contract was executed.

Thus, even though electric prices fell during 2001, as did the gas price, the revenues

received by Montana-Dakota were dictated by the contract and the buyer was obligated to pay the contract price rather than the current price at the time of delivery. Absent this contractual arrangement, Montana-Dakota would not have been able to retain the margins it did in 2001.

To illustrate this point I have prepared Exhibit No. TLB-4. The exhibit shows the futures prices that existed at the various times for purchase in July and August of 2001. At the time the contract was executed in March 2001, the futures price for July and August was $126 per megawatt-hour. I'll make a correction in my testimony. Instead of megawatt, it's megawatt-hour.

These prices are representative of the prices that the buyer agreed to when the contract was executed. Had the contract not existed, Montana-Dakota may not have been to see power -- would -- may have been able to sell power on a month-to-month or day-to-day basis during the summer but at prices current at the time of sale.

For example, Montana-Dakota could have sold power in late June at about the July future price that existed at that time, about $46.75 per

megawatt-hour rather than the contract price at 142-and-a-half per megawatt-hour. Similarly, such transactions could have occurred in August, as well, but at prices substantially lower than the contract price.

In summary, there is a direct correlation between gas price and wholesale power prices, but the correlation was not evident because of the contract provisions that Montana-Dakota had in place in 2001.

Q. Does Montana-Dakota have any contracts for the sale of power in place currently or for the upcoming summer season?

A. No.

Q. What are your concerns with Mr. Diller's characterization of off-peak margins and prices?

A. At page 10, lines 20 through 25 of his rebuttal testimony, Mr. Diller states that Montana-Dakota estimates that off-peak sales comprise about 47 percent of the total sales and are priced below the cost of fuel. This statement is not correct.

First, the peak and off-peak sale megawatts are not estimates. They represent the actual levels of peak and off-peak sale levels that

occurred.

Second, the off-peak sales are not priced below fuel cost. Montana-Dakota keeps specific records of peak and off-peak sales for megawatts by time period. However, the fuel costs shown on the exhibit are actual fuel costs on an average basis for the month as Montana-Dakota does not keep a specific record of the actual fuel costs by peak and off-peak periods.

When energy is sold in the off-peak periods, it is typically sold from a specific unit and Montana-Dakota knows what the incremental fuel cost of that particular unit is at the time of the sale. It is not our common practice to sell below the incremental fuel cost of the unit.

The resulting total margin shown on my Exhibit No. TLB-3 is correct. If specific records had been kept for peak and off-peak fuel costs, we would find that the peak fuel costs would be above the average and the off-peak fuel costs would be below the average. As this information was not available, the actual fuel costs on an average basis were used.

Q. Would you please describe your concern with the reliance on historical information in

light of the known changes and circumstances in the wholesale market?

A. Yes. As I explained in my direct testimony, the wholesale market environment has drastically changed and our opportunities to make higher wholesale sales margins no longer exist. Reliance on the historical actual results in this case will significantly overstate the margins that Montana-Dakota can expect to make in the future.

For example, actual January 2002 wholesale sales were 92,964 megawatt-hours and brought a total margin of 622,000. Actual January 2001 wholesale sales were 83,940 megawatt-hours with an actual margin of 1,316,000. Even though we sold more megawatt-hours in January 2002, the margin was lower by over 50 percent. This is reflective of the drop in price. Similar results can be seen for February 2002 as compared to February 2001.

Q. Have you updated your Exhibit TLB-3 that was part of your direct testimony to reflect changes since the time you've prepared it?

A. Yes, I have. The updated information is shown on Exhibit No. TLB-5.

Q. Would you please explain that exhibit?

A. Yes. The megawatt-hours of sales are the

actual volumes sold for the 11-month period ending January 2002 plus an estimate for February 2002 based on the actual volumes for the first 14 days doubled to reflect the full month of 28 days.

The projected margins shown in the last column represent the actual for January 2002 and the actual level for the first 14 days of February 2002 doubled for the full month.

The margin for the remaining months was calculated using the Cinergy futures prices for on-peak energy as of February 16, 2002, and off-peak prices which reflect prices currently being obtained for off-peak energy.

The resulting total margin that can be expected is 6,429,778. This is about 818,000 less than the expected margin shown on Exhibit No. TLB-3 submitted with my direct testimony.

The megawatt hours of sales are similar but the prices have fallen since preparation of the initial exhibit. This further demonstrates the fact that prices are not rebounding to the levels seen in the last year. I have shown the February 16th, 2002, NYMEX Cinergy energy prices on Exhibit No. TLB-6.

Q. Why is it appropriate, in your opinion, to

rely on the NYMEX futures prices?

A. First, the NYMEX futures price represents the price of actual transactions between willing sellers and willing buyers. Second, the Cinergy hub is a hub nearest Montana-Dakota's service area, MAPP region, and is available to all market participants we typically deal with.

These prices are used as a guide by market participants when buying or selling energy. In fact, the current prices that Montana-Dakota has been able to sell on-peak power at very closely align with the March 2002 futures prices.

I would also know that a recent offer was made to purchase electricity from Montana-Dakota at $35 per megawatt hour for July and August 2002, somewhat below the posted future price of 38-and-a-quarter for July and August 2002.

Finally, as I described earlier in this testimony, Montana-Dakota was able to obtain a contract for the summer season of 2001 last March that was based on the futures prices in existence at that time.

Q. Would you please summarize your position on wholesale sales levels?

A. Yes. Montana-Dakota's ability to make

wholesale sales at higher prices peaked in 2001 and will not reoccur in the foreseeable future. It was a market anomaly that allowed us to achieve the higher prices. Currently, there is more supply available than in the past and gas prices are down and expected to stay there, which has the effect of lowering prices for electricity as there are a number of gas-fired generators on line and the price differential between coal-fired and gas-fired generation is now much narrower.

These factors are also supported by other witnesses in this proceeding. This means we will not be able to achieve prices we saw in the last few years. Based on the latest information available, Montana-Dakota can only expect to achieve wholesale sale margins of 6,429,778 as shown on my Exhibit No. TLB-5.

Q. Mr. Blinsky, did you hear Mr. Schiffman's testimony this morning with respect to his Exhibit 9 of which I've handed you a copy?

A. Yes, I did.

Q. And you understand what that exhibit shows?

A. Yes, I do.

Q. And I've also handed you Exhibit 10. Is

that an exhibit prepared by you and under your direction and control?

A. Yes.

Q. Would you explain what Exhibit 10 shows?

A. What Exhibit 10 shows is in my earlier exhibits, No. 5, I based the futures margins for 2002 based on the NYMEX future prices, then took a look at the exhibit that Mr. Schiffman had showing the forward prices from the Intercontinental Exchange, and what I did then was to stick those forward prices into the exhibit where I had the futures, and that brought a new estimated margin for 2002 to 6,080,199.

Q. In other words, what your -- what exhibit 10 shows is a calculation parallel to what your TLB-5 shows but using the figures that Mr. Schiffman testified to with his Exhibit 9?

A. That is correct.

Q. And the conclusion is within about $400,000 of the same conclusion that you reached using the NYMEX futures?

A. That is correct.

Q. And those NYMEX futures you used were as of February 16th. I think you testified that appears to be the same date that appears on Exhibit

9 for Mr. Schiffman's figures, is it not?

A. That is correct.

Q. Those prices correspond with the same date?

A. Yes.

Q. Does it surprise you that the two methods would reach very nearly the same result?

A. No.

Q. Is Exhibit 10, to the best of your information and belief that you said you prepared, true and correct?

A. Would you restate that?

Q. I'm sorry. I didn't state that very well. Are the data contained in Exhibit 10 which you prepared true to the best of your information and belief?

A. Yes.

MR. PEARCE: I'll offer Exhibit 10.

MR. HOBERG: Any objection?

MR. BINEK: No.

MR. HOBERG: Exhibit 10 is admitted.

MR. PEARCE: And I have nothing further.

MR. HOBERG: Nothing further, did you say, Mr. Pearce?

MR. PEARCE: Right.

MR. HOBERG: Thank you. Mr. Binek, please. Any questions?

MR. BINEK: Yes. Thank you.

CROSS-EXAMINATION

BY MR. BINEK:

Q. Referring you to page two of your surrebuttal testimony where you talk about this contract that was entered into in March 2001, can you tell me how many megawatts were contracted for in that contract?

A. For the term -- for the full term or for each hour based in that contract? It was for a block of 50 megawatts.

Q. A block of 50 megawatts. And for how long?

A. Six months.

Q. Was delivery on peak?

A. That would have been the -- the schedule would have been what we called a 7-by-24, seven days a week, 24 hours a day, for the whole length of the 6 months, which would be off peak -- on peak Mondays through Friday, Saturdays on peak, and Sundays of course. Off peak being right from Monday through Sunday.

Q. Was MDU deficient in MAPP reserves at that

time?

A. Could you restate that, please?

Q. Was MDU deficient in MAPP reserves at that time?

A. No. Not at the time I made that contract.

Q. But during the time of the contract did MDU fall into a deficit position in their -- with their MAPP reserves?

A. On capacity, yes.

Q. I think you briefly touched on this, but did -- did MDU enter into any futures contracts to sell power in the wholesale market this month?

A. No.

Q. How about last month?

A. When you talk about entering into contracts into the futures, we do not trade futures.

Q. Okay. So you haven't done any -- you don't have any outstanding now. You haven't sold any through the futures market?

A. No.

Q. If MDU believed the wholesale electric market would improve in the next year or two, it would be foolish for MDU to enter into any futures contracts; isn't that true?

A. Could you restate that, please?

Q. If MDU believed the wholesale electric market would improve, in other words, there would be more margin in the next year or two, it would be foolish for MDU to enter into any futures contracts today; isn't that correct?

A. That is correct. At the levels I'm seeing in 2002 looking at the gas price, we have two turbines out there that the cost would be greater than the price that we were quoted. So, therefore, we would not sell it at that point.

Q. Were you --

MR. HOBERG: Mr. Lein, could you get the door over there, please, shut it?

Q. (MR. BINEK CONTINUING) Were you present in the hearing room yesterday when Mr. Diller made his proposal to settle the resale issue by using an average of resale margins during the past three years for the purposes of establishing rates in this proceeding?

A. Yes, I was.

Q. What is your response to Mr. Diller's proposal?

A. I believe if we were to use the three-year average as Mr. Diller has suggested, taking into

consideration what happened for those three years would overemphasize what we could mark in the year 2000 and forward. In other words, his average is way too high than what we believe looking out into 2002 and the future we can make marginwise.

Q. You talked about the statement that Mr. Diller made on page ten of his rebuttal testimony. Do you think Mr. Diller is unaware that your schedule was -- uses actual sales levels for 2001?

A. I don't have a copy of Mr. Diller's report, if I could look at what you're referring to, please.

MR. DILLER: Well, it's the thing that you said I was incorrect on.

THE WITNESS: Okay. Which line.

MR. DILLER: Line 20.

THE WITNESS: Excuse me?

MR. DILLER: Line 20 and 21.

Q. (MR. BINEK CONTINUING) Would you just read that?

A. We're on page 10, line 20.

Q. (MR. BINEK CONTINUING) 20 to 25 are the lines that you reference in your testimony as being --

A. Okay. You want me to read his starting

with "MDU's"?

Q. Right.

A. "MDU's estimate of 2002 off-system sale margins begins by dividing the total sales into on-peak and off-peak units. MDU estimates that the off-peak sales, sales from 10 until 6 a.m. and all day Sunday, comprise about 47 percent of the total sales and the price below the cost of fuel. Such an assumption results in the net loss contribution of 144,319 for 2002. Staff can understand why on occasion the company might" -- that's it?

Q. And my question is: Do you think Mr. Diller is unaware that your schedule uses actual sales levels for 2001?

A. I'm still not sure what you're referring to on this on and off peak. What he's referring to is he was looking at the fuel cost to project 2002 minus the off-peak price and looking like it was a negative, is what I'm reading. Is that your question?

Q. Okay. Is it possible that Mr. Diller uses the word "estimate" to relay the fact that even though MDU's projection is based on actual sales volumes, it is still an estimate for 2002?

A. We're just trying to point out that the

margins for 2002 is based on our best possible scenario using the information we had, and I did not think he understood that we're not actually selling off peak at a loss. So I think he was using the estimate in that term of on and off peak.

Q. Isn't the 47 percent an estimate for 2002?

A. Yes, based on 2001.

Q. And the actual sales volumes for 2001 are in fact estimates for 2002?

A. That is correct, except for January and February that we used on the new exhibit for TLB-5.

Q. This 50 megawatts that was sold that you referred to on page two of your surrebuttal testimony, who bought that 50-megawatt block?

A. That was a confidentiality agreement. I cannot disclose the buyer.

MR. PEARCE: Just for the record, I would object, as well. It's not that we're trying to obfuscate, but the contract itself does contain a confidentiality provision that we could not reveal without the consent of the other contracting party.

MR. HOBERG: Thank you, Mr. Pearce. Mr. Binek.

Q. (MR. BINEK CONTINUING) Just a curiosity question, this 47 percent of off-peak capacity,

who's purchasing that electricity? Can you tell us that?

A. The off peak?

Q. Yeah.

A. Various companies throughout MAPP. It can either be sold on a daily basis, hourly basis, monthly basis, the party that was sold under this six-month contract. So there's a lot of parties involved in that off-peak price -- or off-peak megawatt hours, I should say.

MR. BINEK: No further questions.

MR. HOBERG: Thank you, Mr. Binek. Mr. Fahn, did you have any questions of Mr. Blinsky?

MR. FAHN: No, thank you.

MR. HOBERG: Thank you. Commissioner Wefald, please, do you have any questions of Mr. Blinsky?

EXAMINATION

BY COMMISSIONER WEFALD:

Q. Exhibit 10 is basically a projection, is that correct, based on the data that you have available about the futures prices at this time?

A. That would be correct.

Q. And that projection could change next week if the futures prices changed. It could go upward

or it could go downward?

A. That would be correct.

COMMISSIONER WEFALD: Thank you. That's all I have.

MR. HOBERG: Thank you, Commissioner Wefald. Commissioner Reinbold, please.

COMMISSIONER REINBOLD: I have no questions of this witness at this time.

MR. HOBERG: Thank you. Commissioner Clark, please.

COMMISSIONER CLARK: I have none. Thank you.

MR. HOBERG: No questions. Okay. Thank you. Mr. Pearce, any further questions?

MR. PEARCE: Just one, I think, or perhaps two.

REDIRECT EXAMINATION

BY MR. PEARCE:

Q. Mr. Blinsky, the contract you've testified to entered into in 2001, it wouldn't be the case that that -- the existence of that contract caused a capacity deficit for MDU under its MAPP reserve obligations later in the year, was it?

A. No.

Q. You were selling energy in that contract;

is that right?

A. That is correct.

Q. As opposed to capacity?

A. That's correct.

Q. I see you said you had no contracts in place today. Would it be fair to say that if you got an offer from someone wishing a contract at a good price, you'd be happy to enter into a contract?

A. Looking at the futures and what the market is talking about -- every day you talk to marketers as parts of your business and we all discuss what's going to happen in the future, and it seems gloom. If I had somebody approach me and even wanted to negotiate, I would sure listen.

MR. PEARCE: Thank you. That's all I have.

MR. HOBERG: Any further questions then of Mr. Blinsky? Thank you, Mr. Blinsky.

THE WITNESS: Thank you.

MR. HOBERG: Do you want to deal with that Exhibit 8, Mr. Pearce?

MR. PEARCE: Oh, yes.

MR. HOBERG: As I recall Exhibit 8 -- I don't know if we have copies of it. We had marked

Exhibit 8, and it was part of the surrebuttal testimony of Dr. Gaske, but it didn't actually get offered yesterday, and I'm wondering, Mr. Binek, if you'd be willing to stipulate to its admission.

MR. BINEK: Sure.

MR. HOBERG: Do you have copies for the Commission?

MR. PEARCE: We must. Do we have some copies somewhere? It's about a four-page or three-page -- JSG-4 schedule. I'm sure we have some copies here. Perhaps we'd like to -- Dr. Gaske testified about it. As I recall, it's the mathematical calculation of the relation to the --

MR. HOBERG: That's Exhibit 8.

COMMISSIONER REINBOLD: 8?

MR. HOBERG: 8.

MR. PEARCE: This was -- Dr. Gaske talked about this yesterday. He just identified what it is. It's mostly algebraic computations.

MR. HOBERG: Okay. Thank you, Mr. Pearce. All right. Your next witness, please.

MR. PEARCE: I will call Douglass Mahowald.

MR. HOBERG: I should note while he's coming up that Mr. Blinsky's testimony was -- his

direct was Docket No. 48 and his surrebuttal was Docket No. 59, and those are -- again, the direct is found in Exhibit 6 and Exhibit 7 is the surrebuttal. Okay. Mr. -- how do you pronounce that again?

MR. PEARCE: Mahowald.

MR. HOBERG: All right.

COMMISSIONER REINBOLD: Is that Scandinavian?

THE WITNESS: No. It's Luxembourg. Luxembourg in Germany.

COMMISSIONER REINBOLD: Oh, I've been there.

THE WITNESS: Have you?

COMMISSIONER REINBOLD: I didn't see you. Must have been a different time.

MR. HOBERG: Mr. Mahowald, I think you heard the admonition I gave in regard to perjury earlier?

THE WITNESS: Yes.

(Witness sworn.)

MR. HOBERG: Thank you. Mr. Pearce, please.

DOUGLASS A. MAHOWALD,

having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. PEARCE:

Q. Would you state your name and address, please, and your place of business?

A. My name is Douglass A. Mahowald. My business address is 918 East Divide Avenue, Bismarck, North Dakota, 58506.

Q. And in what capacity are you employed by MDU Resources Group, Inc.?

A. I'm assistant treasurer and assistant secretary.

Q. And would you please describe your duties in that capacity?

A. I'm responsible for the treasury services functions of the company, which includes the company's cash management program, maintaining bank and financial relationships, administration of the company's short- and long-term debt financing program, financial analysis, debt compliance. I also assist in the administration of various benefit plans and the company's risk management hedging program.

Q. Would you please outline briefly your educational and professional background?

A. In 1972 I received a Bachelor of Arts degree in business administration with a concentration in finance from the University of St. Thomas, St. Paul, Minnesota. Upon graduating from the University of St. Thomas I held various accounting and financial positions with several firms in Minot, North Dakota, and Minneapolis, Minnesota.

In February 1982 I joined Montana-Dakota as a budget statistician. I was promoted to treasury services manager in November 1982. In that capacity I was responsible for treasury service functions, including the company's cash management program. In August 1992 I was promoted to assistant treasurer and assistant secretary of MDU Resources Group, Inc.

Q. Have you previously testified in proceedings before regulatory commissions?

A. Yes. I have testified before the Montana Public Service Commission and the Wyoming Public Service Commission.

Q. What is the purpose of your testimony here today?

A. The purpose of my surrebuttal testimony is to describe the debt refinancing that incurred in April of 1992, which is referenced in the surrebuttal testimony of Dr. Gaske.

Q. What did the company refinance in 1992?

A. The company refinanced 100 million dollars of first mortgage bonds represented by the five series of bond issues shown under the pre-refinancing heading on page one of my Exhibit DAM-1. That long-term debt was replaced with the issues shown under the post-refinancing heading shown on page one of the exhibit.

Q. One point of clarification. When we're using the term "company" here, we're talking about MDU Resources Group, Inc., aren't we?

A. Yes.

Q. Why did the company refinance the first mortgage bonds in 1992?

A. The company's primary objective in refinancing its long-term debt in 1992 was to lower the overall cost of its long-term debt. The company achieved this objective through the refinancing that was completed at that time. This is shown in Exhibit No. DAM-1.

Page one of the exhibit is a comparison of

the cost of the issues redeemed and the cost of the new issues, which replace the redeemed issues. As shown, the pre-refinancing coupon interest rate for this group was 9.258 percent, and the post-refinancing cue upon interest rate for the group was 7.657 percent.

Also as shown on page one, the pre-refinancing costs for the group was 10.215 percent, and the post-refinancing costs for the group was 9.508 percent. This resulted in an annual savings of $231,500. Page two of the exhibit shows Montana-Dakota's total embedded cost of long-term debt at 9.965 percent for the 12 months ending December 31st, 1991, immediately before the refinancing.

Page three of the exhibit shows a total embedded cost of long-term debt at 9.69 percent for the 12 months ending December 31st, 1992, or immediately after the refinancing.

This exhibit clearly shows the company was able to lower its cost of the issues redeemed as well as lower its total cost of long-term debt by 2.75 percent through this refinancing in 1992. This lower cost of long-term debt has been a direct benefit to the company's customers.

Q. Has the company considered refinancing this debt that was refinanced in 1992?

A. Yes. The company has considered refinancing this group of long-term debt issues. However, the company has not taken any formal action to refinance this debt because this action would cause an increase in the total cost.

Q. Why would refinancing now what appears to be a lower coupon rate increase the total costs?

A. In order to lower the overall cost of its long-term debt in 1992 and provide a direct benefit to its customers, the company issued debt at then prevailing interest rates and market conditions. Based on the current prevailing interest rates, the company anticipates that refinancing this group of existing long-term debt issues may lower the overall interest coupon rate for the group.

However, the company would incur significant costs to reacquire this debt from existing holders in order to refinance. After accounting for the reacquisition costs for this group of existing long-term-debt issues, most notably the loss on reacquired debt, any refinancing action would increase the overall embedded cost of the company's existing long-term

debt and penalize its customers.

Q. Mr. Mahowald, you stated a moment ago -- and this goes back to line 15 on page 3 of your written testimony. I believe, unless I misheard, you said 2.75. Did you mean 0.275?

A. Yes. .275.

Q. In the course of your duties with the current corporation, Mr. Mahowald, do you as a regular matter monitor and continually keep in mind the possibility of refinancing if it would be economic and feasible?

A. We look at that on an ongoing basis, almost on a daily basis.

Q. And would you -- you wouldn't anticipate, would you, that the debt costs would necessarily be the same for other utilities, even other utilities in this area because it depends on various factors, does it not?

A. Right.

Q. And what are some of those factors -- I imagine it involves the question of timing, questions of that kind?

A. Well, the cost of debt and the capital market fluctuates over time. As companies issue new debt to finance new plant or repay existing

debt as it comes due or for other purposes, they go to the capital markets and must pay the competitive cost that is available in the market at that time.

If all utilities in North Dakota were to issue all of their debt at the same time, they might have debt costs that are nearly identical. However, all utilities in North Dakota do not have the same simultaneous needs to issue debt. Therefore, these differences in debt costs are often explained by the vintage of the debt obligations to the different utilities.

Q. And in the course of your duties with the company I gather from your testimony that you would recommend refinancing in any situation where it would save money, where it would be economically viable to do that?

A. Correct.

MR. PEARCE: That's all the questions I have.

MR. HOBERG: Thank you, Mr. Pearce. Mr. Binek, do you have any questions of Mr. Mahowald?

MR. BINEK: Yes.

CROSS-EXAMINATION

BY MR. BINEK:

Q. Yesterday, I believe it was when I was

questioning Dr. Gaske, the discussion about this cost of debt he was raising -- or talking about several factors, and one of the major ones was that during this time period MDU was in the process of constructing a power plant, and he referred specifically to the Coyote power plant. There had been -- Mr. Diller's testimony compared your cost of debt to that of NSP and Otter Tail Power Company, and your debt was considerably higher. I'm referring specifically to Otter Tail Power plant. Wasn't Otter Tail Power Company a partner in the construction of the Coyote plant?

A. Yes.

Q. In fact, Otter Tail Power Company had a larger share of the construction of that power plant than MDU did; isn't that also correct?

A. Yes, I believe so.

Q. Were you present in the hearing room when I asked Mr. King about this 40-million-dollar term loan from the Bank of America?

A. Yes.

Q. Is it true that the 40 million dollars was borrowed on December 29th, 2000, and that it matured on January 2, 2001?

A. That -- that sounds familiar. I'd have to

go back and look. I don't know the exact dates, but that sounds appropriate.

Q. Okay. This was basically a four-day loan; is that correct?

A. That would be four days.

Q. Okay. Now, am I also correct that MDU was carrying it on its books as part of its overall debt, the full 40 million dollars?

A. I believe so.

Q. What was the purpose of that loan?

A. For regulatory reasons we borrow short-term commercial paper throughout the year. For regulatory purposes -- not regulatory -- well, for rating agency purposes -- not regulatory purposes -- rating agency purposes we need to be able to demonstrate to the rating agencies that we have capacity to clear our short-term lines. So we basically put that money into clear that -- into the term loan and then --

Q. Okay. You have the capacity to clear what?

A. Well, for rating agency purposes we have the commercial paper program, and they like to see our quarter ratios, year-end ratios within certain lines so we don't have so much classified as short-

term debt. So we move that short-term debt into the term loan so we can evidence financial strength.

Q. Well, doesn't that -- isn't that a distortion of what is actually occurring within the company?

A. I wouldn't call it a distortion. I think it's another viable option to finance at that time. I think the prime rate at that time was nine-and-a-half percent, so it was a competitive -- or nine-and-a-quarter percent, so it was a competitive interest rate we received on that money.

Q. Now you said -- I believe you said that the full 40 million dollars was included in the -- in the overall debt of the company at that time; is that right?

A. I believe so. I'd have to check the records.

Q. Well, if that is in fact the case, wasn't that a distortion of the capital structure of the company?

A. I wouldn't think so because at that time prevailing interest rates were very competitive, that 9.75 draw.

Q. Well, when Mr. King reviewed this, he

reduced your debt by almost all but 1.3 million of that 40 million; isn't that correct?

A. That I don't know. I haven't looked at that part of the testimony.

Q. Assuming that -- assuming that that is correct, that would have reduced your overall debt by 38-and-a-half-million dollars in your capital structure; isn't that correct?

A. If that was done, that would be correct. Yes.

Q. So when you showed a capital structure with debt at 38-and-a-half-million dollars higher than what it actually was, wasn't that a distortion of the capital structure?

A. Repeat that question.

Q. Well, when your debt -- when you file a report, annual report or whatever -- and I don't know what was provided to Mr. Gaske, but when that shows a debt -- the company's debt at 38-and-a-half-million dollars higher than it should be, isn't that a distortion of the capital structure?

A. Why would that be higher, because it was debt we had on our books?

Q. Well, if -- if you agree that in his report that's been reduced by 38-and-a-half-million

dollars, wasn't it 38-and-a-half-million dollars too high?

A. Well, I haven't read his direct testimony, so I --

Q. Well, assuming that was done and assuming that MDU has not objected to it, wouldn't you agree that the debt was overstated by 38-and-a-half-million dollars?

A. Well, if MDU agrees to that, I guess yes.

Q. What's the difference between the coupon cost and the cost-of-money basis?

A. Well, the coupon rate would be the actual interest coupon rate on the debt, where the cost of money would include the reacquired costs, the issuance costs and those various things.

Q. The prefinancing annual cost was 10.2 million? Page one of your schedule, DAM-1, I assume that is.

A. 10.2 million or 10.2 percent? Oh, okay. I see. Yes.

Q. And the post-refinancing annual cost is 10.0, at the bottom of your interest costs in your schedule, page one of three, DAM-1? The last part of that schedule shows interest costs and cost-of-money basis off in the right-hand column.

A. Right.

Q. Okay. And the -- so you have 10.2 million as pre-finance, post -- this is rounded off. Post-finance is 10 million. Your net interest savings, .2 million?

A. Right.

Q. Is this a huge savings?

A. At that time that was the -- at the current market rates that was a significant savings.

Q. This is a savings of $231,000 per year to refinance 100 million dollars in debt cost; right?

A. Right.

Q. You mentioned a reduction in the debt cost by .275 percent. If I refinance a home at the cost of 8 percent and I could save .275 percent, what rate would I then have?

A. 7-point -- I don't know what --

Q. 7.975?

A. No. 7-point -- 7.625, I think. 8 percent minus the 2.75.

Q. 8 percent minus the .275.

A. Right. So it would be whatever that difference is, 7-point something.

Q. Okay. So it would be about 7.275, is that

it? On page 3 of your testimony, line 15, this .275 percent, where does that number come from?

A. It is the difference between the total found on page two of three in my exhibit, 9.65 at the bottom, versus -- that's the pre-refinancing, and then the post-refinancing shown on Exhibit 3 shows total embedded cost of 9.69 percent. That's your 2.75 differential.

MR. BINEK: I have no further questions.

MR. HOBERG: Thank you, Mr. Binek. Mr. Fahn, did you have any questions of Mr. Mahowald?

EXAMINATION

BY MR. FAHN:

Q. I'm sorry if I -- I'm sure I'm repeating a question here, but I'm still not clear on page three of your testimony. What's the difference between -- okay. What -- you mentioned that the pre-refinancing cost for the group was 10.215 percent.

A. Correct.

Q. Okay. What does that number include?

A. That's the average of the cost of money found on Exhibit 1.

Q. DAM-1?

A. Yeah. Page 1. You've got page two there.

Q. And what is the difference between the pre-refinancing cost for the group versus the pre-refinancing coupon interest rate? What is that in terms -- in English language what is the difference?

A. The coupon rate would just be the sole interest coupon on that debt. That's what we have to pay someone who holds that debt. The cost-of-money rate would include all the refinancing -- that would be our cost for all the refinancing costs and the acquisition stuff that we had to include in refinancing this debt.

Q. Okay. My only confusion, I guess, is that it seems to me like if you -- it's just a definition thing. It's the cost of obtaining the financing back from previously what held it?

A. Right.

Q. Seems like it would be a post-cost instead of a prefinancing cost.

A. Well, because we had refinanced some of this debt in this '92 example because some of that debt was already refinanced in '86, that's why the 10.215 is there because that is acquisition costs that we incurred when we refinanced the debt previously.

Q. Okay.

A. That's just reacquisition costs. It continues to carry forward until this debt finally matures.

MR. FAHN: Okay. Thank you.

MR. HOBERG: Thank you, Mr. Fahn. Commissioner Wefald, do you have any questions of Mr. Mahowald?

EXAMINATION

BY COMMISSIONER WEFALD:

Q. Why does it -- do you have an exhibit that shows -- is the one on page three of three, 39,901,186, the one that shows your date of maturity of all these different bonds?

A. As of December 31st, 1992, that was the maturity at that time.

Q. So do you have an updated list that tells us what the maturity dates are?

A. I have an updated list, but I don't have one with me. I could prepare one and get one to you if you'd like to see that.

COMMISSIONER WEFALD: That would be great.

MR. HOBERG: Okay. Mr. Pearce, can you make that a late-filed exhibit to -- let's see. What's the last exhibit on his --

MR. PEARCE: I believe the data is actually in the record in one of Dr. Gaske's schedules, JSG-2, Schedule 1, page two of two. That would be part of Exhibit 7, I think -- or the direct, Exhibit 6.

MR. HOBERG: The direct?

COMMISSIONER WEFALD: So that's already --

MR. PEARCE: That's already part of Exhibit 6.

MR. HOBERG: Let's take a look. Do you have -- what's --

MR. PEARCE: That's the bound book. It's Exhibit 6, the MDU direct testimony.

MR. HOBERG: Okay. Do you have --

COMMISSIONER WEFALD: MDU direct.

MR. HOBERG: -- the direct of Dr. Gaske?

MR. PEARCE: If you look in his JSG-2, one of his exhibits after the -- JSG-2, Schedule 1, page two of two.

COMMISSIONER WEFALD: Page one of one.

MR. PEARCE: It looks like it's about the --

COMMISSIONER WEFALD: Page two of two is what you want me to look for?

MR. PEARCE: Right. Schedule 1 -- it's

JSG-2, Schedule 1, page two of two, and it's entitled Montana-Dakota Utilities Co. Long-term Debt Capital, December 31st, 2000. Looks like it's just the second page after page 48.

MR. HOBERG: Are you finding it?

COMMISSIONER WEFALD: I found it.

MR. HOBERG: Is that what you're looking for?

COMMISSIONER WEFALD: Mm-hmm.

Q. (COMMISSIONER WEFALD CONTINUING) Now I need a little help in -- in understanding why Montana-Dakota Utilities' debt is intermingled with Montana-Dakota Resources' debt. Because yesterday they said that 13-and-a-half percent -- one of the people talked about 13-and-a-half percent of the debt relates to Montana-Dakota Utilities --

A. Okay. The --

Q. -- but when I asked the question -- excuse me, I'll just try to finish. But when I asked the question about refinancing, they said that, well, 100 percent of the debt would have to be refinanced. So now I'm asking you why that's the case if only 13-and-a-half percent relates to the utility?

A. Okay. The debt that we have for MDU

Resources evidenced by the first mortgage bonds --

MR. PEARCE: I'm handing Mr. Mahowald a copy of the exhibit page from Dr. Gaske that we're looking at.

MR. HOBERG: Thank you.

Q. (COMMISSIONER WEFALD CONTINUING) This says Montana-Dakota Utilities Company's long-term-debt capital. Is this the debt that only relates to Montana-Dakota Utilities?

A. Correct. This is just MDU -- Montana-Dakota Utilities' debt.

Q. All right. So then do you think he erred in answering my question, that 100 percent of Montana-Dakota Resources' debt would have to be refinanced in order to take care of Montana-Dakota Utilities' debt?

A. No. We could refinance this debt here, just the Montana-Dakota debt, if it was economical to do, but at this time it's not economical to refinance.

Q. Explain why it's not if it's --

A. It goes --

Q. This is 130 million --

A. 6.4 million.

Q. Where are you finding that number?

A. We've got the first mortgage bonds and then we have some pollution control bonds, pollution control notes.

Q. Is that $136,450 figure the correct one?

A. Right. That's all Montana-Dakota Utilities' debt.

Q. Okay. And so tell me why it isn't cost-effective to refinance at this present time.

A. You could save some money in your interest coupon rate because rates have come down a little bit for some like -- for instance, the 8.25 and the 8.6, the interest coupon rate has come down. So we could probably generate some annual savings there, but because of the reacquisition costs -- in order for us to get that debt back from the holders, we'd have to pay them a significant cost, and we wouldn't be able to -- we would immediately increase the overall total cost of debt because there wouldn't be enough savings in the coupon rate to overcome the amount of acquisition or the price we'd have to pay to get that debt back from existing holders.

You know, we might be able to save a half-million dollars in interest coupon rate alone, but it would cost us probably a million dollars per

year amortized over 20 years to reacquire that debt. So we would increase total costs by half a million dollars a year by trying to refinance the debt at this time.

Q. Do any of these debts relate to the power plants that were built in 1982 or in the early Eighties?

A. I would say the 8.25, the 8.6, those were issued in '92, as you can see here, and those were reissued as part of a refinancing for '86 debt, which was -- which in '86 refinanced some of the original '77, '78 bonds that we put on the books for the plant.

Q. Those are at 8.25 and 8.6. Have you looked at just refinancing those two alone?

A. Yes, we have, and it would -- for example, the 8-point -- just for an example on the 8.6, you could probably save one-and-a-half percent on the coupon rate, which would be about $500,000 a year based on your principal amount.

Q. One-and-a-half percent on the coupon rate?

A. Right. We could probably issue that debt for around seven percent.

Q. What rating are you right now with your bonds?

A. A. We're a single A.

Q. Single A?

A. But in order to reacquire that 8.6 debt based on a present-value fair-market estimate, it would probably cost us 10 million dollars that we'd have to pay to the existing holders to have them tender that debt. So we would immediately -- it's just not economical because we'd be saving over 500,000 a year, but we'd be paying at least a million dollars a year to reacquire that debt at these rates.

Q. And you don't -- that's the current rate that's available for A?

A. Right.

Q. Triple A would be less; right?

A. Correct. Probably be maybe six-and-a-half.

Q. Actually, it's five today. Someone called me about buying a bond today. Triple A was five percent.

A. Was that tax exempt or --

Q. Yes. It was tax exempt.

A. I was going to say, that seems kind of low for a taxable issue.

Q. Anyway -- all right. Thank you. Now at

least I know that it -- that this is the debt that relates directly to Montana-Dakota Utilities and I'm not confused anymore about the whole --

A. Correct.

Q. -- corporation having to be refinanced in order to take care of this particular debt.

A. Right. And we could refinance this at any time if it was economical.

COMMISSIONER WEFALD: Thank you.

MR. HOBERG: Thank you, Commissioner Wefald. Commissioner Reinbold, please.

COMMISSIONER REINBOLD: I have a question, Mr. Mahowald.

EXAMINATION

BY COMMISSIONER REINBOLD:

Q. You said you were assistant treasurer and assistant secretary of Montana Resources Group, Inc.?

A. Yes.

Q. You're assistant to whom? Who is your -- who is your chief?

A. Warren Robinson.

Q. And he -- he's treasurer and secretary for both --

A. Warren Robinson is the CFO. He's --

COMMISSIONER REINBOLD: Okay. That's the only question I had.

MR. HOBERG: Thank you, Commissioner Reinbold. Commissioner Clark, please.

COMMISSIONER CLARK: I do have a couple questions.

EXAMINATION

BY COMMISSIONER CLARK:

Q. Let me just -- first off, what I'm hearing as far as kind of what appear to be two separate issues, and you can tell me if I'm on the wrong track or the right track. It sounds like one of the questions that the Commission is dealing with is just kind of the -- almost like a prudency review of the cost of debt, and on one hand staff witness has kind of claimed because he doesn't think that it's exactly prudent we should be using this accounting method of calculation, and MDU's testified that it is a legitimate or prudent cost of debt and because of that we should use the model that Dr. Gaske put forth. Is that kind of one issue that we're getting at here?

A. Right. And I would agree with Dr. Gaske, that we have to use the yield to maturity; otherwise, we'd be penalizing and wouldn't be able

to recover those -- some costs that we used in reacquiring that debt in '92.

Q. Is this -- the 40-million four-day loan from the Bank of America, is that kind of a separate issue? Is that more of an issue of what gets counted as debt on the books?

A. Yes, I guess it would be.

Q. Okay. On that issue -- I just need a little bit of help. I know you'd mentioned it, but I forgot to get it down. The institutions that, in your words, you're clearing the short-term lines for, who are they again?

A. Well, it would be the ratings agency, S&P and Moody's. They like to see that you're able to demonstrate financial strength. Otherwise what'll happen is that debt will be considered short-term, which could affect our commercial paper ratings and our bond ratings, and if they were to negatively impact those ratings, our borrowing costs could go up.

Q. And so that's the reason that they want that 40 million there?

A. Right.

COMMISSIONER CLARK: Okay. That's all the questions I have. Thank you.

COMMISSIONER WEFALD: I have one followup.

MR. HOBERG: Thank you, Commissioner Clark. Commissioner Wefald, please.

FURTHER EXAMINATION

BY COMMISSIONER WEFALD:

Q. Then is that 40 million included in the 136 million?

A. No, it would not -- it's not in here. It wouldn't be included.

COMMISSIONER WEFALD: It's not. Okay. Thank you.

MR. HOBERG: Thank you, Commissioner Wefald. Any further questions, Mr. Pearce?

MR. PEARCE: Just a couple extra.

REDIRECT EXAMINATION

BY MR. PEARCE:

Q. Mr. Mahowald, if the company can demonstrate that it can obtain a term loan, say, for 40 million dollars in an amount sufficient to pay your commercial paper, that would demonstrate financial integrity and strength to the rating agencies, wouldn't it?

A. Yes. In fact, it -- yes.

Q. Now I think there was some question about the agreement to Mr. King's use of 1.3 million

dollars with this term loan we're talking about. Is it your understanding that MDU agreed to use the average daily balance of that term loan, and that was 1.3 million dollars? Does that sound right?

A. Yes.

Q. And, of course, if there's an actual outstanding obligation of 40 million dollars at the end of the year, the company's obligated to report that on the appropriate reports it would make of outstanding obligations?

A. Yes.

Q. Now there was a question about Otter Tail's share in the Coyote plant built back in the 1970s. You wouldn't have any information, I assume, as to what kind of financing Otter Tail might or might not have needed to finance its share, would you?

A. No.

Q. You have never worked for Otter Tail, have you?

A. No.

Q. Can I assume that you would not agree with Mr. King's characterization of MDU's current cost of debt as unreasonably high?

A. No, I would not agree with his

characterization.

Q. How would you characterize it?

A. If you look at Dr. Gaske's testimony, his rebuttal testimony on page -- oops, this is not the right book. On page three of Dr. Gaske's rebuttal testimony --

MR. HOBERG: That would be Exhibit 7.

THE WITNESS: -- we have issued some debt since '92, since this refinancing, and if you look at that, our long-term debt issued after April 1992 has an average cost of 7.31 percent, and that is lower than the 7.68 percent debt cost of Otter Tail Power that Mr. King cites in his rebuttal testimony and very close to Northern States Power's 6.99 percent long-term debt cost that he cites. So I think the company's been very prudent in obtaining the least-cost debt. Unfortunately, the '92 debt that is still on the books has a lot of reacquisition costs, and we're just not able to economically refinance it at this time.

MR. PEARCE: I have no further questions.

MR. HOBERG: Thank you, Mr. Pearce. Mr. Binek, anything further of Mr. Mahowald?

MR. BINEK: Yes.

RECROSS-EXAMINATION

BY MR. BINEK:

Q. Getting back to this 40-million-dollar loan, you said they -- I forget. I don't know exactly how you said it, but you said that they want you to be able to show you have the capacity to clear your short-term debt or something like that. Who's "they"?

A. It's the rating agencies, because what we do is when we -- we have a commercial paper program at MDU, and that commercial paper program is backed by a standby letter of credit issued by various banks, and the only way we can really sell commercial paper to investors, you have to have a standby letter of credit because if for some reason we had 40-million-dollars commercial paper outstanding today and we couldn't access the market, September 11th came or we just couldn't sell our paper, those investors would want to be paid back. So we would have to then go into our standby letter of credit and borrow to repay those commercial paper investors, and the rating agencies like to see that you clean out -- or clear your lines so you can demonstrate that you have the financial capacity to do that, and that determines

your short-term credit rating.

Q. Okay. So then was it the rating agencies that told you you needed to do this or who -- who -- who made this determination?

A. It's driven by the rating agencies and their requirements.

Q. But who determined -- who said borrow 40 million dollars for four days?

A. Well, we had -- at that time we had some short-term debt outstanding, and we -- to demonstrate to the rating agencies that we have the capacity under the back-up lines to access credit, we paid that debt -- we moved that debt from short-term over into the term loan.

Q. Okay. And who decided to include the full 40 million dollars as term debt -- or I think the term is what you -- you called it.

A. It was based on our borrowing -- short-term borrowings at that time. We just took the full amount and moved it over.

Q. Okay. And if I understood the exchange between you and Mr. Pearce, it sounds to me like you agree that this 40 million dollars has been removed from your overall debt and there's 1.3 million being shown.

A. Correct.

Q. Do you agree with that?

A. Yeah.

Q. Okay. So my point again is the report that you provided or that MDU provided to Mr. King that showed 170-some million dollars in overall debt was incorrect, that that was overstated by 38.5 million?

A. I haven't seen that exhibit, so I can't -- I don't know. I'll take your word for it, but I haven't seen the exhibit. I guess I'd have to see the exhibit to agree with that.

Q. Okay. And can you tell me or not -- do you know who -- who made the determination to include that 40 million dollars in the overall debt?

A. That I don't know.

Q. Okay. Are your records audited by any outside auditing company?

A. Arthur Andersen.

Q. Okay. This is Arthur Andersen of Enron fame?

A. Well, yes. Yes.

Q. Okay. And they approved this showing of 178 million dollars in debt, overall debt?

A. I believe so. I'd have to look at the -- the accounting exhibits to make sure.

Q. Why did this happen, this 40-million-dollar loan? Why did it happen at the end of the year?

A. We also do it during -- during the quarters, and we also use the term loan if we have more -- borrowed in excess in our commercial paper program.

MR. BINEK: No further questions.

MR. HOBERG: Thank you, Mr. Binek. Mr. Fahn, anything further?

MR. FAHN: No. No, thank you.

COMMISSIONER WEFALD: I have a question.

MR. HOBERG: Commissioner Wefald, please.

FURTHER EXAMINATION

BY COMMISSIONER WEFALD:

Q. I'm sure there's something I'm not understanding correctly here, and that's this exhibit that you showed me, Exhibit No. JSG-2.

A. Okay.

Q. All right. Now Mr. Diller yesterday gave us an Exhibit 3, cost of capital summary. It looks like this. I don't have a page number, but it's called cost of capital summary.

MR. HOBERG: It's in Exhibit 3.

Q. (COMMISSIONER WEFALD CONTINUING) And I'm sure -- I just need to understand then how these numbers are arrived at. Under debt staff shows 8.62 percent cost of debt, and then it says Montana-Dakota Utilities Company, and I believe that's the cost of debt that MDU is stating in this case.

A. Correct.

Q. But when I look at the numbers that you referred me to on JSG-2, none of those interest rates are above 8.6, and so I'm having difficulty understanding how -- there must be something wrong here -- why the cost of debt would be 9.22 percent. So just explain to me how --

MR. PEARCE: Perhaps if I could interject. I don't want to testify for the witness, but the JSG-2, Schedule 1, page one of two, shows how the capital structure and debt works together to end up with the embedded cost.

MR. HOBERG: Is that what you're looking at, Mr. Mahowald?

THE WITNESS: I am now, right.

MR. HOBERG: Okay.

Q. (COMMISSIONER WEFALD CONTINUING) What's

the difference between what you're showing on page one, Schedule 1, and what's being shown on Schedule 1, page two of two? How about -- which of those numbers on Schedule 1, page one of two, relates to the next page that you referred me to?

A. Not preparing this exhibit, I'd have to defer that to Dr. Gaske. I'm not sure.

MR. HOBERG: Mr. Binek, Mr. Pearce, do you mind if Dr. Gaske, who's already been sworn, goes up to answer this question --

MR. PEARCE: That's fine.

MR. HOBERG: -- since he's the appropriate person?

MR. PEARCE: Sure. That makes sense, if you're agreeable.

MR. BINEK: That's fine.

MR. HOBERG: Dr. Gaske, do you want to approach the stand and see if you can help us out with that question, please? Do you understand the question, Dr. Gaske?

DR. GASKE: Yes, I do.

MR. HOBERG: Okay.

COMMISSIONER WEFALD: I just need to know how to relate the figures.

DR. GASKE: Right. If you look at

Schedule 1, page one, on the very top line it refers to long-term capital.

COMMISSIONER WEFALD: Yes.

DR. GASKE: The balance outstanding -- the numbers on that line are a summary of what you see on page two of that schedule.

COMMISSIONER WEFALD: And I see that number at the bottom of that page.

DR. GASKE: Right. You'll see the -- all three of those numbers appear on the very bottom line of page two.

COMMISSIONER WEFALD: All right. Then when we were talking about the first group, $136,450,000, then what's the second group of numbers then, 130,850,000, because those have much higher debt levels? The cost of money is much higher.

DR. GASKE: That's correct. The cost of money is a combination of the coupon interest rates, which you see up positive and also in the title to most of the bonds. If you go over to sort of the upper right-hand block of numbers on the page, you have "Underwriters' Commission," and you've got "Loss on Reacquirement, Redemption and Issuance Expenses." Those carry down then into the

bottom half of the page where the company has calculated the effect of cost of money.

So, for example, the 8.25 percent first mortgage bond has a total cost of 10.17 percent once you include the underwriters' commissions and the reacquisition costs. The overall average for all of the debt way down in the lower right-hand corner of the page, 8.938, carries over then to the first page.

COMMISSIONER WEFALD: I see. Okay. Thank you very much. That's been very helpful.

DR. GASKE: Did you want to follow up on why 9.22 seems to pop out or --

COMMISSIONER WEFALD: Well, then there's an additional 10 million of commercial paper. What is that?

DR. GASKE: Commercial paper is very short-term loans that companies typically issue. They'll --

COMMISSIONER WEFALD: Is that like this one that they were talking about for 40 million dollars for four days?

DR. GASKE: No. It would be paper that they actually issue out in the market. It might be -- I guess Mr. Mahowald probably can tell you

the components of it, but it might be 30 days, 60 days, 6 months, something like that, but there's -- there are a couple of items when you look at the annual cost column, the second line has $548,000 of amortizations. So that would tend to increase the overall costs that you end up with way down at the bottom. The 9.22 percent includes that.

COMMISSIONER WEFALD: Thank you.

DR. GASKE: Okay.

MR. HOBERG: Thank you, Dr. Gaske. Anything further of Mr. Mahowald?

COMMISSIONER WEFALD: No.

MR. HOBERG: Thank you. Commissioner Clark, anything further?

COMMISSIONER CLARK: No further questions.

MR. HOBERG: Any further questions of Mr. Mahowald? Thank you, Mr. Mahowald. Okay. Mr. Pearce, I think you have three witnesses left?

MR. PEARCE: Yes.

MR. HOBERG: Should we take a recess here and come back at 1 o'clock? Does that sound appropriate?

COMMISSIONER CLARK: I think so, unless we've got one that's real quick.

MR. HOBERG: Probably don't have one

that's that quick.

MR. PEARCE: Probably not. There may be a number of questions of Mr. Espeland.

MR. HOBERG: Okay. Let's stand in recess till one o'clock, promptly at one o'clock.

(Noon recess taken.)

MR. HOBERG: Okay. We're back from luncheon recess, and just for the purposes of a clean record, Mr. Mahowald's testimony we took just before lunch was Docket No. 62, Exhibit 7. I believe we're about to move on to Mr. Espeland.

MR. PEARCE: Yes.

MR. HOBERG: Would you please call him?

MR. PEARCE: I'll call Richard A. Espeland.

MR. HOBERG: And while he's walking up, I'll just refer to his testimony as Docket No. 58, also surrebuttal testimony found in Exhibit 7. Mr. Espeland, did you hear the admonition I gave in regarding to perjury earlier today?

THE WITNESS: Yes, I did.

(Witness sworn.)

MR. HOBERG: Thank you. Mr. Pearce, please.

RICHARD A. ESPELAND,

having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. PEARCE:

Q. Would you please state your name and business address?

A. Yes. My name is Richard A. Espeland. My business address is 918 East Divide Avenue, Bismarck, North Dakota.

Q. And what is your business position?

A. I am vice president of human resources for MDU Resources Group, Inc.

Q. What are your duties and responsibilities with MDU Resources in that capacity?

A. I have the overall responsibility for human resources function throughout the corporation. The primary areas include employment, total compensation, and by that I mean both general and executive compensation and the full benefit programs, training and development, employee relations and employee communications.

Q. Would you please outline your educational and professional background?

A. I received my Bachelor of Arts degree from

UND in 1996 with a marriage in personnel management and subsequently received my Master's degree in public administration from UND in 1981.

Upon graduating from college I spent 4 years in the U.S. Army as an officer in the infantry, and then I worked 2 years with the City of Grand Forks, 5 years with the State of North Dakota, 12 years with North American Coal Corporation, and currently 12 years with MDU Resources Group.

In December of 1989 I did join MDU Resources as human resources manager and held that position until August 2000 when I was elected vice president of human resources.

I'm currently a member of the Human Resource Management Society and the Central Dakota Human Resource Association. I have spoken on retirement and employee benefit issues on many occasions at national conferences in Boston, Orlando, Chicago and San Francisco.

Q. I may have misheard, but did you say possibly that you received your BA degree in 1996? I think you meant '66.

A. Did I say '96? I may have. '66, as the written testimony shows.

Q. What is the purpose of your testimony today?

A. The purpose of my testimony is to address the rebuttal testimony of Mr. Mike Diller of the Commission staff in this case concerning the supplemental income security plan, or SISP, and to further explain the purpose of SISP as it was originally addressed by Mr. Don Ball of Montana-Dakota in his direct testimony.

Q. What are your duties and responsibilities relative to the SISP program?

A. I am the plan administrator assigned the responsibility by the board of directors of MDU Resources Group for the management of the plan, design of the plan, eligibility, interpretation, communication and benefits administration.

Q. At page 16, line 7 of his testimony, Mr. Diller mentions that the SISP has been in effect since 1982 but that Montana-Dakota has not previously sought rate recovery. Would you please explain why that is?

A. Yes, I will. When the SISP was implemented in 1982, it was a visionary plan and was new to the utility industry and many industries at that time. It was not common anywhere within

the utility industry in 1982. In the intervening years since then, and particularly in the last few years, supplemental employee retirement plans, which are commonly called SERPs, which are like Montana-Dakota's SISP, have become common practice both in utilities and related companies.

These types of plans have become necessary due to various changes in federal regulations, Social Security benefits and employment practices. These changes have adversely affected Montana-Dakota's key employees as to potential retirement benefits. Because of those changes, SERPs, such as Montana-Dakota's SISP, have become necessary in order to attract, retain and provide equitable benefits for key employees. The SISP costs therefore should be included in Montana-Dakota rates.

Q. Would you please describe the various changes in federal regulations that have adversely affected retirement plans for key employees?

A. In the early Eighties prior to SISP being implemented, a defined benefit pension plan like Montana-Dakota has could provide benefits in consideration of up to $225,000 of salary. That limit was reduced in the mid Eighties to $150,000

of salary that could be considered in a defined benefit pension plan, therefore reducing the benefit eligibility and pension benefits provided by about one-third.

This compensation limit has slowly increased to the current $200,000 level but is certainly not at a pace equal to general wage inflation. In addition, the 401(k) plan regulations limit employee contributions to $11,000. The effect is that the employee with a $50,000 annual income can contribute 22 percent of their salary while senior executives are generally limited to 10 percent or less.

Q. What changes in Social Security benefits have adversely affected key employees?

A. The Social Security covered wage base, while increasing over the years, has not kept pace with the general wage inflation, and benefits provided to higher income levels are significantly less than at lower income levels.

Q. At page 16, line 12 of his testimony, Mr. Diller notes that Montana-Dakota participants in the SISP have declined from 38 participants in 1996 to 27 participants in 2001. He suggests that the reduction may indicate that Montana-Dakota no

longer sees the same need for this plan. Is there a reason for the decline in SISP participants?

A. Yes, there is a reason. Montana-Dakota has taken aggressive action since 1995 to reduce costs and to streamline their organization and provide the lowest cost to the consumer. As a result of these actions, Montana-Dakota was able to reduce the number of management positions as well within their company and thus reduce the number of SISP participants.

Q. Who are the key employees you refer to who are participants in SISP?

A. Key employees are officers, directors and senior managers of MDU Resources and Montana-Dakota who have the vision to adequately plan for the future, implement appropriate strategies for the company, and see how to reduce costs, streamline the organization, and implement new technologies to maintain and increase efficiencies of the company with fewer employees while keeping the rates stable and competitive within the industry. A perfect example is the fact that Montana-Dakota has not had to seek an electric rate increase in the last 15 years.

Q. Mr. Diller at page 16, line 19 of his

rebuttal testimony expresses concern that there is a lack of symmetry in the SISP in that an employee making $50,000 per year would receive a lower percentage of annual income than a higher income employee. Would you please explain the difference?

A. Yes, I will. When the compensation and benefit programs are designed, we look at them in the context of all of the benefit programs, all of the retirement benefit programs specifically. To put the retirement benefits in perspective, I have prepared Exhibit RAE-1, which reflects the retirement programs available to employees in Montana-Dakota, including the SISP.

As you will note from the graph, at the lower income levels the replacement income through retirement programs is about 80 percent. This includes Social Security, the defined benefit pension plan, the company match to the employee contributions to the (k) plan, and as you move up the scale, the percentage of income replaced by retirement plans of these three decreases significantly based on the retirement plan design requirements and the government limitations.

The SISP as a supplemental plan has been designed to replace some, but not all, of the

income that is not replaced by Social Security, defined benefit pension and the 401(k) plan. At the higher income levels we target only about 50 percent of the annual income being replaced compared to 80 percent at the lower income levels.

Q. Does the SISP benefit last as long as the other retirement benefits you've noted?

A. No, it does not. The retirement benefits payable under SISP are payable over 15 years beginning at age 65 and not over the remaining lifetime of the individual, which is currently about 20 years for the defined benefit pension, Social Security and the like. So Social Security, the defined benefit pension, and the 401(k) plan income projections cover the entire -- the retiree's lifetime versus just the first 15 years.

Q. Should Montana-Dakota's SISP be included in rates?

A. Yes, it should be. The SISP is a common type of benefit provided in today's business environment. The combined replacement income from all retirement plans when taken together is equitable, reasonable and justifiable. The SISP recognizes the contributions of key employees whose abilities and vision have enabled Montana-Dakota to

streamline operations, reduce costs and employee numbers, implement new technologies and, more importantly to the ratepayer, to keep Montana-Dakota's electric rates at 1987 levels at a time when the Consumer Price Index rose 59 percent during the same period of time.

Q. Looking at the question of the security of the SISP benefits, is that the same as for the company's other retirement plans?

A. It is not. It's significantly different. The SISP is a non-qualified benefit plan, which means it is not secured by Pension Benefit Guarantee Corporation. It's only backed by the assets of the corporation itself or by Montana-Dakota Utilities. So the significant difference is if the company was to go bankrupt or become insolvent, there would be no money to pay benefits to these executives under the SISP because those moneys would first go to creditors.

Whereas in a defined benefit pension plan, those are separated in a trust, guaranteed by the Federal Government, as well as the funding within the trust, and are available no matter what happens to the company, the general employees. And I might add that is by design. We want the supplemental

income retirement program to be at risk so that the executives have an incentive to maintain the company as a viable organization.

Q. You stated the SISP is necessary to attract and retain key employees. Is this just your theory or your hope, or do you have real-life experiences with this?

A. We have real-life experiences. You know, I can give a couple examples in recent times of -- in power production we had a very young crew in our power plant area. We went to the outside to hire someone that had a lot of experience in the Midwest region. We hired a very experienced person that has been able to coach and develop our current employees to be able to have that seasoned experience. If it had not been for SISP's benefit, we would not have been able to attract that individual. Same with -- and we recently hired a vice president of human resources for Montana. Again, without SISP we would not have been able to get the expertise and the background to really come in and make a difference.

Q. In your opinion then, the existence of a program like SISP provides a real benefit to ratepayers?

A. I do. And I'll use one more example, and this may or may not help, but in regards to myself four years ago I was given a very significant offer by another company at substantially higher wages and benefits. Because of SISP and a few other reasons, but one of it was SISP -- we have a vesting provision in SISP, and I was only 50 percent vested so I didn't get the full benefit unless I stayed longer. It was a factor in my decision to stay. Some people may have wished I was fully vested, but it certainly did keep me as a North Dakotan in North Dakota.

MR. PEARCE: Thank you. I have nothing else for Mr. Espeland.

MR. HOBERG: Thank you, Mr. Pearce. Mr. Binek, did you have any questions of Mr. Espeland?

CROSS-EXAMINATION

BY MR. BINEK:

Q. I take it from your last comments here that had you been fully vested, you'd be gone.

A. I wouldn't say I would be because there were other issues there, as well, but it certainly is one factor. We design our programs to have that retention value.

Q. I believe in your testimony you agreed

that the costs of this plan have never been included in rates.

A. That's correct.

Q. And you gave some explanation of why you think that this benefits the ratepayers and why the costs should now be borne by ratepayers. Are you saying or suggesting that MDU's shareholders do not benefit from the efforts of these key employees?

A. Well, they certainly do. Yeah. Both ratepayers and stockholders benefit.

Q. But you want the ratepayers to pay the full cost of this; right?

A. I think it's an appropriate cost, just like their salaries are. It's a part of the total compensation package.

Q. But we're talking about key employees, 27 key employees that are doing all these wonderful things for the company, and you want the total cost to be paid by the ratepayers, even though you say that the shareholders benefit?

A. Well, I think -- yes. I think it's an appropriate cost of doing business to have the talents at any level within the organization.

Q. You state that these types of plans have become necessary due to various changes in

regulation, Social Security benefits, and employment practices and that those changes have adversely affected MDU's key employees as to potential retirement benefits. I'd like to have you provide a list -- or give us a list of the retirement benefits that are presently available to these key employees.

A. A list of their retirement benefits?

Q. Right.

A. That is summarized on the graph, which was Exhibit RAE-1, which lists those four sources of retirement benefits, Social Security, 401(k) plan, the pension, and the SISP. Those are the four retirement programs we have.

Q. What other benefits does MDU provide to these key employees?

A. The same benefits that we provide to all other employees, healthcare, life, disability.

Q. I'd appreciate it if you'd give us a list of those.

A. Okay. We have healthcare, which includes medical and dental, with cost-sharing by the individuals. We have life insurance available uniformly to all employees to include the key executives. We have holidays, vacations, we have a

sick leave program, long-term disability program. I'm trying to think of what I'm forgetting.

Q. Are there some post-retirement benefits?

A. Yeah, retiree healthcare.

Q. Is there a benefit of -- still in place of reduced utility rates for employees?

A. Yes. For employees that are -- reside in the utility area that provides service, they get a utility discount.

Q. How much is that?

A. I believe it's about one-third of the utility.

Q. And that -- key employees also get that, don't they?

A. That's correct.

Q. What's the annual cost of this supplemental income security plan?

A. For the Montana-Dakota Utility electric side it's about $680,000, 600 -- I think that's right, $680,000.

Q. What's the total cost of the plan?

A. Total cost corporatewide?

Q. Right.

A. About two-and-a-half to three million.

Q. That's an annual cost?

A. That's an annual cost.

Q. And there are 27 employees?

A. No.

Q. Okay. How many employees -- there are 27 employees -- well, the 27 employees, is that just Montana-Dakota Utilities?

A. That's correct.

Q. This 600-some-odd-thousand, is that just North Dakota's share?

A. Yes.

Q. Okay. So the total -- what is the total cost of the Montana-Dakota Utilities plan?

A. Both gas and electric?

Q. Whatever the --

MR. DILLER: Just electric.

Q. (MR. BINEK CONTINUING) Whatever these 27 employees are?

A. Okay. The cost to Montana-Dakota total, gas and electric, would be about 1.2 million. There's 27 active participants, but also there are 34 inactive, deferred, vested participants which those costs also are funding those costs because they have worked for us or they're retired and you still have that cost, just like our defined benefit pension plan. Our defined benefit pension costs

include not only active employees but all those that are retired and the ongoing costs to fund those benefits, as well. So we have about 60 total participants for Montana-Dakota in SISP, former and current, for that 1.2 million.

Q. And with roughly 60 employees, 1.2 million, you're talking about $20,000 a year per employee for --

A. The cost is about 20,000 a year. Correct.

Q. You talked about the total number of employees being covered by this being 60. Haven't those -- the costs for these prior employees been funded previously?

A. No. Since it's a non-qualified plan, there is no provision specifically for prefunding and setting aside moneys. We do have a SISP -- or a rabbi trust that some moneys go into, but it is not fully funded like our defined benefit pension plan. There is no -- there is -- about probably 20 or 30 percent of the liability has some dollars set aside to it, but again those dollars are available to creditors first. So they're not totally set aside like a defined benefit pension plan.

Q. But this plan -- since 1982 money's been going into this plan; right?

A. That's correct.

Q. Every year?

A. That's correct.

Q. And we're talking about right now 1.2 million a year. The benefits being paid out aren't being paid out to 60 employees.

A. Montana-Dakota has about 20 employees in pay status at various levels that can take partial or they can take full. So we have about 20 individuals in a pay status. They don't have to take it all at one time. The average cost is about 20,000 per year.

Q. Over the 60?

A. Over the 60.

Q. Of the 20 current employees what's the average cost?

A. Of the 27? If you divide that way, it's about 40,000, you know, but that's not reflecting the full number of people covered, and that's -- that 680,000 also includes the cost of paying current benefits and recognizing the cost of future benefits, and so it's everything in there.

Q. And you said you're one of the key employees?

A. Yes, I am.

Q. Will you resign your position if this benefit is eliminated?

A. No.

Q. Isn't it true that even if the Commission does not allow the cost of this plan to be recovered in rates, the shareholders can still continue to provide the benefit at shareholders' expense just like it has been up to now?

A. I'd have to answer yes because the quality and the type of management and employees we have are going to do the best job they can regardless of whether they feel they're paid fairly or treated fairly. That doesn't make it necessarily the appropriate way to establish rates. So, yeah, they're going to continue to do a very good job. That's just their nature.

Q. On page 5, beginning at line 14, you talk about replacement income through retirement programs, and you state that at the lower income levels the replacement income through retirement programs is about 80 percent, and as you move up the income scale, the percentage of income replaced by these plans significantly decreases. The 27 employees that we're talking about are the higher-income employees obviously.

A. That's correct.

Q. Aren't these employees in a much better position than lower-income employees to build up savings and other stock portfolios and other investments for their retirement?

A. Yes, they are. They have much more discretionary income than the lower income, and that's why we decline the replacement income to 50 percent rather than at the 80 percent level.

MR. BINEK: I have no further questions.

MR. HOBERG: Thank you, Mr. Binek. Mr. Fahn, did you have any questions of Mr. Espeland?

EXAMINATION

BY MR. FAHN:

Q. Did you indicate anywhere in your testimony what the -- I assume that your Exhibit No. RAE-1, that would be annual salary levels on the bottom of the chart?

A. Right. Annual compensation.

Q. And what is the -- of the key employees you're talking about, what would the lowest annual salary be possibly?

A. The ones included would be around 75 to 80,000.

MR. FAHN: 75 to 80. Okay. That's all I

have. Thank you.

MR. HOBERG: Thank you, Mr. Fahn. Commissioner Wefald, please.

COMMISSIONER WEFALD: I have no questions for this person.

MR. HOBERG: Thank you. Commissioner Clark, please. I'm sorry. Commissioner Reinbold.

COMMISSIONER REINBOLD: I have no questions.

MR. HOBERG: Commissioner Clark, please.

COMMISSIONER CLARK: I do have just a couple.

EXAMINATION

BY COMMISSIONER CLARK:

Q. Maybe it would be helpful for me just to -- and I understand kind of what it is in general, but could you talk about in specifics how does the SISP work?

A. Okay. SISP was designed so that we can provide a supplemental retirement benefit at age 65. It is funded -- or we fund it through corporate-owned or trust-owned life insurance policies. Currently they're through Northwestern Mutual Life because they have a cash value buildup which offsets our cost, and the benefit there, as

well, is that if the executive were to die during the lifetime, their working career, they would have a life benefit or death benefit for a surviving spouse. But generally it's funds or retirement at age 65 for 15 years based on replacement, and the costs of the program are paid out of corporate funds and the proceeds come in to corporate assets.

Q. If someone were to retire at, say, 70, is it 15 years after retirement date or is it 15 years after 65?

A. Okay. It's 15 years from the date they start receiving benefits. Now at age 65 if they say I don't need it right now, I would like to defer that for 5 years because I'll live till 90 or 100, they can do that.

Q. Okay. You talked about -- in response to a question that Mr. Binek had about other additions that employees -- or other additions, kind of other benefits that employees get. You talked about this utility discount of about a third or something.

A. That's correct.

Q. Is that to all employees, including current ones, or is that just to retirees?

A. No. That's to all employees.

MR. HOBERG: Excuse me. You need to get a

little closer to the mike.

THE WITNESS: I'm sorry. That is to all employees.

Q. (COMMISSIONER CLARK CONTINUING) Okay. All employees get this third discount or however it's figured. The income that's not realized there, it has some sort of cost, does that come from shareholder or ratepayer side of the equation?

A. The discount is included in prior rate filings, I believe.

Q. So that would be included prior to rate filings. In other words, it comes from shareholder -- it comes on the ratepayer side?

A. It's my understanding from the design of it, that all costs are covered in the -- you know, in the cost the employee pays, but there is no additional costs incurred there, but I would have to defer to Don Ball on the specifics.

COMMISSIONER CLARK: Okay. I'll maybe ask Mr. Ball when he gets up here. That's all I have. Thanks.

MR. HOBERG: Thank you, Commissioner Clark. Anything further? Commissioner Wefald?

COMMISSIONER WEFALD: I just had a question.

EXAMINATION

BY COMMISSIONER WEFALD:

Q. Is Mr. Ball going to be covering the pension and post-retirement issues that are separate from SISP?

A. I believe he is, yes.

COMMISSIONER WEFALD: Thank you.

MR. HOBERG: Mr. Pearce, anything further for Mr. Espeland?

MR. PEARCE: No.

MR. HOBERG: Anyone have anything further for Mr. Espeland?

MR. BINEK: Yes. I just have a question.

MR. HOBERG: Mr. Binek.

RECROSS-EXAMINATION

BY MR. BINEK:

Q. It's a followup from Commissioner Clark's question when he asked about these discounts. I think he asked if they were also available to retirees, and you said to all employees. Are you including retired employees?

A. Yes. Those that live in the service territory.

Q. Okay. So that continues on after they retire? They still get that utility discount?

A. That's correct.

MR. BINEK: Thank you.

MR. HOBERG: Anything further then of Mr. Espeland? Thank you, Mr. Espeland.

THE WITNESS: Thank you.

MR. PEARCE: Call Donald Ball.

MR. HOBERG: Mr. Ball, please. Mr. Ball, I believe you heard the admonition I gave in regard to perjury earlier; is that correct?

THE WITNESS: I did.

(Witness sworn.)

MR. HOBERG: Thank you. Mr. Pearce, please.

DONALD R. BALL,

having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. PEARCE:

Q. Would you please state your name, business address and position?

A. My name is Donald R. Ball. My business address is 400 North Fourth Street, Bismarck, North Dakota, 58501. I'm the director of regulatory affairs of Montana-Dakota Utilities Company, a division of MDU Resources Group.

Q. And you have previously filed some direct testimony in this proceeding, have you not?

A. Yes, I have.

Q. What is the purpose of your testimony today?

A. The surrebuttal testimony -- the purpose is to address concerns I have with the rebuttal testimony of staff witness Mike Diller in the areas of the Mid-Continent Area Power Pool, or MAPP, penalty, pension costs, insurance costs and office supplies and expenses.

Q. Would you please explain your concerns with Mr. Diller's treatment of the MAPP penalty costs?

A. Yes. At pages 11 and 12 of his rebuttal testimony Mr. Diller discusses his reasons for not allowing the MAPP penalty costs. He indicates that the Commission should not encourage further penalties in the future by granting rate recovery and that the Commission should assume that appropriate reserve margins will be maintained and no additional penalties will be incurred. He eliminates about $458,000 of penalties that were included in 2001 results.

I would note at the outset that

Montana-Dakota, through its extensive planning and forecasting activities, makes every effort to ensure that it has adequate capacity to meet the reserve obligation for serving retail customers. There are a number of employees involved in the process and the latest state of the art tools and techniques are used. The load forecasting process is described in detail in Section 2 of the integrated resource plan filed with the Commission on July 1, 2001.

Despite Montana-Dakota's best efforts at forecasting peak load and resulting reserve obligation, it fell short of capacity to meet the reserve obligation in the summer seasons of 2000 and 2001 due to higher than normal temperatures at the time of the peak and incurred penalties. I should note that the 1999 penalty mentioned by Mr. Diller was for only 0.9 megawatts, a very small difference.

Application of hindsight indicates that Montana-Dakota should have acquired more capacity during these periods, particularly in 2001, to avoid the penalties. As I explained above, Montana-Dakota makes every effort to assure that it has adequate reserve margin to avoid any penalty.

However, with the disallowance of all costs related to the penalty that was incurred and the update to the 2001 actual information, the staff position now has sales levels and expense levels reflective of 2001 results but has no costs included for the added capacity that was required to achieve those results. This is an obvious mismatch that should be corrected.

The Commission should include, as a proxy for capacity that would have been purchased for the summer of 2001, an amount representative of what the cost would have been for added capacity that would otherwise necessarily have been purchased to avoid the penalty. Montana-Dakota, had it known that it would be deficient in 2001, would have purchased additional capacity for the four months of June, July, August and September 2001 as it is now planning on doing for 2002. However, the precise cost of that capacity is not known.

Based on bids received by Montana-Dakota for capacity purchases planned in 2002, the cost for additional capacity is $4,000 per megawatt month. Using this as a proxy for what would have been purchased in 2001 translates to a cost for the 16.9 megawatts of $270,000. That would be 16.9

megawatts times $4,000 times 4 months. This is the minimum amount that the Commission should include to recognize the cost of the actual capacity used in 2001 to meet the needs of Montana-Dakota's retail customers.

Q. Would you please explain your concerns regarding pension expense?

A. Yes. Mr. Diller denied Montana-Dakota's increase in pension expense for two reasons. First, because there was no actuarial data provided in the discovery process and, second, because overall benefits expense decreased by $43,000 from 2000 to 2001. I will address both of those concerns.

When Montana-Dakota was preparing its direct testimony, we looked at current or 2002 cost levels versus the cost levels for 2000 as included in Mr. Diller's cost of service. Where the 2002 cost level was different from the 2000 level we reviewed the cost to determine the appropriate expense given current information.

The benefits account, that is FERC account 926 labeled employee benefits, includes pension, medical and dental insurance, post-retirement, 401(k), employee discounts and other benefits. The

pension account was the only benefit that significantly changed from 2000 to current or 2002 levels, so that was the only benefit that was adjusted in my direct testimony.

The primary reason for the slight decrease in benefit expense from 2000 to 2001 is because the pension and post-retirement amounts were less in 2001 than 2000. But that situation has turned around and those expenses increased and are currently higher than the 2001 level.

Montana-Dakota externally funds the pension and post-retirement accounts with the annual expense based on an actuarial study performed by Towers Perrin. I should note that the actuarial study is considered confidential information and as such cannot be provided as a public document. Montana-Dakota, as it has done with such information in the past, will agree to let Mr. Diller review that information on a confidential basis.

As explained in my direct testimony, the reason for the increase is because of low investment returns in 2000 and 2001 and a lower discount rate for future years than in the previous studies. These increases for 2002 are real,

they're currently being booked, and they are expected to continue to increase through 2006.

To deny recovery of current expenses because the expenses decreased between 2000 and 2001 when current expense levels are demonstrably higher is not reasonable. Exhibit DRB-1 shows the 2001 level of expense and the current expense levels that Montana-Dakota is recording on its books for pension and post-retirement benefits. The amount of the adjustment for pension is $179,000, and the adjustment for post-retirement benefits is $62,000.

I should note that the amount for the supplemental income security plan discussed in the surrebuttal testimony of Mr. Espeland is $683,000 currently. This reflects an update from the amount contained in my direct testimony.

Q. Would you please explain your concerns with the insurance expenses?

A. Yes. Mr. Diller proposes to leave insurance expense at the 2001 levels because the 2001 level of expense changed very little from 2000. He also says that he needs additional proof from Montana-Dakota that insurance expenses have increased. Most of Montana-Dakota's insurance

policies expire in November or December of each year. Therefore, the significant increases in insurance expense as outlined in my direct testimony became effective in late 2001 and therefore are not visible when comparing 2001 expense to 2000 expense.

However, the level of expense that we are incurring today is significantly higher than we experienced in 2001. The increase in insurance costs is affecting companies nationwide, not just Montana-Dakota.

I have been advised by the company's risk management personnel that the year 2000 and beginning of 2001 were reflective of soft market conditions, that is, expanded coverage at lower prices, and the insurance costs for these years reflect that market.

The situation changed in 2001 when the market changed to hard market conditions reflective of lower coverage and higher prices. The September 11, 2001, terrorist attack further exacerbated the situation by increasing costs and changing available policy coverages.

One example of the change is the All Risk Property Insurance premium, which went from an

annual premium of approximately $377,000 in effect through December 2001 to an annual premium of $550,600 through December 2002, an increase of 46 percent. These increases are real and the higher premiums are in effect today.

Exhibit DRB-2 lists each of the insurance policies along with the expiration date of the policy and the current annual expense. As shown on the exhibit, the annual expense being incurred today is 37 percent higher than the 2001 level for insurance. Montana-Dakota's proposed insurance expense adjustment of $155,000 reflects the level being incurred today and is reasonable.

Q. Would you please explain your concerns with Mr. Diller's adjustment to office supplies and expense?

A. Yes. At pages 18 and 19 of his rebuttal testimony Mr. Diller discusses his adjustment to office supplies and expenses. His adjustment reflects a five percent increase over the 2000 level with a net result of decreasing the actual 2001 result by $678,000. His testimony indicates that he is not aware of what caused the increase and that he made the adjustment to reflect a more normal operating expense level.

I take exception to this adjustment because the items that caused the increase from 2000 to 2001 are not one-time aberrations but are continuing expenses. Items causing the increase from 2000 to 2001 are the costs for a corporate aircraft, which was acquired in 2001, increased service and supply costs for the company's computer infrastructure, an increase in phone expenses due to expanding cell phone use, and improvement of the computer frame relay network, an increase in subcontract work which is continuing, and reclassification of subcontract fees and bank service fees from other accounts. The last item simply means that other accounts were reduced to reflect the reclassification.

As these are recurring expenses, the amounts should be included which reflects an increase in expense of $678,000 from the staff position.

Q. Mr. Ball, in connection with your responsibilities with the company, are you familiar with how the capital structure is computed and the debts are carried on the books?

A. Generally I am, yes.

Q. There may be some confusion in the record,

I think, regarding the term loan that was testified to earlier this morning. Could you explain that and your understanding of how that was booked?

A. The term loan was discussed by Mr. Mahowald in his testimony, and as he explained, the company periodically will exercise that term loan to draw down its short-term debt to demonstrate to rating agencies and to the financial world that the company does have the financial ability to pay down its short-term debt.

Typically, the term loan is exercised at the end of quarters and typically for a very short duration. In this proceeding I believe we were asked to provide what the company's capital structure was, and I believe we have provided that in a number of places, primarily even in the annual report to the Commission. It's a balance sheet item, and the numbers there reflect the balances that were in existence for the time -- for the day indicated, typically balances as of December 31 of each year. So -- so the reports in that respect reflect the books and records of the company at that point in time, as it does with any other balance sheet item.

In this proceeding staff witness, Mr.

King, looked at that item. He took exception to including 40,000 -- or 40 million dollars in the capital structure. Instead, he looked at the average balance of that particular item that would be outstanding, and that is what he reflected in his capital structure. For purposes of this proceeding we are not contesting the use of the average balance of the term loan in the capital structure. The average balance, I believe, was 1.3 million.

Q. And it was testified, of course, that MDU, as every major company does, has its books and records audited by every year. Are you aware that the company has made a public announcement already that it's going to be changing its auditors?

A. Yes, I am aware of that.

Q. So it will no longer be Arthur Andersen?

A. That is correct.

Q. And I'm not suggesting that's a result -- you don't know of anything wrong that Arthur Andersen did, but it's customary, is it not, from time to time to periodically review and perhaps change auditors?

A. Yes, that is correct.

MR. PEARCE: I have nothing further for

Mr. Ball.

MR. HOBERG: Thank you, Mr. Pearce. Mr. Binek, did you have any questions of Mr. Ball?

MR. BINEK: Yes.

CROSS-EXAMINATION

BY MR. BINEK:

Q. Getting back to this 40-million-dollar debt item, if -- if a staff witness had not reduced that item, would the overall debt in the capital structure have reflected something in the neighborhood of $40,000 above what it is now -- today, that you've agreed to -- or 40 million, I mean.

A. You mean 40 million? Yes. As a matter of fact, if you go back in history to rate cases that this company has had in the four-state area that it serves, it was a very common practice to include that, the entire 40 million in the capital structure in determining the ratios.

Q. This supplemental income security plan, are you one of the key employees?

A. Yes.

Q. Do you plan to leave the company if the benefit is discontinued?

A. I guess I haven't really considered it.

Q. On the expense items, this corporate aircraft, what benefit does Montana-Dakota Utilities Company in its North Dakota operations derive from the corporate airplane?

A. Well, I think there are a number of benefits. The company, you know, has a number of employees that to conduct their business are required to travel, and in the -- in using a corporate aircraft before any trip is made, you have to request to use the aircraft. If -- and we have a travel coordinator, and if it does not appear to be cost-effective to use the corporate aircraft, we will use other means of travel, such as commercial aircraft or drive.

Q. Has there been any study done to quantify the savings that the company realizes through the use of this corporate aircraft?

A. I believe there was one --

Q. I'm talking about the North Dakota -- Montana-Dakota Utilities Company in North Dakota.

A. Not to my knowledge.

Q. What is the percentage increase in expenses from the year 2000 to 2001, administrative and general expenses?

A. Percentage increase?

Q. Right.

A. Oh, you mean for the administrative and general --

Q. Expenses.

A. -- expense category?

Q. Right.

A. All accounts? I guess I don't have that information in front of me.

Q. Okay. Do you recall Mr. Diller's slide show where he had that up?

A. Yes. Yes, I do.

Q. Okay. Can --

A. Well, however, my copy is the reduced slides, and the numbers are very small. I can't read them.

MR. HOBERG: Could you provide him a copy of that, please?

MR. DILLER: Yes. It's slide 23, but Bill and I only have the numbered pages.

MR. HOBERG: What's it titled at the top?

MR. DILLER: Administrative and general.

MR. HOBERG: Thank you.

MR. BINEK: Administrative and general expenses.

THE WITNESS: And your question again was

what was the --

Q. (MR. BINEK CONTINUING) Percentage increase from 2000 to 2001.

A. According to Mr. Diller's slide, it's 12.4 percent.

Q. And the increase projected from 2001 to 2002?

A. According to Mr. Diller's slide, it's 12.3 percent.

Q. And do you have any reason to disagree with the figures on Mr. Diller's slide?

A. No, I don't.

Q. Prior to 2001 and 2002 what -- what range were increases?

A. Again, from Mr. Diller's slide, the '98 to '99 was a decrease of 3.4 percent, '99 to 2000 was a decrease of 3.8 percent.

Q. Are you going to respond with any analysis -- any additional analysis to Mr. Diller's concern regarding the adjustments you've proposed for office supplies expense, property insurance and employee pensions and benefits?

A. Yes, I was. Mr. Pearce was going to ask me a question about that.

Q. Oh, I thought he was done.

MR. HOBERG: Well, he may have some questions on redirect then.

MR. BINEK: Apparently he didn't know he was done.

COMMISSIONER WEFALD: Is that called leading the lawyer? I don't know.

MR. BINEK: Good point.

THE WITNESS: Something like that.

MR. BINEK: Well, I guess we're waiting. I have no further questions at this time.

MR. HOBERG: Thank you, Mr. Binek. Mr. Fahn, did you have any questions of Mr. Ball?

MR. FAHN: No, thank you.

MR. HOBERG: Commissioner Wefald, please.

COMMISSIONER WEFALD: I have one.

EXAMINATION

BY COMMISSIONER WEFALD:

Q. It relates to A&G salaries, and that's found on page 18 of the rebuttal testimony of Mr. Diller, and in that paragraph it says, "Staff noticed that administrative and general salaries increased by 20 percent in 2001 or 843,000 on a total company basis and that transmission supervision and engineering costs were up 35 percent or $294,000 on a total company basis.

While the expense levels seemed quite inflated in comparison to recent years, staff agreed in principle with the company's 2002 overall labor expense projection," which is in another paragraph, I believe. "Therefore, staff proposes no adjustment to these inflated expense accounts, as they are primarily labor related."

Would that explain why your pension costs went up if your administrative and general salaries increased by 20 percent? Are your pension costs related to your salary levels?

A. Pension costs are related to salary levels, but I don't think we can make the conclusion that the changes that we see in these two particular accounts for labor expense would drive up the pension costs because pensions are based on total.

Q. Well, if I had a salary at your firm of -- if I received a 20 percent salary increase in 2001 from MDU Utilities, wouldn't I expect to see an increase in my pension?

A. Yes, you would.

Q. So could that partially explain the dramatic increase in the pension dollars that were shown?

A. Well, actually I would not categorize the pension increase as dramatic. On an overall basis the average pay increases have been in the three to three-and-a-half percent range.

Q. Well, then how did they get to be 20 percent?

A. That's just one particular account.

Q. Well, it's all administrative and general salaries.

A. Well, that would simply be the administrative and general salary category.

Q. Right.

A. There are a number of employees whose labor is charged to other accounts.

Q. I understand that, and that's why labor is in another paragraph that he's referring to.

A. Right.

Q. But I was just referring to this group of employees.

A. Yeah. To this -- those employees whose time is charged to this particular account, we did see an increase of this magnitude in the dollars booked in that account from 2000 to 2001.

Q. About how many employees are in that category?

A. Oh, that -- I guess I don't -- I would have to hazard a guess.

Q. A guess is fine.

A. But overall, you know, the company has 900-some employees. I would guess that probably 300 to 350 would have some time charged to the administrative and general accounts.

Q. But that wouldn't -- that wouldn't be under Montana-Dakota Utilities?

A. Yes.

Q. Montana-Dakota Utilities employs 900 --

A. Yes.

Q. -- itself?

A. Yes.

COMMISSIONER WEFALD: Okay. Thank you. That answers my questions.

MR. HOBERG: Thank you, Commissioner Wefald. Commissioner Clark, please.

EXAMINATION

BY COMMISSIONER CLARK:

Q. Just to bring hopefully final closure to this term loan thing, just to make sure that I understand it, I think I understand the reasoning for MDU entering into this. It's kind of a show of financial strength, I guess, to these rating

agencies which hopefully would result in lower interest rates down the line that you would have to pay. So I guess I understand it from that, but what you're saying is from a regulatory standpoint the -- the way that Mr. King has -- for dealing with this, it's not contested, it's kind of okay, that average balance method that he's offered is all right. Is that MDU's position?

A. Yes. In a nutshell, that's it.

Q. Okay. Now just to do a quick followup on the -- something which wasn't brought up by staff but kind of piqued my interest on the break that current and former employees -- or retired employees get on utility bills. Is -- it sounds like that's something that -- it's just -- it's reflected in a decreased net income; is that right?

A. You're referring to the utility discount?

Q. Yeah.

A. Actually, that has been in place for a number of years. There's actually a tariff on file here at the Commission specifying what that is.

Q. Okay.

A. And our employees who actually take gas and/or electric service from us simply get one-third off of their bill.

Q. Okay.

A. Now --

Q. So the cost is fully recovered of providing the service; is that right?

A. Yeah. The cost -- at least the incremental cost is fully recovered. For -- and the discount applies to MDU Resources employees, as well. It also applies to Knife River Corporation employees or Williston Basin Interstate Pipeline Company employees. For all employees of companies other than Montana-Dakota, those other companies reimburse us in full for the amount of those employee discounts. So from that perspective our consumers are not paying, if you will, or there's nothing in the costs for those discounts for employees of the other companies. For Montana-Dakota employees and the allocated portion of the Resources employees there is no specific reimbursement, and the amount of the utility discount would be a cost-of-service item.

Q. Okay. Do you have any idea what that cost is in dollar figures?

A. I guess I don't specific to North Dakota, but I do know that in -- the utility discounts for 2001 were about $290,000 companywide.

Q. Just from a -- kind of justification standpoint, what is the rationale for that?

A. For the discount?

Q. Yeah.

A. The rationale for the discount is that it's part of compensation, and one way to look at that would be it's -- if you will, it's a tax-exempt compensation. So, in other words, if we were to make it equivalent in actual pay, on a net basis we would have to raise salaries by more than the amount of the discounts because people would have to pay taxes on that if it's part of their payroll. So this happens to be the least costly way to do it.

COMMISSIONER CLARK: Okay. That's all the questions I have. Thank you.

THE WITNESS: Thank you.

MR. HOBERG: Thank you, Commissioner Clark. Mr. Pearce, anything further then of this witness?

MR. PEARCE: Just one -- well, perhaps two.

REDIRECT EXAMINATION

BY MR. PEARCE:

Q. Getting back to the question of the

corporate aircraft, is there any kind of -- is there an employee or department -- sort of a centralized department that keeps track of the aircraft use and decides whether it's economic or not?

A. Yes, there is, and that's done on a trip-by-trip basis.

Q. So, for example, I suppose you wouldn't send one employee to a meeting in Washington or New York on the company plane?

A. We would not.

Q. Because that would not be economical?

A. That would not be cost-effective.

Q. But you might send four or five because that would be less than the total airfare commercially?

A. Yes, that's true, and you also consider the factor of the other -- you know, the other costs related to alternative means. You know, for example, many times you won't have to stay overnight, you can avoid meal costs, accommodation costs.

Q. Right.

A. Those are factored in as well.

Q. And it's simply a matter of the time of

the employees, I suppose --

A. Yes.

Q. -- to be most economically used.

A. That is true.

Q. Okay. Is there anything else I've failed to ask that you'd like to respond to?

A. Yes. In Mr. Diller's slide show yesterday he talked about three areas where he remained unconvinced of what was going on, and I would like to take a few minutes just to hopefully shed some more light on those particular areas.

I'd like to start with pension and post-retirement benefits expense. As I indicated in my surrebuttal testimony, pension and post-retirement benefits are included in the FERC account number 926 along with several other items. I think I mentioned medical and dental, 401(k), utility discounts are in that particular account, those types of things.

In our analysis of that we can compare the results, and what we saw from 2000 to 2001 would be a slight decrease in the pension and benefits area, and I would note that all of the changes in that account are caused by the pension and post-retirement benefit areas. There were some minor

changes to the other accounts or other items in there, some are up, some are down, but they're all typically under the $10,000 range of change, either up or down.

With pensions and the post-retirement benefits the company uses an actuary. The firm's name is Towers Perrin, and they provide periodic actuarial studies as to what the funding requirements are to meet the pension obligation and the post-retirement benefit obligation that the company has.

The latest study from Towers Perrin indicated that there would be increases in both of those categories, and the study really relates to the period beginning now, with 2002. So for 2001 we were operating under the prior study. The new study clearly indicates an increase that is necessary in the amounts that the company will need to accrue to cover these costs.

We began recording the higher costs on our books in January of 2002. So primarily you will not see any increase on our books in 2001 because we didn't start doing it until almost two months ago now.

In reviewing the results of the actuarial

study, we know what we need to accrue for pensions and post-retirement benefits. We began doing that, and the numbers that I have provided to you for the electric utility and then as allocated to North Dakota electric operations reflect the amounts that we are now accruing on our books, and very simply we took the January accrual times 12 because that is what the actuarial study indicates that we need to do.

I would note that in spite of the fact that there is an increase in the pension expense, that the grand total pension expense is still a negative number. In other words, the plan has adequate funding and we can have a negative expense, if you will, which simply reduces our overall costs. However, when you go from a bigger negative to a smaller negative, that's a bigger increase. On post-retirement it's the other way. It is a positive number that we need to accrue, and that is what we're doing. On a net basis the difference is very small when you get down to it.

I guess I would offer that additional information on pensions. It is based on an actuarial study. As I indicated in my testimony, the actuarial study is confidential in nature.

However, if Mr. Diller would like to review it on a confidential basis, he's certainly welcome to do so, and quite frankly, there was only one week between the submission of our surrebuttal testimony and the beginning of our hearing. So there was relatively little time to deal with that matter as we typically have done in the past.

With regard to insurance expense, some additional comments there. Insurance expense covers primarily property insurance and then the other miscellaneous areas, you know, related injuries and damages. The amounts are recorded in FERC account 925 for property insurance -- I'm sorry, 924 for property insurance and 925 for injuries and damages.

In looking at the actual results for 2001, and I will refer you to my Exhibit DRB-2, which is attached to my surrebuttal testimony, our actual expense for North Dakota electric operations was $420,193, and before I go further, let me make one minor correction to the exhibit in the first column labeled "type of insurance." The third item from the bottom says aircraft coverage. Strike that and insert the word "subtotal."

MR. HOBERG: Did everyone get that? Okay.

THE WITNESS: As you'll note, the bulk of our insurance policies have expiration dates of around -- like October 31 there's a whole group there. We have another group where the policies expire at the end of the year, and those are renewed annually, and what we now have is that you will not see again increased expenses there for the year 2001 because the new costs have just taken over and we're just now incurring those new costs beginning either like November 1 or January 1, depending upon the expiration of the policies.

So just looking at the activity for insurance in 2001 really won't show you what the -- what the real picture is with respect to those costs. The annual premium that I've listed here is the current premium. You begin booking those costs the day that the new premium took over, and it's fairly clear that there is a substantial increase in insurance costs. We're booking those costs today, and we believe that it would be appropriate to include those cost levels in your determinations here because those are the costs that we are now incurring.

The last area was office supplies expenses. In -- and I guess I explained in my

surrebuttal what Mr. Diller did. He saw a fairly substantial increase in the office supply expense account, and in looking at that I looked at the items that made up that change, and they're not just one-time things.

For example, we already talked briefly about a corporate aircraft. This was an aircraft acquired in January 2001. You've never seen those costs for that aircraft in that account before. That's about $226,000 worth of change. There was also a reclassification of certain costs that used to be included in account 930. Those relate primarily to annual report preparation, annual report printing, interim report printing, items like that. That was simply moved from the 930 account and placed in the 921 account, and you can clearly see that there's a reduction in the 930 account for that.

There was also a reclassification of bank service fees. I believe those were primarily related to transfer agent fees for stock transactions, items like that. It's just that they had been booked in account 930 in the past. It was believed that they would be more appropriately accounted for in account 921, which is defined as

office supplies and expenses.

There were also some changes in account 921, the office supplies accounts, that relate to an increase in costs related to the ongoing use and maintenance of personal computers. We're using a lot more on-line capability today than we used to. There's added telephone fees, there's added fees for relays in there, and those, in my opinion, are ongoing costs and should be included here, and with that --

MR. HOBERG: Mr. Pearce, anything further questions?

MR. PEARCE: I have nothing else.

MR. HOBERG: Thank you. Mr. Binek, any further questions of Mr. Ball?

MR. BINEK: Yes. We will have some. Can we just take a couple minutes?

MR. HOBERG: Sure. Let's just take five minutes, just strictly five minutes.

(Recess taken.)

MR. HOBERG: We're back from a short recess, and, Mr. Binek, you had a few more questions of Mr. Ball?

MR. BINEK: Yes.

RECROSS-EXAMINATION

BY MR. BINEK:

Q. Mr. Ball, do you have a schedule to support what you've testified to here --

A. I can provide you --

Q. -- concerning pension, post-retirement benefits, insurance expenses that would show the 2001 expense as well as your 2002 expenses and the changes that you talked about with the office supplies?

A. I can provide that information as a late-filed exhibit.

MR. HOBERG: Did you want a late-filed exhibit?

MR. BINEK: Yes.

MR. HOBERG: Specifically what was that again?

MR. BINEK: Well, maybe Mr. Diller can ask specifically what it is he feels the Commission needs.

MR. HOBERG: Okay.

MR. DILLER: That will eliminate some of the talking back and forth. I think Don has a very good schedule here laying out miscellaneous general expenses, has every account, the 2001 costs, 2000.

The titles do need to be filled in for all of those.

THE WITNESS: Yes.

MR. DILLER: I think that would be a small thing to ask. Then the Commission can go through there and make its own mind up as to whether it wants to grant increases in the various accounts. That one, I think, would be very helpful.

And then on the pension and post-retirement benefits I understand that none of the other 926 costs -- the company won't have any knowledge of what 2002 costs will be for those other expenses within that account, and so I'm okay with what they've recommended here with Towers & Perrin. It's an actual cost. I don't need to see the Towers & Perrin -- is that the right name?

THE WITNESS: Yes.

MR. DILLER: -- report, and so to me that one we don't need any information on, but the office supplies, and the last one is insurance expense, and I think this one will be a real easy one for the company to provide, as well, and make a lot of sense to the Commissioners. You have 2002 annual premiums on your DRB-2. It would be a

simple matter to put in 2001 annual premiums and then total those up, just like you've done for 2002. The difference times North Dakota factor is the answer for insurance expense adjustment. I don't know what that 420,193 is on DRB-2, but then the Commission can see exactly which premiums went up, which ones didn't. It's a mathematical calculation from there.

COMMISSIONER WEFALD: Are you telling us that you're agreeing with the 3,883,000 for the MDU employee benefits? Are you agreeing with their number? Is that what you just said?

MR. DILLER: Based on what I've heard Don explain -- based on his explanation I understand -- I understand what they've done, and you can decide based on what they've -- I'm just saying that I don't need any more information on that.

COMMISSIONER WEFALD: All right. Thank you.

MR. DILLER: You can decide for yourself.

MR. HOBERG: Mr. Diller, on the office supplies one, was that DRB-2 -- or 1? I'm sorry.

MR. DILLER: It's DRB-2 on the insurance expense.

MR. HOBERG: Insurance, yeah, but what was

the office supply one?

MR. DILLER: That's just a schedule that Mr. Ball's been talking from the last five or ten minutes.

MR. HOBERG: Is that designated something DRB or --

THE WITNESS: There was no exhibit on that.

MR. HOBERG: Okay.

MR. DILLER: It's to be provided later.

MR. HOBERG: Okay.

MR. BINEK: I guess I do have -- I have a question.

MR. HOBERG: Just a minute, Mr. Binek. So we have two late-filed exhibits then, one on office supplies and one on insurance expense?

MR. DILLER: Right.

MR. HOBERG: Okay. So that would be late-filed Exhibit 17 and then 18. Is that satisfactory, Mr. Pearce?

MR. PEARCE: Yes.

MR. HOBERG: Okay. Thank you. Mr. Binek, please.

MR. BINEK: Yes. I just have a couple questions on the expenses related to the airplane.

Q. (MR. BINEK CONTINUING) How are the costs of the airplane determined for Montana-Dakota Utilities?

A. The corporate aircraft that was acquired in January of 2001 is owned by someone other than Montana-Dakota, and the costs that we're looking at represent Montana-Dakota's allocated share of the fixed costs of that airplane.

Q. Okay. And how is that share determined? Is it just a percentage -- a percentage of the cost of the airplane that's applied to Montana-Dakota Utilities, or is it based on the use that Montana-Dakota Utilities makes of the plane -- or I guess that's what I'm getting to. How do you determine what costs Montana-Dakota Utilities should cover?

A. The fixed costs will be allocated among the various companies based on a standard corporate overhead allocation process.

Q. So for the fixed cost of the airplane like depreciation?

A. Depreciation, maintenance, the capital cost.

Q. Okay. Doesn't matter how much -- how much use Montana-Dakota Utilities has of the airplane or

makes of the airplane. It's going to get a set amount -- it's going to get a percentage charge of the depreciation, maintenance and all of that irregardless of the use it makes of the plane?

A. That is correct. Now the actual use of the airplane is billed out on an hourly basis, based upon who actually uses the aircraft.

Q. What is Montana-Dakota Utilities' share of the fixed costs of the airplane?

A. I guess I don't know right off the top of my head.

Q. Could you provide that information, also?

A. Sure.

MR. HOBERG: Okay. Can we make that late-filed Exhibit 19 then?

Q. (MR. BINEK CONTINUING) Do you know -- excuse me. Do you know how much Montana-Dakota Utilities uses the airplane or can you provide that information?

A. I would have to provide it because I do not know.

Q. Okay. Would you also please provide that as a late-filed exhibit?

MR. HOBERG: Make that a part of 19, please.

Q. (MR. BINEK CONTINUING) And would you also show what the percentage use for Montana-Dakota Utilities is as compared to the other participants? Can you make that comparison, like does Montana-Dakota Utilities utilize the airplane ten percent of the time or --

A. And others 90 percent?

Q. Yeah.

A. Yeah. I think by definition if I say we use it 10 percent of the time, somebody else uses it 90 percent of the time.

Q. Well, can you break it out as to -- do you want it for each one?

MR. LEIN: You'd like take the number of hours it was in the air and how many of those were MDU's and how many of them belonged to somebody else.

THE WITNESS: If I just based it on hours' use, would that suffice?

MR. BINEK: Yes.

MR. HOBERG: Make that a part of 19 also, please.

MR. BINEK: Nothing further.

MR. HOBERG: Nothing further? Thank you, Mr. Binek. Mr. Fahn, anything further?

MR. FAHN: No thanks.

MR. HOBERG: Nothing? Any further Commission questions?

COMMISSIONER WEFALD: I do.

MR. HOBERG: Commissioner Wefald, please.

FURTHER EXAMINATION

BY COMMISSIONER WEFALD:

Q. I'm confused with some numbers here and maybe you can help me.

A. We hope so.

Q. Under the employee benefits -- pensions and benefits, on Mr. Diller's chart that's included in Exhibit 3 entitled administrative and general expenses.

MR. HOBERG: Do you still have that, Mr. Ball?

Q. (COMMISSIONER WEFALD CONTINUING) Is that the small copy?

A. I have the small version.

Q. I'm looking at the last two columns.

MR. HOBERG: Just a minute. He's getting it from Mr. Diller.

MR. DILLER: That's a little bigger, but not much.

Q. (COMMISSIONER WEFALD CONTINUING) I'm

looking at -- the number under 2001 is $2,415,000. Do you see that number?

A. Yes.

Q. And then I'm seeing the MDU number, which is $3,883,000?

A. Yes.

Q. All right. Now, you maybe can't comment on this, but "Mr. Ball argues for a small increase in pension costs of 116,000 for North Dakota operations based on information received from its actuary," and that's on page 15 of Mr. Diller's testimony?

A. Okay.

Q. What is he referring to there when he talks about the small increase in pension costs of 116,000 when this number to me looks like it's 1.4 million dollars difference in employee pensions and benefits? What am I missing here?

A. I know part of it would be the costs related to SISP.

Q. Okay.

A. About 680,000.

Q. But that cost has been defined in another paragraph?

A. That would be about $680,000.

Q. $680,000. So then what's the other 1.4 million? What's the other part of it?

A. What he's looking at is the 2,415,000 --

Q. Yes.

A. -- for 2001. He's included a 285,000 pension adjustment, $99,000 post-retirement benefit adjustment, and 1,084,000 for SISP, and another thing -- I believe these are total company numbers, not just North Dakota numbers.

Q. The administrative and general expense numbers are total company numbers?

A. Yes. And the million-84, for example, that he included I believe he extrapolated the $680,000 North Dakota number upward to a total company number.

Q. All right. Okay. That helps me understand that. Thank you. And then on your salaries line item where there was the jump -- I need that same chart.

A. Okay.

Q. On the salaries line item where it went from 4,181,000 in year 2000 to 5,024,000 in 2001, those are again total company numbers?

A. Yes, they are.

Q. When were those -- what month were those

salary adjustments given?

A. The salary adjustments typically occur at the first of the year, January 1.

Q. Did they occur last January 1 --

A. Yes.

Q. -- of 2001?

A. Yes. And January 1 of 2000.

Q. And January 1 of 2000?

A. Correct.

COMMISSIONER WEFALD: All right. Thank you.

MR. HOBERG: Thank you, Commissioner Wefald. Commissioner Clark, anything further.

COMMISSIONER CLARK: I do. It's maybe just a followup to Commissioner Wefald.

EXAMINATION

BY COMMISSIONER CLARK:

Q. The jump between 2000, 2001 on that salary line item, I noticed in your direct testimony you had mentioned 4.32 percent increase January 1, 2001, and there must have been one on January 1, 2000, as well, and then there's a three-and-a-half percent on '02, which all certainly seem very reasonable, but I'm wondering then why the -- looks like about 20 percent increase in that one year,

from 2000 to 2001, whereas most of the others on Mr. Diller's spreadsheet seem to be percentagewise much less. Was there some reason behind that that drove that particular year?

A. The overall -- you know, the percentage increases that you quoted would represent the percent change in overall labor costs, but from -- from year to year we do see differences in the amount of labor that is booked in, for example, operation and maintenance expense accounts versus capitalized as part of capital projects. So it's difficult to see a direct relationship between the overall percent and then the amount that might go to any particular account.

Q. Okay.

A. And I guess that's -- a long way of saying that is I don't know how to explain that difference adequately at this point.

Q. And the salary line item would be kind of inclusive of all those types of things, like maybe you had some reason you needed to hire a lot of temporary employees for some project or something. It could be any one of a number of things; right?

A. That is correct.

Q. Okay. And then this is just more kind of

out of curiosity. The regulatory commission line that Mr. Diller has on his sheet there, what type of things does that include?

A. That includes any expenses directly related to matters, to docketed items before a regulatory commission.

Q. It doesn't mean to imply that when Commissioner Hagen left, he was costing MDU 158,000, does it?

A. No, not at all. And this would represent, you know, four states, too.

Q. Okay. That does seem to be highly variable, though, doesn't it?

A. Yes, it does.

COMMISSIONER CLARK: Thanks. That one's just out of curiosity.

MR. HOBERG: Thank you, Commissioner Clark. Anything further then of Mr. Ball? Anything further? Thank you, Mr. Ball.

THE WITNESS: Thank you.

MR. PEARCE: Could we have about maybe two minutes to confer briefly? I might be able to clarify something else.

MR. HOBERG: Sure. Let's take a recess in place here for a couple minutes.

(Recess taken.)

MR. PEARCE: Okay. We're back from a short recess, and before -- well, we're maybe not done with Mr. Ball yet.

MR. PEARCE: One final, final question, if I may, Mr. Ball.

REDIRECT EXAMINATION

BY MR. PEARCE:

Q. Don, just before our little break here you were responding to a question from Commissioner Clark, and I think -- would you be willing to put together some additional data filed as a late exhibit to clarify the matter of what that increase was that you were talking about?

A. Yes, I would. We were discussing the approximate 20 percent change in the account 920, administrative salaries, and I was not adequately able to explain that. It's certainly not a 20 percent increase in salaries for our employees, but I would -- I would offer to explain more fully why the change occurred in that particular area.

MR. HOBERG: Okay. Late-filed Exhibit 20 then?

MR. PEARCE: No. 20, right.

MR. HOBERG: Okay.

MR. PEARCE: And that's all I have.

MR. HOBERG: Anything further then of Mr. Ball?

MR. BINEK: No.

MR. HOBERG: Thank you, Mr. Ball. I'll just note for the record that his direct testimony is Exhibit 6, Docket No. 46, and surrebuttal, Exhibit 7, Docket No. 57.

COMMISSIONER WEFALD: In that exhibit would it be possible to put the dates that the changes occurred?

THE WITNESS: Sure.

COMMISSIONER WEFALD: If it wasn't salary-related, you know, like on July 1, if you could indicate the dates when the other changes occurred.

THE WITNESS: Sure.

COMMISSIONER WEFALD: Thank you.

MR. HOBERG: Thank you, Mr. Ball. Mr. Pearce, your last witness, I believe.

MR. PEARCE: Last witness will be Rita Mulkern.

MR. HOBERG: Please be seated. Ms. Mulkern, I think you heard the admonition I gave earlier in regard to perjury; is that correct?

THE WITNESS: Yes, I did.

(Witness sworn.)

MR. HOBERG: Thank you. Mr. Pearce, please.

RITA A. MULKERN,

having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. PEARCE:

Q. Would you please state your name and business address?

A. My name is Rita A. Mulkern, and my business address is 400 North Fourth Street, Bismarck, North Dakota.

Q. And you're employed by Montana-Dakota Utilities Company, are you not?

A. I'm employed by Montana-Dakota Utilities Company as the regulatory analysis manager.

Q. And have you previously filed direct testimony that's been made an exhibit in this proceeding?

A. Yes, I have.

Q. What is the purpose of your testimony today?

A. The purpose of my testimony is to quantify the adjustments that -- to the North Dakota

Commission staff's rebuttal testimony that was discussed earlier by the previous witnesses and the effects of those adjustments on the North Dakota electric revenue requirements. I am sponsoring Exhibit -- and these were part of Exhibit 7 -- RAM-3 and Exhibit RAM-4, which quantify the effect of these adjustments to the North Dakota electric revenue requirement.

MR. HOBERG: Are those part of your surrebuttal?

THE WITNESS: Yes, they are.

Q. (MR. PEARCE CONTINUING) Would you explain the first sheet, RAM-3, please?

A. Yes. The exhibit summarizes the adjustments to the income statement that were supported by the other witnesses. Each of the adjustments was developed either on a total company basis and allocated to North Dakota or directly assigned to North Dakota.

Q. And what does the next sheet, RAM-4, show?

A. RAM-4 is a summary showing the income statement and rate of return for 2001, the staff adjustments and the staff's position, Montana-Dakota's adjustments from RAM-3, and then the resulting income statement, rate of return and

revenue deficiency calculation. Page two shows the same information for the rate base statement.

Q. Why does your exhibit show a staff revenue excess of 7.135 million dollars rather than the 7.327 million dollars in Mr. Diller's rebuttal testimony?

A. The difference is in the income taxes. And the interest expense that's deductible for calculating income taxes should have been restated to reflect Mr. King's proposed debt costs. With the lower debt cost, the interest deduction is lower and results in higher income taxes. So the income tax adjustment has been restated to reflect the higher level of income taxes.

Q. What effect do the adjustments have on the revenue requirement?

A. As shown on page one of RAM-4 under the column labeled "adjusted," Montana-Dakota's adjusted return on equity is 11.091 percent, which is below the 12.75 percent return on equity required. Montana-Dakota will experience a revenue deficiency of $1,727,000 at a 12.75 percent return on equity based on the adjusted calendar year 2001 results.

Q. Does that complete your testimony?

A. Yes, it.

MR. PEARCE: I have nothing further.

MR. HOBERG: Thank you, Mr. Pearce. Mr. Binek, did you have any questions of Ms. Mulkern?

MR. BINEK: Yes.

CROSS-EXAMINATION

BY MR. BINEK:

Q. The purpose of your testimony is to quantify the adjustments that MDU has made and to determine the revenue excess or revenue deficiency based on all of Montana-Dakota Utilities' calculations and using Montana-Dakota Utilities' proposed return on equity?

A. That's correct.

Q. Okay. Are you one of MDU's key employees?

A. That depends on what -- how you define "key employee."

Q. Well, we realize you're a key employee, but for the purpose of answering my question are you one of the key employees who receives this SISP benefit?

A. I am not a part of the SISP program.

Q. Okay. So you fall into one of the lower-income category employees?

A. I guess so.

MR. BINEK: Okay. Thank you. I have no further questions.

MR. HOBERG: Thank you, Mr. Binek. Mr. Fahn, do you have any questions?

MR. FAHN: No, I don't think so.

MR. HOBERG: No questions. Thank you. Commissioner Wefald, please.

EXAMINATION

BY COMMISSIONER WEFALD:

Q. What's the income tax number?

A. The current income tax number reflects the level of federal and state income taxes in the cost of service.

Q. Rita, I'm not an accountant, so I need a little help with the numbers.

A. Okay.

Q. So when there's a number with a parenthesis around it, is that a positive or a negative number?

A. That is a negative number. It reduces -- if it's an adjustment, it reduces the amount of the initial number.

Q. So 2001 test year, I'm looking at RAM-3, page one of one. Then explain to me what you did with the Pool sales.

A. The Pool sales number -- the total company number that Mr. Blinsky came up with was -- and this was based on the 6.4-million Pool number. We compared that to the Pool number that was in Mr. Diller's initial testimony and took the difference between the 15.1, I believe, number Mr. Diller had --

MR. DILLER: Pretty close.

THE WITNESS: -- and the 6.4 million and took that times approximately 66 percent, which is North Dakota's share of that total company amount, and so basically what this 5.754 million dollars difference is between the 6.4 million total company Pool sales that we believe is the correct level and the level that Mr. Diller had in his position.

Q. (COMMISSIONER WEFALD CONTINUING) So this isn't the actual amount of Pool sales that were received in 2001 from different sources?

A. That's correct.

Q. This is an adjustment that you're making to show if this is used as the test year for -- to determine future income needs you're making an adjustment in that actual Pool sales number from 2001?

A. That's correct.

Q. Okay. All right. And then you're adding $1,670,000 of costs to the staff rebuttal case?

A. That's right. We're adding that much to the expense side.

Q. All of these different adjustments that Mr. Ball was just up discussing?

A. That's right.

Q. All right. I just wanted to make sure I understand this particular document. Okay. And then you're subtracting, though, an amount for income taxes?

A. Yes. We're saying because we're going to have less revenue and higher expenses, we're going to pay less income taxes. So we're reducing the income tax number.

Q. I see. Okay. And then -- so then your net adjustment is $4,346,000?

A. That's correct.

Q. And you're using those figures then on the next page and substituting them in the appropriate prices. All right. I'm fine.

A. Yes. That's right.

COMMISSIONER WEFALD: Thank you.

MR. HOBERG: Thank you, Commissioner Wefald. Commissioner Clark, any questions of Ms.

Mulkern?

COMMISSIONER CLARK: I have none. Thank you.

MR. HOBERG: Thank you. Anything further then of Ms. Mulkern? No further questions? Thank you, Ms. Mulkern.

MR. PEARCE: At this time I would offer Exhibits 6 and 7, which are the two books containing the original testimony and the surrebuttal testimony of the MDU witnesses.

MR. HOBERG: Okay. Any objection? Exhibits 6 and 7 are admitted.

(Off the record.)

MR. HOBERG: Okay. We're back on the record. Commissioner Wefald, you had another question of Ms. Mulkern?

COMMISSIONER WEFALD: I do.

Q. (COMMISSIONER WEFALD CONTINUING) Under the -- under the sales for resale line -- page one of two, exhibit -- it's actually under RAM-4 in the surrebuttal testimony of MDU, that shows an adjusted number of $11,395,000 for sales for resale; is that correct?

A. That's correct.

Q. That's the number that MDU is projecting

with adjustments?

A. That's right.

Q. Well, how is that -- how much different is that from the number that Mr. Diller was proposing for the three-year average?

A. Well, this -- the 11,395,000 first, it represents the revenue received from the Pool sales. In this exhibit the cost associated with that Pool sales is in the fuel and purchase power line. So you can't directly look at this and see the same -- and see the Pool sales margin, which is what Mr. Diller refers to using what Mr. Ball referred to as the margin, the revenue less the expense.

Q. All right. So where's your expense number on this?

A. The expense for it is included in the fuel and purchased power line, the first line under operating expenses.

Q. The 31,762,000?

A. It's included in that number. It's not --

COMMISSIONER WEFALD: Okay. All right. Thank you. I understand now. Thank you.

MR. HOBERG: Thank you, Commissioner Wefald. Anything further then of Ms. Mulkern?

Thank you, Ms. Mulkern. Anything further of Ms. Mulkern?

MR. PEARCE: No.

MR. HOBERG: Thank you. Okay. Mr. Pearce, you've completed your presentation?

MR. PEARCE: Yes.

MR. HOBERG: Anything in rebuttal, Mr. Binek?

MR. BINEK: No.

MR. HOBERG: Nothing in rebuttal? Okay. Just a reminder then, we have Exhibits 1 through 20, of which 16, 17, 18, 19 and 20 will be late-filed exhibits.

MR. PEARCE: Do we have a time frame?

MR. HOBERG: We're going to talk about time frames in a minute here, but anything else to bring to the attention of the Commission at this time in regard to evidence outside of the late-filed exhibits? Mr. Pearce?

MR. PEARCE: No. Just procedurally -- I don't know if it's appropriate to do it yet, but at this point since the evidence is all in, we'd basically by way of motion renew our request to dismiss the case on the grounds that the Commission's case has not been proven by a

preponderance of the evidence.

MR. HOBERG: Thank you, Mr. Pearce. Response, Mr. Binek?

MR. BINEK: We'll obviously resist that motion. We feel we have set forth a sufficient case for the Commission to consider.

MR. HOBERG: Okay. You don't have any further evidence today, Mr. Binek?

MR. BINEK: No.

MR. HOBERG: Okay. Let's talk a little bit about time frames then. I'm assuming the Commission will want proposed findings of facts, conclusions of law and order from each of the parties, staff and MDU.

COMMISSIONER WEFALD: That would be helpful.

COMMISSIONER CLARK: I'm sure Illona, if she were here, would be shaking her head vigorously. Yes.

COMMISSIONER WEFALD: And Pat.

COMMISSIONER CLARK: But Pat is.

MR. BINEK: Settle down back there.

MR. HOBERG: So I imagine you want the late-filed exhibits before that. So can you have those in what -- how long?

MR. PEARCE: Next Monday, a week.

MR. HOBERG: Okay. A week?

MR. PEARCE: Next Tuesday.

MR. HOBERG: One week.

MR. BINEK: I guess another question is how long will it take for the transcript to be prepared.

MR. HOBERG: Right. You want that before the proposed findings.

THE REPORTER: Couple, three weeks.

MR. HOBERG: Three weeks. Okay. So the late-filed exhibits will be filed with the Commission a week from today. The transcript should be ready in about two to three weeks. Proposed findings, et cetera, what, two weeks after the transcript? Is that enough time?

MR. BINEK: Let me see what's happening.

MR. PEARCE: That's fine for me.

COMMISSIONER WEFALD: I hope that'll be okay. We want to keep the case moving along.

MR. BINEK: Well, I realize that, but we've got things coming up, too, that I don't have anybody to share with.

COMMISSIONER WEFALD: You could give that job to Jerry.

MR. BINEK: Yes.

COMMISSIONER CLARK: In that case --

MR. HOBERG: Okay. Let's keep it together. She's recording all this here now.

MR. BINEK: You got that "yes"?

MR. HOBERG: In other words, five weeks from today; is that --

MR. BINEK: I think that probably works.

MR. HOBERG: So the late-filed exhibits in a week, the transcript in three weeks, and findings of facts, et cetera, five weeks from today.

MR. FAHN: Electronic versions, as well.

MR. HOBERG: Electronic version?

MR. FAHN: Yes.

MR. HOBERG: Okay.

MR. BINEK: That works.

MR. HOBERG: Anything else to bring to the attention of the Commission before I ask for closing comments from the Commissioners? Mr. Binek?

MR. BINEK: No.

MR. HOBERG: Mr. Pearce?

MR. PEARCE: No.

MR. HOBERG: Anything else we need to discuss? It's satisfactory? Okay. And in reverse

order, starting with Commissioner Clark, any closing comments?

COMMISSIONER CLARK: Reverse order? I would just say thank you to both sides. Both MDU and staff did a very admirable job in presenting a case and building a very good record for the Commission to work with, and I thank them for that and for a good hearing.

MR. HOBERG: Thank you, Commissioner Clark. Commissioner Wefald, please.

COMMISSIONER WEFALD: There's a daunting amount of material here that we've been presented with over the last few days and many interesting numbers to go over, and I echo Commissioner Clark's comments about the good presentation from both sides. It takes a great deal of work to prepare all of this, and we understand the importance both to the ratepayers of MDU and to the company for this particular case. So I know we'll all be looking carefully at what additional information is filed in making a careful examination of this whole case. Thank you.

MR. HOBERG: Thank you, Commissioner Wefald. Then it's approximately three o'clock, and we'll close this hearing. Thank you very much,

everyone.

(Concluded at 2:57 p.m., Tuesday, the 26th day of February, 2002.)

CERTIFICATE OF COURT REPORTER

I, Stephanie A. Smith, a Registered Professional Reporter,

DO HEREBY CERTIFY that I recorded in shorthand the foregoing proceedings had and made of record at the time and place hereinbefore indicated.

I DO HEREBY FURTHER CERTIFY that the foregoing typewritten pages contain an accurate transcript of my shorthand notes then and there taken.

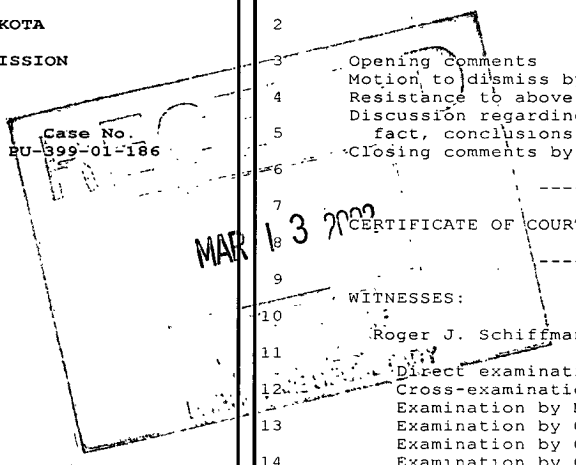
Dated at Bismarck, North Dakota, this 13th day of March, 2002.

Stephanie A. Smith
Registered Professional Reporter

STATE OF NORTH DAKOTA

PUBLIC SERVICE COMMISSION

Montana-Dakota Utilities Co. : Case No.
2000 Electric Operations : PU-399-01-186
Annual Report :



TRANSCRIPT OF

HEARING

VOLUME II

Taken At
State Capitol
Public Service Commission
Bismarck, North Dakota
February 26, 2002

BEFORE ALLEN C. HOBERG
-- PROCEDURAL HEARING OFFICER --

C O N T E N T S

	Page No.
Opening comments	271
Motion to dismiss by Mr. Pearce	485
Resistance to above motion by Mr. Binek	486
Discussion regarding proposed findings of fact, conclusions of law and order	486
Closing comments by the Commissioners	489
CERTIFICATE OF COURT REPORTER	491

WITNESSES:

Roger J. Schiffman

Direct examination by Mr. Pearce	272
Cross-examination by Mr. Binek	306
Examination by Mr. Fahn	318
Examination by Commissioner Wefald	323
Examination by Commissioner Reinbold	337
Examination by Commissioner Clark	340
Redirect examination by Mr. Pearce	341
Recross-examination by Mr. Binek	343
Redirect examination by Mr. Pearce	345

Terry L. Blinsky

Direct examination by Mr. Pearce	346
Cross-examination by Mr. Binek	358
Examination by Commissioner Wefald	364
Redirect examination by Mr. Pearce	365

Douglass A. Mahowald

Direct examination by Mr. Pearce	369
Cross-examination by Mr. Binek	375
Examination by Mr. Fahn	382
Examination by Commissioner Wefald	384
Examination by Commissioner Reinbold	391
Examination by Commissioner Clark	392
Further examination by Commissioner Wefald	394
Redirect examination by Mr. Pearce	394
Recross-examination by Mr. Binek	396

A P P E A R A N C E S

COMMISSIONERS PRESENT:

COMMISSIONER SUSAN E. WEFALD
COMMISSIONER LEO M. REINBOLD
COMMISSIONER TONY CLARK

MR. WILLIAM W. BINEK
Public Service Commission
State Capitol
600 East Boulevard Avenue
Bismarck, North Dakota 58505-0480

FOR THE COMMISSION STAFF.

MR. WILLIAM P. PEARCE of
Pearce & Durick
Attorneys at Law
314 East Thayer Avenue
P.O. Box 400
Bismarck, North Dakota 58502-0400

-- and --

MR. DOUGLAS W. SCHULZ of
Montana-Dakota Utilities Co.
Attorney at Law
400 North Fourth Street
Bismarck, North Dakota 58502-4092

FOR MONTANA-DAKOTA
UTILITIES CO.

MR. PATRICK FAHN
Public Service Commission
State Capitol
600 East Boulevard Avenue
Bismarck, North Dakota 58505-0480

COMMISSION ADVISOR.

C O N T E N T S (Continued)

Douglass A. Mahowald (Continued)

Further examination by Commissioner Wefald	400

Richard A. Espeland

Direct examination by Mr. Pearce	407
Cross-examination by Mr. Binek	417
Examination by Mr. Fahn	425
Examination by Commissioner Clark	426
Examination by Commissioner Wefald	428
Recross-examination by Mr. Binek	429

Donald R. Ball

Direct examination by Mr. Pearce	430
Cross-examination by Mr. Binek	442
Examination by Commissioner Wefald	446
Examination by Commissioner Clark	449
Redirect examination by Mr. Pearce	452
Recross-examination by Mr. Binek	460
Further examination by Commissioner Wefald	468
Further examination by Commissioner Clark	471
Redirect examination by Mr. Pearce	474

Rita A. Mulkern

Direct examination by Mr. Pearce	475
Cross-examination by Mr. Binek	479
Examination by Commissioner Wefald	480

EXHIBITS:

No.	Description	M	O	R
15	Table 1, Completed and Sited New Power Plants in MAPP	271	302	302

271

(The following proceedings were had and made of record herein, commencing at 8:33 a.m., Tuesday, the 26th day of February, 2002:)

(Exhibit 15 was marked for identification.)

MR. HOBERG: It's February 26th in the year 2002. This is the second day in the hearing of the matter of the North Dakota Public Service Commission Staff complaint regarding Montana-Dakota Utility Company and its year 2000 electric operations annual report.

Yesterday we completed the presentation of the state's case, the PSC staff's case, and we were on the -- we completed the second witness of MDU's case, about to take the third witness.

Are there any preliminary matters we need to discuss before we go into the evidentiary portion of the hearing again? Commissioners, any preliminary matters that you have?

COMMISSIONER REINBOLD: Nothing.

MR. HOBERG: Mr. Binek?

MR. BINEK: Nothing I'm aware of.

MR. HOBERG: Mr. Pearce?

MR. PEARCE: No.

MR. HOBERG: Would you call your next

272

witness, please.

MR. PEARCE: I call Roger Joseph Schiffman.

MR. HOBERG: Okay. For the benefit of Mr. Schiffman and all the other witnesses who will be testifying today, I'll give the admonition I'm required to give by law, and that is that the maximum penalty for perjury in this state is a Class C Felony, punishable by a maximum 5 years imprisonment, $5,000 fine, or both.

(Witness sworn.)

MR. HOBERG: Thank you. Mr. Pearce, please.

ROGER J. SCHIFFMAN,

having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. PEARCE:

Q. Would you please state your name, your business address and your position?

A. Yes. My name is Roger Joseph Schiffman. My business address is 3100 Zinfandel Drive, Suite 600, Rancho Cordova, California, 95760. I'm a principal consultant in the Energy and Water Practice of Navigant Consulting, Incorporated.

273

Q. Would you please describe NCI's business and your role and responsibilities?

A. NCI's a national management consulting firm specializing in the energy industry. The Energy and Water Practice provides services to all segments of the restructured energy industry and is a leading provider of planning and engineering services to the water industry.

MR. HOBERG: Excuse me, Mr. Schiffman. Could you maybe move the mike in front of you a little bit? I'm having a little trouble hearing you over here.

THE WITNESS: Sure. Our existing energy sector client base includes most of the largest utilities in the United States, most of the independent power producers, and a number of municipal utilities. NCI is active in all North American electricity markets.

Within NCI, I manage a group that focuses on electricity market assessment and analysis. My first exhibit lists my detailed experience. One of the key services provided by my group centers on wholesale electricity market price forecasts derived using detailed computer simulation models.

Within the last four years I have prepared

274

forecasts of electricity market prices in all North American regional markets, including the Mid-Continent Area Power Pool. These forecasts have been used by consulting clients for several purposes, including supply portfolio planning and procurement, contract evaluation, asset valuation, and feasibility analysis.

A number of the forecasts have also been used to support revenue projections underlying project financing deals for new merchant power plants.

Within the last year I have also been heavily involved in NCI's engagement with the California Department of Water Resources in that agency's efforts to structure a portfolio of power supply contracts and to obtain a targeted 13 billion dollars in new financing. Preparation of detailed forecasts requires constant attention to supply and demand fundamentals in each of the North American market regions, in addition to careful evaluation of regulatory and market developments.

Q. Would you please describe your professional experience before joining NCI?

A. From 1998 through March 2000 I was employed as a senior consultant by Henwood Energy

275

Services. My duties at HESI were similar to those at NCI and included electricity market assessment, electricity market price forecasting, generating assets valuation, gathering market analysis and intelligence, and completing a variety of financial and cost evaluation projects for consulting clients.

From 1990 through '98 I was employed as a financial analyst at the Public Service Commission of Wisconsin. My job responsibilities included policy development and analysis, economic and cost analysis, evaluation of competitively bid power supply proposals, integrated resource planning, advising the Wisconsin Commission on rate of return and capital structure, and conducting specialized studies concerning public utility finance, economics and regulatory policy.

Q. Would you please describe your educational background?

A. I earned a Bachelor of business administration in finance, investment and banking from the University of Wisconsin-Madison in 1988. From 1988 through 1990 I engaged in graduate studies in finance also at the University of Wisconsin-Madison.

276

Q. And on whose behalf are you testifying this morning?

A. I am testifying on behalf of Montana-Dakota Utilities, a division of MDU Resources Group, Incorporated.

Q. What is the purpose of your testimony?

A. I will address wholesale bulk power market conditions over the past several years as well as the outlook for 2000 and more specifically the impact of those conditions on the level and profitability of Montana-Dakota's off-system sales. While many of these conditions are common across the United States, I will also address the conditions in the market that Montana-Dakota sells into, which is the MAPP region.

Q. And what are your conclusions?

A. Staff witness, Mike Diller, proposes that the level of off-system sales margins experienced in 2000 be reflected in rates that will be in effect in 2002 and beyond. However, 2001 was hardly a normal or average year in any respect, and conditions in both natural gas and electricity wholesale markets changed in very significant ways throughout the year. As in all competitive markets, the fundamental demand and supply

277

conditions explained the 2000 to 2001 experience and define the outlook for 2002.

Q. What are the primary determining factors of Montana-Dakota's off-system sales revenues?

A. In simple terms, Montana-Dakota's margins from off-system sales are determined by the level or quantity of sales and the profit margin, which is revenue minus cost, that it's able to obtain from each sale.

The opportunity to make off-system sales is created by the gap between the price of purchases and sales opportunities in the spot market in Montana-Dakota's cost of powering its own generating units, which are primarily coal fired.

Spot market prices in the MAPP region where Montana-Dakota operates can vary substantially with the price of natural gas and with the fuel efficiency of units on the margin. For Montana-Dakota to make a profitable sale the gap, or profit margin, must be sufficient to offset incremental operating costs and to provide adequate incentive to increase production levels and to compensate for any risk associated with the transaction. Thus, the profit margin is the primary determinant of the quantity of off-system

278

sales that Montana-Dakota is able to make in a given period.

The margins that Montana-Dakota is able to obtain are determined by the size of this fuel cost differential as well as fundamental demand and supply conditions that affect the markets that Montana-Dakota is able to reach. Demand and supply conditions are important because the so-called spark spread, the difference between wholesale electricity and natural gas prices, will vary in response to changing demand and supply conditions.

Q. What markets does Montana-Dakota sell into?

A. Montana-Dakota sells primarily into Upper Midwest wholesale markets in the MAPP, MAIN and Southwest Power Pool regions. The northern MAPP region where Montana-Dakota's generators are located can be characterized as a relatively low-cost market. Trade patterns in the Upper Midwest are such that energy tends to flow from the northern and western MAPP region toward higher cost markets in eastern MAPP, MAIN and SPP.

MAPP power markets are sometimes impacted by transmission constraints which limit export opportunities, particularly the amount of energy

279

that can flow simultaneously in the easterly direction toward the Wisconsin Upper Michigan Systems subregion of MAIN, and in the southerly direction toward the St. Louis area.

Q. What factors do you consider important when comparing wholesale power market conditions from year to year?

A. Wholesale power markets operate in a competitive landscape where numerous influences combine to create changes in the market environment. Weather, fuel prices, economic growth, generation mix, and the supply demand balance all play important roles in defining trends in the broader wholesale power markets.

Indeed, these are all important quantitative inputs in the complex computer models many companies use to forecast power pricing and are critical factors in real-time market operations.

Q. How have fundamental market conditions evolved in North America power markets over recent years?

A. U.S. wholesale power markets have undergone significant evolution in recent years in response to deregulation policies implemented in a

280

number of states and in response to continued efforts by the Federal Energy Regulatory Commission to establish fair and open transmission access. The extent of market reforms has varied by region.

During this period of transition toward competitive markets, wholesale electricity prices have exhibited considerable volatility. The levels of price volatility have also varied by region and have sometimes resulted primarily from rapidly changing supply and demand conditions.

In some circumstances the levels of volatility witnessed in regional markets have also been due to the temporal exercise of market power by suppliers or due to institutional inefficiencies in organizations and market rules meant to regulate market operations in a particular region.

Q. Would you please expand on the experience of price volatility in the Midwest region?

A. During the summer of 1998 and 1999 significant price volatility was first seen in Midwest power markets. Several fundamental supply conditions contributed to the price volatility seen in that period. In the early to mid 1990s development of new generating supply had lagged in many Midwest markets as the future role of

281

investor-owned utilities in the generation market became uncertain with the advance of deregulation.

With uncertainty over which entities would be responsible for serving native load customers and significant risks of stranded cost exposure in the face of declining demand levels, utility companies and their investors became reluctant to make large investments in new capital-intensive power plants. As such, demand growth during that period outpaced growth in the supply base in many regions.

Beginning in late 1997, several nuclear plants in the Upper Midwest region faced extended outages to repair cracks that surfaced in steam generators. At the same time the Nuclear Energy Regulatory Commission began a rigorous review of its safety regulations governing nuclear plant operation.

The combination of physical repairs and more stringent safety regulations resulted in extended outages of an unprecedented amount of Midwest nuclear capacity during the summer of 1998 and 1999.

Those supply conditions were further exacerbated when similar concerns with safety

282

compliance forced several nuclear plants in Ontario, Canada, into extended outage. That net result was critical supply shortages in the Upper Midwest during that period with over 7,000 megawatts of nuclear capacity out of service in the Midwest and an additional 5,000 megawatts of nuclear capacity out of service in Ontario.

Those outages led to significant price volatility during the summer months. At their peak, reported wholesale power prices reached $1250 per megawatt-hour in July 1998 and $1426 per megawatt-hour in July 1999 in the MAPP region.

With return to service of the nuclear capacity in the MAIN and ECAR regions and additional generating supply coming into Midwest prices -- or into Midwest markets, price volatility returned to more normal levels during 2000.

Q. What fundamental market conditions occurred during 2001 that indicate it was an abnormal year?

A. As discussed by Mr. Blinsky, Mr. Wilkinson and Mr. Gaske, the key factor underlying electricity market dynamics in 2001 concerned the unprecedented increase in natural gas price witnessed during the last quarter of 2000 and the

283

first two quarters of 2001. During that period, high natural gas prices resulted in significantly increased spot market electricity prices throughout the United States. That pattern is illustrated in Mr. Wilkinson's Exhibit PLW-1.

Within the MAPP region natural gas fuel generators have been playing an increasingly prominent role in establishing spot market clearing prices. This pattern occurs because a significant portion of new entry in MAPP has been fueled by natural gas, and those new resources operate as intermediate and peaking resources. Gas-fired generators in MAPP now occupy an expanding segment of the supply curve that represent the marginal resource with increasing frequency.

The correlation between MAPP electricity and natural gas prices has been increasing in recent years due to this factor and will continue to strengthen as gas-fired resources represent an expanding portion of generating supply.

In addition to the run-up in natural gas prices seen in late 2000 and the first half of 2001, the supply crisis in western U.S. power markets, and particularly in California, also played an important role in electricity price

284

discovery in other U.S. markets.

While the power systems in the eastern and midwest U.S. operate asynchronously to those in the western U.S., the level of sustained abnormal prices seen in California had an impact on price discovery in all domestic power markets. The extent of the crisis that arose in California was beyond anyone's expectations and drew significant attention throughout the world.

From a risk management perspective, market participants in all market regions were required to reevaluate their hedging strategies in response to the magnitude of prices and reliability difficulties seen in California. The financial distress faced by the California investor-owned utilities were also factors that far exceeded prior expectations.

The supply crisis reached a level so serious that the State of California was required to step in and assume the role of spot market broker and financier. Absent that step, frequent and sustained blackout periods would have occurred during the first half of 2001 and perhaps throughout the year. A crisis of that magnitude was clearly an abnormal event.

285

Q. What steps did energy market participants take in response to increased natural gas price levels and in response to market uncertainties created by the supply crisis in California?

A. Market participants that faced significant price risk in electricity and natural gas spot markets early in 2001 took actions to mitigate a portion of that risk on a going-forward basis. In the short-term, risk mitigation measures involved entering into short-term or intermediate-term bilateral contracts designed to create improved price certainty and to hedge against extreme upside price volatility. This type of hedging activity was a rational response to extreme uncertainties in both natural gas and electricity markets.

Because of the level of volatility seen in both natural gas and power markets during late 2000 and early 2001, the risk premiums underlying such hedging arrangements were quite high by historical standards.

A concrete example of the hedging activity I am describing is illustrated in Mr. Blinsky's surrebuttal testimony and has direct relevance to projecting the margin on Montana-Dakota's off-system sales.

286

As described in Mr. Blinsky's testimony, Montana-Dakota entered into a sales agreement in March of 2001 which locked in summer electricity prices and sales revenue based on the prices of futures contracts in place at that time. When spot market natural gas and electricity prices declined during the last half of the year, Montana-Dakota enjoyed a higher profit margin based on its contracting position than it would have earned selling power directly at spot market prize.

Under current market conditions contracting opportunities such as that enjoyed by Montana-Dakota are no longer available because the premium between contract and spot market prices is substantially smaller.

Q. What impact have these fundamental energy market conditions had on market prices in late 2000 and 2001?

A. The price spikes we observed recently in the winter of 2000-2001 were clearly an anomaly. In fact, winter peak wholesale power prices have historically varied between 25 and $35 per megawatt-hour and had only ever reached around $40 per megawatt-hour in the winter of 1999-2000.

With higher natural gas prices and greater

287

market uncertainty, wholesale power prices in MAPP reached $142 per megawatt-hour during the on-peak period of December 12, 2000. This level was, in fact, higher than the previous and following summer peaks of $120 per megawatt-hour reached in August 2000 and August 2001, respectively.

Off-peak pricing also increased during the winter of 2000 to 2001, reaching slightly more than $47 per megawatt-hour for the first time in recent history. Normally, off-peak pricing in MAPP runs between 10 and $15 per megawatt-hour.

Since natural gas resources are really marginal in the MAPP region during off-peak periods, this level of off-peak prices suggests significant risk premiums being priced into wholesale electricity prices. Exhibit RJS-2 illustrates daily spot market electricity prices in the MAPP region for the period beginning January 1996 through February 2002.

Q. How have the electricity price levels seen in late 2000 and the first half of 2001 impacted the margin earned on off-system sales by Montana-Dakota during that period?

A. With continued coal price stability, the run-up in natural gas prices and risk premiums

288

priced into short-term and intermediate-term bilateral transactions resulted in abnormally high profit margins for coal-fired generators throughout the first months of 2001.

That pattern can be seen in Exhibit RJS-3, where daily coal-based and natural gas-based spark spreads were plotted for the period January 1996 through February 2002. Exhibit RJS-4 plots the spark spread data on a monthly basis for the same period, while Exhibit RJS-5 plots the same monthly spark spread data for just the period January 2000 through February 2002.

The spark spread represents the margin above fuel costs achievable by operation of a given power plant. In estimating the spark spread, we have assumed market heat rates of 7,000 Btus per kilowatt-hour for gas-fired generation and 12,000 Btus per kilowatt-hour for coal-fired generators.

The coal-based spark spread measure provides a representation of the margin that Montana-Dakota could be expected to earn on off-system sales but does not net out additional costs attributed to nonfuel operations and maintenance. As shown in Exhibit RJS-4 and Exhibit RJS-5, the coal-based spark spread departs

289

significantly from the natural gas-based spark spread during the period of high natural gas prices experienced in the fourth quarter of 2000 and in the first half of 2001.

During the last half of 2001 and the first two months of 2002 when natural gas prices returned to equilibrium levels, the two spark spread measures returned to their normal historical pattern and tracked each other closely.

The abnormal departure of coal-based and natural gas-based spark spreads illustrated in Exhibit RJS-5 directly corresponds with the period of abnormally high margins and off-system sales enjoyed by Montana-Dakota during 2001. As shown in this exhibit, coal- and natural gas-based spark spreads track each other very closely throughout the second half of 2001.

Q. Are current natural gas and electricity market fundamentals such that you would expect repeated electricity price spikes and continued abnormally high profit levels on Montana-Dakota's off-system sales?

A. No. Market fundamentals for 2002 and subsequent near-term years suggest a period of improved stability in wholesale power markets. As

290

discussed by Mr. Blinsky, Mr. Wilkinson and Mr. Gaske, natural gas prices have returned to more normal levels, and the current outlook is for natural gas price stability.

In wholesale electricity markets, a combination of new supply coming on-line, reduced demand from target and conservation programs, and institutional market reforms have contributed to price stability again in the western U.S. market. That stability has been bolstered by a return to normal or perhaps wet-year hydro conditions in the western U.S. and by the increased use of bilateral contracts entered into to hedge against upward price volatility.

In Midwest power markets supply expansion is also expected to improve supply demand margins and to contribute to electricity price stability. Exhibit RJS-6 lists estimated historical and 2002 projected reserve margin levels in the MAPP, MAIN and SPP market regions. As shown, reserve levels reached their floor during 1999 and 2000 and are projected to continue their rebound during 2002.

This combination of factors points to lower and more stable wholesale electricity prices in the MAPP region for 2002 compared to the price

291

and volatility levels seen over the last four years and particularly during the first half of 2001.

As discussed by Mr. Blinsky, this expectation of reduced-price volatility is reflected in current market expectations and prices of NYMEX futures contracts for on-peak power delivered into the energy hub. Buyers and sellers in futures markets place great weight on their fundamental supply and demand issues.

Q. Given your expectation of likely 2002 wholesale power market conditions in the Midwest region, do you believe Montana-Dakota will enjoy profit margins on off-system sales that are comparable to the levels earned during 2001?

A. No. With lower and more stable natural gas and electricity prices, profit margins on off-system sales will be correspondingly lower. Reduced price volatility will result in lower risk premiums being priced into wholesale market transactions.

In addition, as supply expands and supply demand balances improve, Montana-Dakota will face greater competition for off-system sales. With lagging electricity sales due to the current economic downturn, that competition will only be

292

greater and Montana-Dakota might face reduced volumes of off-system sales, in addition to lower profit margins on those sales.

As discussed above, natural gas and electricity price volatility created the increased margins for Montana-Dakota in the winter of 2000-2001 because Montana-Dakota retained its relatively flat cost structure relative to natural gas-burning competitors. With more stable prices going forward, the margins available in off-system sales will be lower.

In summary market conditions toward the end of 2001 are significantly more representative of what can be expected in 2002 and for the foreseeable future.

Q. Do you believe that the approach used by Mr. Blinsky for forecasting margin on off-system sales is reasonable?

A. Yes. I believe Mr. Blinsky uses a reasonable approach. Forecasting energy market prices is always a difficult exercise, and using the prices of currently traded futures contracts is a reasonable way to assess current market expectations of spot market prices that will prevail during the relevant months of 2002.

293

Q. Showing you what's been marked as Exhibit 9, Mr. Schiffman, would you identify what that is and explain what it shows?

A. Yes. Given some of the -- some of the questions that have been raised about the NYMEX futures contracts and the role that they play in forecasting forward prices, we also took a look at alternative sources of forward electricity prices, which came from the Intercontinental Exchange, which is an exchange that's been in place for maybe two years and records bilateral transactions and bid-and-offer prices between entities in the power markets.

We put this in as an alternative look at what the forward curve is like. Exhibit 9 lists the prices from the Intercontinental Exchange as of February 16th, 2002. You'll see that the prices are roughly comparable, maybe slightly lower than what was listed in Mr. Blinsky's exhibit from the February 16th NYMEX futures contracts quotes. These are both for delivery at the Cinergy hub, and as I understand it, Mr. Blinsky will be presenting an updated view of the off-system sales margins based on this curve, as well, for the Commission's consideration.

294

Q. Would you for purposes of clarification just remind us what's meant by the Cinergy trading hub?

A. That's -- Cinergy is located in the Ohio, Indiana region. It's one of the places that participants in the electricity markets have chosen to price their transactions against as sort of an index, and so the prices here are for delivery at that location.

Q. And that's a widely used reference in the industry, isn't it?

A. Yes.

Q. Did you prepare Exhibit 9, Mr. Schiffman?

A. Yes.

Q. And to the best of your information and belief, are the data in Exhibit 9 true and correct?

A. Yes, they are.

MR. PEARCE: I will offer Exhibit 9.

MR. HOBERG: Any objection, Mr. Binek?

MR. BINEK: No objection.

MR. HOBERG: Okay. Exhibit 9 is admitted.

Q. (MR. PEARCE CONTINUING) Mr. Schiffman, I've handed you also Exhibit 11, which is already in evidence, and Exhibit 13 and Exhibit 15. Exhibit 11 is the NERC report that's been admitted

295

into evidence, I believe it's a two-page report. Exhibit 13 is a longer MAPP report that we will be having you testify to, and Exhibit 15 is an additional -- several additional schedules that were not included in your prefiled direct testimony. Would you comment on --

MR. HOBERG: Do you mean his surrebuttal? I don't think he had direct, did he?

MR. PEARCE: I'm sorry. I called it direct. Surrebuttal, yes.

Q. (MR. PEARCE CONTINUING) Would you -- the exhibits -- well, all of these exhibits relate, I believe, to generation and generation capacity in the MAPP region. Would you comment on these exhibits and discuss what they show, if you would?

A. Yeah. I prepared these exhibits in response to Exhibit 11, which had provided a little bit of confusion for me because of the amounts of new capacity that they have listed in there as likely to come into the MAPP market in the 2001 to 2010 time frame.

They're indicating in Exhibit 11 that there will be an additional 5,108 megawatts of capacity during that period, from 2001 through 2010, and this again was a report from the North

296

American Electric Reliability Council.

Exhibit 13 is a different report that's published by MAPP itself, and the focus of it is on transmission planning, and they've got a list of projects, new generating projects under development in the MAPP region. Within that report --

MR. BINEK: Your Honor?

MR. HOBERG: Yes.

MR. BINEK: I don't have a copy of Exhibit 13.

MR. PEARCE: Oh, I'm sorry. I thought I had furnished them.

MR. HOBERG: I thought he had, too.

MR. PEARCE: Does the Commission have 13?

MR. HOBERG: No, I don't think they do.

COMMISSIONER REINBOLD: Do we want them?

MR. PEARCE: It doesn't talk about recession. Well, maybe it does indirectly.

MR. HOBERG: This is Exhibit 13.

MR. PEARCE: 13.

Q. (MR. PEARCE CONTINUING) Would you go ahead?

A. Yeah. Beginning -- it's at table 2.4 beginning on page 14. They go through quite an extensive list of new power plants that have either

297

entered the MAPP market or that are under development in the MAPP market as of the date of this -- of the preparation of that report, which was November 30th of 2001.

What I've done in Exhibit 15 is identified the plants that are just in the MAPP region because in the report itself there are some that also targeted for MAIN, and I've tried to -- to then add those up and reconcile the differences in capacity, because the amount of capacity that is shown in Exhibit 13 is significantly higher than the amount of new capacity that's shown in Exhibit 11 by -- it's roughly twice the amount by the 2010 time frame, and most of it occurs in the early time frame.

What appears to be going on is just that the reliability councils themselves have been having a lot of difficulty with their reliability assessments in the last four or five years as the markets have evolved and the planning responsibility for new generation has become less clear.

I think if you looked at these reports maybe three or four years ago, they would show huge capacity surpluses when the utilities were

298

following kind of their traditional history of putting in plant resources to meet in MAPP, for example, the 15 percent reserve margin target.

That created kind of a disconnect because they would put the resources into the reliability reports, but they weren't taking any active steps to actually procure the new supply. So the reports would keep coming out showing adequate resources, but there was no generation under development, which is part of what led to some of the supply crises we had in the late 1990s.

So then through time, the utilities stopped basically putting in resources unless they were under development, and most of the new projects that were coming in were either being developed as merchant power plants or were being developed without a purchase contract connection with the IOU, so it wasn't clear who was responsible and how much capacity was coming in.

So the reliability councils in recent years have been having a lot of difficulty struggling with the issue of how much new capacity to include in their reliability assessments.

The reconciliation of these two reports, it seems to be, that the MAPP region itself has a

299

list of generators that are under development, some of which have come into the market, some of which have -- have been going through permitting and planning and siting and have sites identified, and they're including a greater amount of new capacity in, for example, their transmission planning report than what NERC is including as new capacity in their reliability assessment.

If you look at Exhibit 15 on, I guess, table one, page three, if you look over to the far right side, you'll see at 2005 there's 6500 megawatts of new capacity listed in the MAPP report as likely to come into the markets by 2005, and that's a greater amount than the whole period listed in the NERC report.

The difference is kind of illustrated -- or the amounts of capacity in the MAPP report are listed on what I've labeled as Exhibit RJS-10, figure 1, where it shows graphically the three different categories of new power plants that MAPP has identified and the amounts completed and unsited, which are the first two bars in the chart. You'll see that it's about 6,000 megawatts by 2005, and that looks like about 7,000 megawatts by 2010 if you don't include the unsited generation. If

300

you include the unsited generation, it's in excess of 10,000 megawatts by 2010.

The last -- the last schedule in Exhibit 15 compares the forecast to demand in the most recent MAPP EI-411 report. It lists in the second column the change in demand that's projected, and then it lists side-by-side projected changes in new generation that are listed in again Exhibit 13 and indicates in there that the generation additions are projected to outstrip the demand growth.

So I put this in really just for the Commissioners' information, to illustrate that there seems to be some uncertainty. I think Commissioner Wefald yesterday was concerned that we were headed for supply deficits, which whether or not that's true, I don't personally believe it's true because, you know, the MAPP region has pretty stringent penalties for not hitting their reserve targets. The utilities are actively developing new projects.

There's some uncertainty, I guess, about how many of the new projects that are at some stage of development are actually likely to come into the market, and these two reports seem to take quite a different view of that, you know, which is somewhat

301

odd given that they come out of primarily the same entities or organizations.

The other point I would make is, you know, there's a fair amount of capacity in these schedules also that's listed as unsited. If you look at what I've labeled -- again in Exhibit 15, what I've labeled inside of that as Exhibit RJS-9, this is the source of capacity that's listed as not being sited in the MAPP transmission planning report. Normally that type of capacity would not be counted. People would look at it as, well, they haven't really identified a site so we won't pay any attention to it.

The reason in this instance that I would pay some attention to it is you'll see that there's a number -- the ones listed in here as various RFPs by Xcel are essentially capacity that NSP is scheduled to go out and procure through its regular RFP process and bidding process that's been approved by the Minnesota Commission, and so I think a number -- or an amount of that capacity is likely to be real capacity. It's just that they haven't identified who the winning birds are at this stage.

Q. Mr. Schiffman, did you prepare Exhibit 15?

302

A. Yes, I did.

Q. And to the best of your information and belief are the data in that exhibit true and correct?

A. Yes.

Q. And Exhibit 13 you took from a regular printed material in the normal course of MAPP business; is that right?

A. Yes. I just downloaded that report from the MAPP web site.

MR. PEARCE: I'll offer Exhibits 13 and 15.

MR. BINEK: No objection.

MR. HOBERG: Exhibits 13 and 15 are admitted.

Q. (MR. PEARCE CONTINUING) Finally, Mr. Schiffman, would you elaborate somewhat on the correlation between electricity and natural gas prices in the MAPP market?

A. Yes. The -- there's been a number of questions raised about the relationship between electricity prices and natural gas prices I guess in power markets in general and in the MAPP region in particular. The -- maybe the primary idea to take away from that discussion is that the

303

correlation between power prices and gas prices is increasing in MAPP.

The reason for that is that there was not a significant portion of gas-fired generation in the MAPP market, say, four, five years ago. It was basically with the additional capacity additions, the portion of resources that burn natural gas or are fueled by natural gas has been increasing in the last four, five years and will increase through time, at least with the current outlook, because all of the new generation that's coming into the market is gas-fired.

Similarly, a lot of the wholesale prices that are seen in MAPP and are experienced by Montana-Dakota in their off-system sales opportunities are influenced by the supply characteristics and the demand characteristics in other markets, particularly the markets that occur in northern Indiana -- or northern Illinois, in Wisconsin, in the St. Louis area, and the supply characteristics in those regions historically have been more influenced by natural gas, particularly in the Illinois and Ohio and Indiana regions because there's always been a greater portion of gas-fired capacity that is in those markets and

304

that in turn influences those markets from power plants in the southeast United States.

Similarly, to MAPP only more drastically, there's been a lot of gas-fired capacity that's come into the MAIN region in the Chicago area and northern Illinois area and into the ECAR region in recent years.

So basically through time in recent years the correlation has been increasing, and in future periods it will increase even more drastically.

The other thing that's tricky about it, though, is the correlation is basically very high at times when gas-fired resources are setting the marginal price, and by setting the marginal price that just means that the people that are bidding at a given hour for -- to sell their output and where they're finding buyers in that hour, they tend to be using similar technologies, so that most of the resources will be gas-fired in a particular hour primarily during the on-peak periods. In off-peak periods gases are rarely marginal so there's not much correlation in the MAPP prices between coal and natural gas.

But then the other element is that the correlation isn't just a constant. It varies by

305

season. So in the winter months and in the summer months the correlation of electricity prices and natural gas prices will be much higher just because there's a greater reliance on the gas-fired resources as demand levels are higher.

Q. Finally, Mr. Schiffman, turning back to Exhibit 9 for a moment, which was your table on the NYMEX and Intercontinental Exchange prices, showing the differences, based on the last column in that exhibit, your difference between the two prices, would you anticipate that a projection of futures prices using the Intercontinental Exchange figures would come to about the same result that Mr. Blinsky reached using the NYMEX futures?

A. Yes. I think it would be roughly the same, and as I indicated, I think Mr. Blinsky has an update of that for the Commission's consideration.

MR. PEARCE: Thank you. That's all I have.

MR. HOBERG: Thank you, Mr. Pearce. Just for the record, Mr. Schiffman's surrebuttal testimony is found in Exhibit 7, and it's Docket No. 61 in the PSC docket. Mr. Binek, do you have any questions of Mr. Schiffman, please?

306

MR. BINEK: Yes.

CROSS-EXAMINATION

BY MR. BINEK:

Q. Mr. Schiffman, on page nine of your testimony you mentioned the peak wholesale power price of $1250 per megawatt-hour in July of 1998. How long did that -- did that peak price exist?

A. Just for a few hours, and as I understand, the liquidity or volumes that were traded at those price levels were quite small.

Q. And the $1426 per megawatt-hour in July 1999, how long did that peak wholesale power price last?

A. Similarly. The prices were very spiky in those periods and they weren't at sustained, high levels.

Q. Do you have any average price for peak power purchases for, say, the month of July 1998 and the month of July 1999?

A. I have that data. I don't know that I have it immediately at my fingertips. I could get that for you.

MR. BINEK: I think that would be helpful.

MR. HOBERG: Can you provide that as a delayed exhibit, Mr. Pearce?

307

MR. PEARCE: Yes.
MR. HOBERG: Just mark it as perhaps what, RJS number -- what would it be, 10?
MR. PEARCE: I think we're at 11.
MR. HOBERG: 11 for his?
MR. PEARCE: His last page on 15 I think was 10.
MR. HOBERG: Okay.
THE WITNESS: I'm sorry. Just so I'm clear, you want monthly prices for just that period or for what period?
Q. (MR. BINEK CONTINUING) Well, those are two that you referred to in your testimony, so I'd like those. Also on page 12 of your testimony you reference $142 megawatt-hour during the on-peak period of December 12, 2000. Probably that -- the average for that month might be helpful, too.
MR. HOBERG: Okay. That would be -- it would be RJS-12. You had 11 on your Exhibit 15.
MR. PEARCE: That's right.
THE WITNESS: All right. Thank you. Yes. I can provide that.
Q. (MR. BINEK CONTINUING) Okay. Then also on page 12 you talk about a $47 per megawatt-hour for -- that was reached the first time in recent

308

history for off-peak pricing in the winter of 2000-2001. When was that $47 per megawatt-hour reached? Was that an average you're talking about or just a one peak-time period?
A. I believe that was a one time, but I don't recall the frequency. Again, I could make that data available.
Q. Okay. I'd appreciate that.
MR. HOBERG: Do you want to just make that all part of the one exhibit?
THE WITNESS: Yes.
MR. HOBERG: Okay.
Q. (MR. BINEK CONTINUING) In your testimony you had listed several factors that affect the wholesale market environment. On page nine and also on this recent discussion you talked about the natural gas pricing, and on page nine, line eight, you talked about this unprecedented increase in natural gas pricing during the last quarter of 2000, the first quarter of 2001 as being a key factor underlying electric market dynamics in 2001, and you point out also on page nine that within the MAPP region natural gas generators have been playing an increasingly prominent role in establishing spot market clearing prices.

309

That's correct, isn't it?
A. Yes.
Q. And just in your conversation -- or the discussions you had after reading your surrebuttal testimony, you've emphasized the fact of all of this generation that's coming on-line in MAPP, and that generation for the most part is all natural gas, isn't it?
A. Yes, it is.
Q. That isn't -- isn't the fact that we're going to be having this increased demand for natural gas generation being created by all of this new generation, not just in MAPP, but isn't that also true throughout the country, that the new generation coming on-line for the most part it's gas fired?
A. Yes, most of the generation is gas-fired that's coming on-line in the U.S.
Q. And isn't it also true that all of this gas-fired generation is going to put an upward pressure on natural gas prices and demand for natural gas?
A. Well, relative -- I mean, all else fixed, yes, that's true. I mean, the idea or the fact that there's been a lot of electricity generation

310

coming in as gas-fired and likely to come in as gas-fired has been well-known for several years, though. So it's also reflected in the market expectations, say, for natural gas and is reflected in the fundamental price forecasts that people come up with for predicting natural gas prices going forward.
Q. And right now we're in a period of relatively low prices of natural gas; isn't that correct?
A. I would characterize it more as normal in terms of long-term history.
Q. Okay. When prices are normal or at a lower level, doesn't that also generally affect drilling activity?
A. I think I would defer to Mr. Wilkinson on that.
Q. Okay. And he talked about that yesterday. On page 15 of your testimony you talked about the 2002 market outlook. Your 2002 market outlook is based on projections, expectations and assumptions; isn't that correct?
A. Well, yes. It's based on -- based on looking at all of the market fundamentals that are in play and based on those fundamentals making an

311

assessment of what would we expect to see in the electricity markets during the coming months.

Q. And you've stated that the current outlook is for natural gas price stability. That may or may not happen; is that correct?

A. Yes, that's correct.

Q. You state -- and I'm not sure what page it is. It's toward the end of your testimony -- that price stability in the western U.S. market has been bolstered by a return to normal or perhaps wet hydro conditions in the western U.S. Isn't it true that reservoir levels are very low due to the drought that has persisted in the West for quite a long period of time?

A. Well, last year was quite a dry year, particularly in the Pacific Northwest. In the current winter we don't have the full story yet, but the first three months were actually 150 percent of normal in terms of -- in terms of precipitation, and then it's been closer to normal or perhaps a little dryer even in the recent months, so that we don't have the full story, but I think we'll be at least normal-type conditions, is what's currently being projected for hydro in the West.

312

Q. What -- what area of the West has this excess precipitation?

A. Northern California has had quite high snowpacks, and the Pacific Northwest as well, as I understand, has had significant rainfall this year, particularly in the early months.

Q. How about the Northern Rockies?

A. I don't know about the Northern Rockies.

Q. Are you aware of WAPA's projections about cutbacks in the amount of hydroelectricity that will be generated due to expected low -- or lower flows out of the Rockies?

A. I'm not aware of that. What I'm referring to here when I say western U.S. is primarily the California and the Pacific Northwest prices. Those are really not materially influenced by WAPA hydro conditions. They're influenced by what we see in northern California and what we see in Oregon and Washington and then up into British Columbia.

Q. Do you know how much hydroelectric -- electricity capacity there is in the Missouri system?

A. I haven't looked at that number. No.

Q. Are you aware of the fact, for instance, the water levels in Lake Sakakawea, which is the

313

lake behind the Garrison Reservoir, in North Dakota?

A. No. I have not reviewed hydro conditions in the Missouri region or the Missouri River Basin.

Q. On page four of your testimony, beginning at line four, you state that staff witness Diller proposes that the level of off-system sales margins experienced in 2001 basically were not normal or average. Were you present in the hearing room when Mr. Diller made his proposal to settle the resale issue by using an average of sales margins during the past three years for purposes of establishing rates in this proceeding?

A. Yes, I was present.

Q. What is your -- your response or your reaction to Mr. Diller's proposal?

A. Reaction in what sense?

Q. Well, I guess just that -- how do you feel about his proposal?

A. Well, I believe that using the last three years would likely still result in an overestimate because of the price volatility seen, you know, again in 2001 because of the increased gas prices and the increased risk premiums as discussed in my testimony and seen in the two previous years, or

314

particularly, I guess, you would pick up 1999 because of the volatility seen there that was left over from the nuclear capacity outages.

So relative to what I would project going forward in 2002, I would expect that it would still result in an overestimate.

Q. Won't MAPP's increasing reliance on natural gas cause electric energy prices to increase compared to historical levels?

A. Not compared to what we've seen recently in the historical prices because, again, the other fundamental supply and demand conditions basically are such that with the additional supply, with the lower natural gas prices, my expectation is that prices in 2002 will be lower than what we've seen due to those other volatility characteristics in recent years.

As indicated in Mr. Blinsky's testimony or if you look at the two forward price series in Exhibit 9, those are reflective of supply and demand expectations in the market for 2002, which includes the forecast of how much generation will be gas-fired, how much of that will be marginal, how much -- you know, what will the demand levels be, what do people expect as -- does the market

315

expect as the natural gas prices. So this reflects an expectation of those factors. The forward prices already take into account the idea that there's going to be more gas-fired generation.

Q. Your comparison, as I understood it, is to reach recent historical prices, the very high prices that have been talked about here.

A. Right.

Q. When you look at more average prices, then isn't this reliance on natural gas going to cause electric energy prices to increase?

A. All else fixed, an increased proportion of gas capacity would be expected to cause an increase in price. Now that'll depend on the mix of gas capacity. You know, I would indicate still that MAPP is primarily a coal-based market. It's not -- we haven't grown to the point in terms of gas supply -- gas-fired generation supply, that MAPP is dominated by gas. We expect it to be the marginal resource maybe 50, 60, up to 70 percent of the time on-peak and hardly of off-peak. So all else fixed, the answer to your question is yes.

Q. Isn't gas a more expensive fuel than lignite burned in mine-mouth plants?

A. Yes. Gas is more expensive, but the heat

316

rate -- you know, it depends on the gas technology we're bringing in, as well. If it's a simple-cycle unit, they've got a heat rate that's comparable to the coal units, maybe slightly less, and so then clearly there's a cost advantage. If you look at combined cycle technologies, they see higher fuel costs, but then they have improvements in thermal efficiency, so the proportional increase in production cost is smaller.

Q. I think you said you're from California?

A. Yes.

Q. How far ahead of time were you able to predict the problems in California?

COMMISSIONER REINBOLD: The earthquake?

Q. (MR. BINEK CONTINUING) The energy problem.

MR. HOBERG: Which problem, Mr. Binek?

COMMISSIONER REINBOLD: Not the earthquake?

MR. BINEK: No.

COMMISSIONER REINBOLD: Excuse me.

THE WITNESS: When you say "the problems," could you be more specific.

Q. (MR. BINEK CONTINUING) Well, the whole energy shortage that occurred in California the

317

last several months, all the brownouts, rolling blackouts.

A. Right. We were -- say, in the summer of 2001 we were predicting prices that were spiking up because the supply still was lagging in 2001-2002. So we were predicting prices in the maybe $200 per megawatt-hour region at the spike in August in California.

We weren't predicting anything near the magnitude of what actually happened, and partly what happened in California was just natural gas prices. We're talking about average gas prices here of five dollars and spiking at ten. Well, they were at least twice that level in California last year. We hit a spike of $50 per MMBtu for natural gas prices. You know, there were some generators that saw, because of a shortage of nox emissions credits, an additional $100 per megawatt-hour for nox credits.

So some of the impacts out there were based on just pure fundamentals, the same as what's been seen here in MAPP, and then some became, you know, just a function of the breakdown of the markets and of exercise of market power by suppliers, and then near the end by the financial

318

distress faced by the IOU so that no one was willing to sell into the market.

MR. BINEK: Looking at your final statement in your testimony, I agree with the portion of your statement that you make on page 17 where you say that forecasting energy market prices is always a difficult exercise. No further questions.

MR. HOBERG: Thank you, Mr. Binek. Mr. Fahn, did you have any questions of Mr. Schiffman?

MR. FAHN: Yes.

EXAMINATION

BY MR. FAHN:

Q. Earlier I heard testimony about -- I mean, a lot of the information that we have on the effects of gas pricing and energy demand seem to be a regional general view of things, and then I heard a few questions about -- well, about snowpack and snowpack in different areas of the country, and I'm wondering if it would be -- if it would be necessary -- if it is necessary or if it would be important for the Commission to know more about the demand for electricity or the areas where MDU is selling this electricity. Rather than a regional look, should we be getting into more detail so that

319

we can determine exactly spot -- like the spot market type of look so we can determine for sure what the impact would be in the future for MDU and sales for resale?

A. I'm not sure I understand your question completely. You mean in terms of focus on spot markets closer to MDU like North Dakota?

Q. Focus on the markets -- maybe we should be looking at the areas that purchased energy from MDU in those sales for resale and looking at those markets specifically to determine the future demand for MDU's sales for resale.

A. Well, I believe that the -- you can't look at those markets in isolation or at just the entities that, per se, MDU is selling to. I mean, Mr. Blinsky can probably describe in greater detail and I can in terms of who are the actual parties on the other sides of the transactions, but the dynamics of the markets and -- I mean, the dynamics of all of the power markets and all of the gas markets is that they're connected, so that what happens in -- you know, the reason we take regional looks is because it's all of the regional supply and demand conditions that result in what does the price end up at in a given hour.

320

You know, the historical pattern in MAPP markets has been -- they're lower cost because of the lower cost of lignite coal and the closeness to the Powder River Basin coal in Montana and Wyoming, and they've had, you know, a greater amount of particularly energy, sometimes capacity, but particularly energy.

And Montana-Dakota sells into an energy market. They're not long on capacity. As we've talked about, they've been barely meeting the 15 percent requirement for MAPP, but they've got a lot of coal-based generation so they're able to sell in a lot of hours, and basically the trade patterns have been that the energy that's available at lower cost in particularly the northern and western MAPP region basically ends up going towards some of the higher demand or greater industrial production regions, which are in northern Illinois and in the St. Louis area and in Wisconsin.

It may be that Montana-Dakota is selling to entities that are right next-door. I mean, I would imagine a lot of their sales are to NSP, but NSP's in a position where they're sitting kind of right on the cost of one of the prime transmission constraints that affects how much energy can flow

321

from the western MAPP region into these other markets.

And so we could look at just what's going in North Dakota, but the reality is that the price is going to filter up from these other markets and get brokered through somebody like NSP, and the supply and demand fundamentals in those other markets are what's going to ultimately determine, you know, the greatest portion of the price, and the only times that that won't be true is when the transmission constraints are binding.

So, say, there's only -- say you can only move 2,000 megawatts total of energy from MAPP into, you know, either the Chicago or St. Louis area and basically you hit a transmission limit. Well, what will happen then is you'll see a separation in the markets during that type of a period so that you'll see higher prices in those markets, in the Chicago markets and the St. Louis markets and you'll see lower prices in MAPP because they can't get the lower price generation out of the region.

Q. I guess I was thinking that if there are certain areas in the region that MDU sells to that are controlling the price, that are affecting the

322

price to a greater degree, perhaps the Commission should know the supply-and-demand situations in those areas and maybe that would give them a better picture of how, you know, the price for MDU's sales for resale would be affected, and I guess the question is -- what I've heard so far is that you're thinking that it might not be beneficial for the Commission to get into that much detail.

I guess I'll ask just one more time about specific -- you did mention that specific areas could control price, and so with that in mind, do you think it would be beneficial for the Commission to study specific areas?

A. I'm not sure the -- I mean, I'm not sure, first of all, what areas you have in mind, but my own view would be that if you want to look at, you know, reasonable projection of a spot market-type price, that it will take into account something that's broader than, say, an individual utility system or a small geographic area, because even if somebody is long in supply and looks like they don't need it, if somebody in an adjacent market does, you know, they're able to basically broker between the two.

So they'll take a spread on the

transaction and they'll move the power through their system. You know, similarly if they're short, you know, they'll buy from wherever.

But, I mean, the way the market works is everybody that -- I mean, they try to use the most efficient resources to meet demand, and there's transactions back and forth to do that so you get to the same point in terms of the clearing price, and again, the only time that that doesn't happen or wouldn't be expected to happen would be when transmission constraints would preclude the transactions.

MR. FAHN: Okay. Thank you.

MR. HOBERG: Thank you, Mr. Fahn. Commissioner Wefald, did you have any questions?

COMMISSIONER WEFALD: I have a couple.

EXAMINATION

BY COMMISSIONER WEFALD:

Q. Would you explain this chart? That is -- this is -- I don't know the exhibit number because it's not marked on mine.

MR. HOBERG: What's it say -- is it RJS-7?

COMMISSIONER WEFALD: It says Table 1.

THE WITNESS: It's Exhibit 9.

MR. HOBERG: 9.

Q. (COMMISSIONER WEFALD CONTINUING) Could you explain Exhibit 9 to me? I know the NYMEX futures strip. That's showing in March 2002 would be -- 21.10 would be what the price would be for the -- on the futures market for electricity on that date.

A. Right.

Q. Is that the date that that price was offered?

A. March 2002 would be the delivery period, so that would be for electricity delivered -- you know, in that example, for electricity delivered under the terms of the future contract for the month of March. So that's like an average on-peak price for March. I think it's what, 730 megawatt-hours during the month or something like that under the terms of the futures contract.

Q. Okay. So when would -- that could have been offered any time previous to March 2002; is that correct? So, for example, if you were purchasing electricity today from March 2002 and I wanted to -- I would enter into a futures contract for $21.10 for March 2002?

A. Right. And then that's the price you would pay for delivery of that energy in March.

Q. Okay. And then the Intercontinental Exchange forward price is another market that I could negotiate with for delivery at that time?

A. Right, exactly. And it's a similar product in terms of its on-peak energy for delivery in March.

Q. And these are all forward looking. Is there any -- you know, Commissioner Clark asked yesterday about what actual prices are for the electricity in the past compared to what the futures prices were. You haven't done any study overnight to show that?

A. You mean in terms of --

Q. Historically, how accurate the futures prices were to the actual price of electricity if you needed to buy it on the open market on that date?

A. No. I haven't completed a study to show that. No.

Q. Okay. Thank you. All right. And you mentioned about this projected demand, and in your testimony you said something about Xcel. Can you show me where it tells -- shows something about Xcel in your chart? This is RJS-8.

MR. HOBERG: Exhibit 15.

Q. (COMMISSIONER WEFALD CONTINUING) Exhibit 15.

A. Yeah. In the MAPP report that I referred to, which is Exhibit 13, they list -- or they categorize the capacity that's under development going to three different categories. One was the capacity or was the project completed and is in the market.

Q. And where is that? Where are you showing finding that on here, in Exhibit 15? Is it in Exhibit 15?

A. Yeah. In Exhibit 15 what I've done in, say, the first page, which is RJS-8, is I've left out the category -- I've left out one of the three categories that they include. So what I put in here is basically what would be viewed as the most certain capacity, which is something that's either already come into the market or something which is currently being developed as a site identified and they're actively in the permitting and financing stages and in some cases have proceeded to construction. In the report -- that's listed either as completed or as sited in the MAPP report. Then there's another category of capacity in the MAPP report that's listed as unsited. So somebody

327

has identified that they're --
Q. So, wait. I need to have a little help here. So up to 2001 that's the completed megawatts. That's through Winterset, is that right, Winterset, Iowa?
A. Yes. That's right.
Q. That's what's completed?
A. Right. And if you look over to the column entitled cumulative and it says completed megawatts --
Q. 1,774?
A. Right, exactly. And then after that is the -- is the capacity that is identified and which they list as having been sited but not completed. So presumably the stuff that's identified in 2001 in that category, you know, it was under construction but hadn't yet come on-line at the time that they had gathered all the data for this report.
Q. All right. And then you mentioned something about Xcel?
A. Yes. Well, then there's a third category. So if add up, say, at the bottom of what I've listed as Exhibit RJS-8, by 2010, for example, the very last number in the table is 7,614 megawatts.

328

So that's the amount of capacity if you add up all of the projects that's either come into the market or which has been listed and identified as under development but hasn't actually come into the market yet.
Then in addition to the capacity that's identified there, so in addition to these specific projects if you look at the next table, which is entitled RJS-9, there's another category of capacity that's identified in the report, which is characterized in there as unsited. So this is capacity that someone has said we're going to procure, we're going to develop, but they haven't said we're going to do it by building this generating plant at this site.
Q. I was curious about your comments about Xcel because at a meeting that the Commission held about --
MR. HOBERG: Could somebody get the door over there, please? Thank you.
Q. (COMMISSIONER WEFALD CONTINUING) A meeting we had about two weeks ago, a periodic information exchange meeting with Otter Tail, they were giving us information about how there's a proposed -- proposal to build a coal-fired -- coal

329

conversion to natural gas power plant in northern Minnesota, and they're trying to convince the legislature that they should mandate that all 3,000 megawatts would be purchased by Xcel.
So you said you thought that Xcel had already made a determination of where they would be getting their electricity. It doesn't sound like they have from that because they're still -- they're still considering mandating that Xcel would have to purchase 3,000 megawatts from this plant.
A. Right. The point I was trying to make is I understand Xcel, or as I have known them, NSP's supply procurement program, there's been a competitive bidding proceeding that's been partially mandated, partially approved by the Minnesota Commission in conjunction also with an integrated resource planning proceeding that they're still subject to, and what they do in that is they identify a schedule for we need this much capacity, you know, in this time frame and we think that it's going to be -- you know, say 500 megawatts of it is going to be intermediate-type capacity and 200 megawatts is peaking-type capacity, and then they go out regularly with RFPs to try to procure that capacity under that

330

schedule.
That process was set up basically because NSP at the time was trying to develop its own projects, and a lot of independent power producers were also interested in developing projects, and so the process was put in place to try to create a fair way for the utility portion of NSP to select the right projects, the best projects for the ratepayers.
Q. I understand the process.
A. Right. And as I understand it, they're still -- the numbers that are listed in Exhibit RJS-9, wherever it says in the categories entitled "name," where it says "Various RFPs by Xcel," those capacity requirements -- you know, NSP has submitted to MAPP a schedule of we will be responsible for this much capacity under this schedule.
Q. But my understanding is that that's why there's a lot of these power plant developments. Even MDU, as you know, is considering building a power plant.
A. Right.
Q. Why would they be building a power plant if there's an excess of power shown right in these

331

numbers? If you're telling us that these numbers show that there's -- not an excess of demand, but an excess of capacity and there isn't any need for additional power in the next few years, why would Montana-Dakota Utilities be thinking about building a power plant in North Dakota? Why would Otter Tail be thinking of building a power plant in South Dakota? Why would Great Plains be thinking of building a power plant in several locations in the Upper Midwest, and they're all hoping to sell to Xcel or to someone else that power and they're planning, and then this other project was being considered up in northern Minnesota to add 3,000 megawatts because they want to share in this need for additional demand that they see, and -- how do you explain that if this -- these numbers show that there isn't any needed demand in the MAPP region?

A. No. That's why I broke out separately the -- say in the first part of this table the cumulative and completed because, you're right, they're likely -- if you add up all of this capacity and say you get to the 10,000 megawatts by 2010, you know, there's going to be duplication between this category unsited and sited because some of the projects are being developed at least

332

in anticipation or hope that they'll sell power supply contracts to existing LBCs in the MAPP region.

I wouldn't characterize MAPP as a region where I would expect large excess supply because it's not the type of market that is that attractive to merchant plant developers just to come in and sell in the spot market. I mean, they're coming in in this region primarily either to sell capacity to hit the 15 percent reserve requirement that's needed on peak, or they're developing capacity, you know, largely with the hope of signing off-take contracts with the LBCs.

Q. And in the meantime, though, as this NERC study shows, that until those plants come on-line with base-load power, there could be some uncertainty in the market; would you agree with that or not?

A. Some uncertainty in terms of the supply demand balance?

Q. Yes.

A. In the next couple years I guess I don't see that much uncertainty just because the -- you know, the projects that are forecasted to come in in that time frame have either come into the market

333

or they're under construction. Once they start construction, they don't typically stop regardless of market conditions.

Q. I understand that, but some of them are going to take five to seven years to build.

A. If it's a coal plant.

Q. Yeah.

A. Yeah, sure. But I --

Q. That's what we're thinking of in the Upper Midwest.

A. Yes. I think they'll make that decision based on, you know, if -- I mean, I think that people weren't considering too much coal until the gas price spikes that we've seen in the last year, year-and-a-half, and, you know, whether they actually develop a coal plant or not will depend upon how market conditions evolve over the next couple of years.

I mean, there are always a lot of uncertainties about what supply is going to come in. What we've seen -- and MAPP is a region again where I wouldn't expect a lot of excess. You know, one of the -- one of the sort of oddities of deregulation in some of the markets that have been more developed, say in the Northeast, in

334

California, in -- even in the MAIN and ECAR region, is that once they deregulate the markets, there's actually been a glut of capacity under development, or in Texas, for example.

Q. Well, they just went to deregulation in January.

A. In Texas.

Q. Right.

A. Right. But the merchant plant development started about three years ago. So they'll actually be in -- it's like in the markets where deregulation has been imminent --

Q. But we're not in that market, are we, here in the Upper Midwest?

A. No. You're not in that market here, but it does permeate, as I was indicating before.

Q. But they're not selling into Texas, MDU isn't.

A. I'm not talking -- I understand that, but they are selling into like Illinois, into the MAIN markets.

Q. MAIN right now -- my understanding is that there's a deficiency in the MAIN as far as capacity?

A. A deficiency in MAIN?

335

Q. Capacity in MAIN.
A. That's not my understanding in terms of 2002 or 2003. There's been a lot of capacity that's --
Q. Then how come it says --
A. -- come into the market.
MR. HOBERG: Commissioner Wefald, I think you need to let him finish.
COMMISSIONER WEFALD: Okay.
MR. HOBERG: She's going to have trouble taking the testimony if you don't let him finish.
Q. (COMMISSIONER WEFALD CONTINUING) All right. Go ahead.
A. I mean, the larger point I'm trying to make is that in a lot of the markets there's been a lot of capacity that's come in when there's been, you know, expected profit opportunities, and that has -- in the 2002 through, say, 2005 time frame is when most of that capacity is projected and will come into the markets because it's under construction currently. A lot of it hasn't come in. It just started in MAIN, say, some of the peaking units and some of the combined cycle units came in in 2000-2001, and then there's an acceleration that will be happening in, say, the

336

New England markets, in some of the ECAR markets and some of the SERK markets in the next two to three years, and then on the development side, you know, you could forecast in a lot of regions where there's been a lot of deregulation, you know, big capacity surpluses in, say, the 2004 through 6, 7 time frame, and that's not a condition in MAPP that you would forecast right now.
Q. If we were to be thinking only in terms of the next, let's say, not 15 years but the next 3 years, is that a time of potential shortages or -- in MAIN and MAPP?
A. My own view is I think MAPP will be primarily in balance over that time frame, and I think in MAIN they'll see some of the -- they'll see some of the influences of surpluses that are coming into some of the New England markets, and within MAIN itself, and so I would expect probably some excesses or slight excesses in terms of the price discovery, the influence of some slight excesses in the MAIN region.
Q. Okay. I guess I'm curious about that because in this NERC report on page 44, the one that's labeled Exhibit 11, it says the ability to import power may be severely limited in the near

337

term because of the lack of external resource availability.
A. Yeah. Again, that NERC report -- I guess I'm curious about it myself because it seems to have taken a pessimistic view in terms of the projects under development in a number of the regions.
COMMISSIONER WEFALD: Thank you. That's all I have. Thank you very much.
MR. HOBERG: Thank you, Commissioner Wefald. Commissioner Reinbold, please.
COMMISSIONER REINBOLD: Couple questions, Mr. Schiffman.

EXAMINATION

BY COMMISSIONER REINBOLD:

Q. First, let me compliment you and the other witnesses' well-coordinated presentation here, past, present and future, as I look at the array of testimony givers here. Congratulations.
A. Thank you.
Q. When is the plant going to run on natural gas?
A. I'm not an expert on that.
Q. Oh, okay. We don't -- is there anyone else that you could ask?

338

A. Probably Mr. Fox.
Q. I worry a little bit at the rate natural gas is being consumed, but nobody seems to have an answer. When we talk about people in California learning from their mistakes, do you talk about the governor's office maybe, legislature?
A. Pretty much everybody in the whole market.
Q. Utility?
A. Yeah. It's pretty widespread.
Q. Regulators?
A. Yes.
Q. Everyone -- all of the above?
A. Yes.
Q. Okay. I've been accused of and complimented for brevity in my questions in proceedings, and I'm going to embark here upon the mother of all brevities, and you're my subject. Would you turn to page 16 of your testimony, your direct testimony? There's a paragraph and a word there that strikes me. It starts on line 7. Would you read that question, the question given by counsel?
A. I'm sorry. It was page 16?
Q. Page 16.
A. And line 7.

339

Q. Line 7, starting with "given."
A. It says, "Given your expectation of likely 2002 wholesale power market conditions in the Midwest region, do you believe Montana-Dakota will enjoy profit margins on off-system sales that are comparable to the levels earned during 2001?"
Q. And your answer to that was no --
A. Right.
Q. -- and you elaborated further?
A. Right.
Q. But starting with the word "given" and ending with a period after no, would you -- if that paragraph and that answer was absorbed, believed and adopted by this Commission, then we're pretty near home, aren't we?
A. In terms of the rate case proceeding?
Q. Yes, yes, yes.
A. Yeah. I think it's one of the more material issues or the most material issue.
COMMISSIONER REINBOLD: Okay. That's all I have at this time. Thank you.
MR. HOBERG: Thank you, Commissioner Reinbold. Commissioner Clark, please.
COMMISSIONER CLARK: Just one.

340

EXAMINATION

BY COMMISSIONER CLARK:

Q. We spent quite a bit of time this morning talking about competitors to coal. Natural gas and hydro are probably the two that we spent the most time on, but I didn't hear much conversation about nuclear, and although it's not a part of MDU's mix, it is probably most notably with NSP in this region here, and that, too, could be something that impacts future markets for MDU coal. Is it safe to characterize nuclear as kind of a wild card in this, depending on what happens with the Yucca Mountains and that whole situation?
A. In terms of the availability of nuclear?
Q. Well, in terms of the availability of nuclear power, which would then impact export markets for coal power if this nuclear being low-cost form of power were to be jeopardized or kind of threatened to go off-line.
A. Yeah. I mean, I think we saw that, you know, again in 1998 and 1999, that if a large portion of it came off-line, that you could have a significant impact. That depends really on the timing of when it came off-line. If it all came off-line right away, it could have a huge impact if

341

because we weren't able to get through the Yucca Mountains or weren't able to do relicensing or didn't want to do steam generator replacement, and we knew about that two or three years in advance, it wouldn't have nearly as material of an impact because people would have time to plan for it and procure replacement supply.
COMMISSIONER CLARK: Okay. Thank you. That's all I have.
MR. HOBERG: Thank you, Commissioner Clark. Any further questions by commissioners? Mr. Pearce, any further questions?
MR. PEARCE: Just one or two really.

REDIRECT EXAMINATION

BY MR. PEARCE:

Q. Commissioner Clark's question brings to mind just a question that -- I think from what you've testified to, the current future prices basically are a result of every relevant factor between nuclear generation and other kinds of capacity, hydro, weather conditions, gas prices, markets, everything; right?
A. Yeah. The futures prices and the forward prices are, you know -- they're a culmination of expectations of all the people in the market of

342

what conditions are going to occur, you know, in the -- you know, as we indicated here in the delivery period. So based on what do people think the demand levels are going to be, the fuel price levels, the amounts and types of capacity on-line during that period, what do they think the supply and demand conditions are going to be during that period and based on that what will be the clearing price.
Q. And then just one final question. You agreed, I think, there would be some -- or testified there would be some continuous upward pressure on gas as more use is made of gas for generation, but you wouldn't expect gas prices to ever reach -- or in the near future anyway to reach the 2001 levels, would you?
A. Well, not in the near future particularly or in 2002. I mean, we're kind of through the winter. So that's the period when you would normally see a spike in natural gas prices. I mean, I think gas prices typically are going to be pretty stable in the spring through summer time frame, and then, you know, there's some uncertainty in terms of what could happen in the fall and winter of next year.

343

MR. PEARCE: Thank you. That's all I have.
MR. HOBERG: Thank you, Mr. Pearce. Mr. Binek, anything further?
MR. BINEK: Yes, I do have a question.

RECROSS-EXAMINATION

BY MR. BINEK:

Q. Looking at your Exhibit 15 and listening to the discussion about the expectations and projections concerning the -- the shortages of capacity or the excess capacity of MAPP, and I'm looking through this -- this list, and when you're talking about the capacity that's needed, let's say that the projections are that there will -- that we'll need 10,000 megawatts of capacity by -- by the year 2010. Is that actually 10,000 megawatts of usable capacity that's needed? Is that what they're talking about? And what I'm getting at, I look at the list of projects here and I see at the bottom of page one in Nebraska, GCW Wind Farm, 110 megawatts.

We all know that the capacity from a wind farm -- if it's 110-megawatt wind farm, the capacity is considerably less than that. That's true of any kind of power plant. They don't -- you

344

know, the capacity is less than the total megawatt capacity of the unit, you know, the efficiency is less than that. So my question is, you know, when I look at this, I'm assuming that the 110 megawatts that's included for this wind farm is the stated capacity of -- or, I mean, the nameplate capacity; is that right?

A. I'm not sure exactly when they put this together. They do list it in their report as summer megawatts. So for wind whether they've done some derating to reflect the fact that the wind doesn't tend to blow on-peak, I don't know. For the gas-type units I think that these would be probably pretty accurate in terms of the actual dependable capacity that would be available in the on-peak period, you know, in the summer.

You know, they would be -- the gas plants, for example, would be derated by outages and would take a little hit for increased temperature depending upon, you know, whether they used chilling technology or something like that, but I believe these numbers probably reflect that for the gas units, at least that would be my expectation, but I don't know that for certain.

Q. Would you agree that NSP's RFPs are a

345

demand, not a supply?

A. Yes. In terms of what they publish in the RFPs, it's the need for power and then they go out and contract for that power.

MR. BINEK: Okay. Thank you. No further questions.
MR. HOBERG: Thank you, Mr. Binek. Mr. Fahn, anything further?
MR. FAHN: No.
MR. HOBERG: Mr. Pearce?
MR. PEARCE: May I have one final?

REDIRECT EXAMINATION

BY MR. PEARCE:

Q. Mr. Schiffman, I've shown you Exhibit 3, starting at the list of factors Mr. Diller testified are relevant to the question of the resale margin. You would agree, would you not, that all those factors are wrapped up in and relevant to the futures prices themselves? I mean, they all form a part of how that futures price would be determined?

A. Yes. There's some expectation of each of those factors that would get rolled into the final clearing price that's expected in the futures price.

346

MR. PEARCE: Thank you. That's all I have.
MR. HOBERG: Thank you, Mr. Pearce. Any further questions then of Mr. Schiffman? Okay. Thank you, Mr. Schiffman. Let's take a 10-, 12-minute recess here, please.
(Recess taken.)
MR. HOBERG: Let's go back on the record. Mr. Pearce, are you ready to call your next witness?
MR. PEARCE: Yes, I am. I'll call Terry L. Blinsky, please.
MR. HOBERG: Mr. Blinsky, I believe you heard the admonition I gave earlier in regard to perjury; is that correct?
THE WITNESS: Yes.
(Witness sworn.)
MR. HOBERG: Thank you. Mr. Pearce, please.

TERRY L. BLINSKY,

having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. PEARCE:

Q. Would you please state your name, business

347

address and position?
A. Yes. My name is Terry L. Blinsky. My business address is 400 North Fourth Street, Bismarck, North Dakota, 58501. I am the electric bulk power marketing coordinator for Montana-Dakota Utilities Company, a division of MDU Resources Group, Inc.
Q. And you also supplied some direct testimony in this proceeding that's been filed, didn't you?
A. Yes.
Q. What's the purpose of your surrebuttal testimony today?
A. The purpose of my surrebuttal testimony is to address concerns I have with the rebuttal testimony of staff witness Mike Diller as it relates to the area of wholesale sales.
Q. What concerns do you have with Mr. Diller's testimony?
A. My concerns with his rebuttal testimony relates to his comments on the correlation between gas price and wholesale electric prices, his characterization of off-peak sale margins and the price and his reliance on actual historic levels in light of the known changes and circumstances in the

348

current wholesale market.
Q. Would you please describe your concerns regarding the correlation between gas prices and sales for resale margins?
A. Yes. At page 9, lines 16 to 24, Mr. Diller discusses this point and concludes that natural gas prices declined throughout 2001 yet sales for resale margins did not decline correspondingly. We know that natural gas prices declined during 2001, and we know that our actual sales for resale margins in 2001 did not decline with the gas price decline. However, Mr. Diller has not recognized the cause for this lack of correlation in 2001.
Very simply, the reason that sales for resale margins remained up in 2001 was that Montana-Dakota was successful in entering into a contract with a buyer in March 2001 that covered the summer season of 2001. At the time the contract was executed, prices of gas and electricity were still relatively high and the buyer agreed to pay essentially the futures price that existed at the time the contract was executed.
Thus, even though electric prices fell during 2001, as did the gas price, the revenues

349

received by Montana-Dakota were dictated by the contract and the buyer was obligated to pay the contract price rather than the current price at the time of delivery. Absent this contractual arrangement, Montana-Dakota would not have been able to retain the margins it did in 2001.
To illustrate this point I have prepared Exhibit No. TLB-4. The exhibit shows the futures prices that existed at the various times for purchase in July and August of 2001. At the time the contract was executed in March 2001, the futures price for July and August was $126 per megawatt-hour. I'll make a correction in my testimony. Instead of megawatt, it's megawatt-hour.
These prices are representative of the prices that the buyer agreed to when the contract was executed. Had the contract not existed, Montana-Dakota may not have been to see power -- would -- may have been able to sell power on a month-to-month or day-to-day basis during the summer but at prices current at the time of sale.
For example, Montana-Dakota could have sold power in late June at about the July future price that existed at that time, about $46.75 per

350

megawatt-hour rather than the contract price at 142-and-a-half per megawatt-hour. Similarly, such transactions could have occurred in August, as well, but at prices substantially lower than the contract price.
In summary, there is a direct correlation between gas price and wholesale power prices, but the correlation was not evident because of the contract provisions that Montana-Dakota had in place in 2001.
Q. Does Montana-Dakota have any contracts for the sale of power in place currently or for the upcoming summer season?
A. No.
Q. What are your concerns with Mr. Diller's characterization of off-peak margins and prices?
A. At page 10, lines 20 through 25 of his rebuttal testimony, Mr. Diller states that Montana-Dakota estimates that off-peak sales comprise about 47 percent of the total sales and are priced below the cost of fuel. This statement is not correct.
First, the peak and off-peak sale megawatts are not estimates. They represent the actual levels of peak and off-peak sale levels that

occurred.

Second, the off-peak sales are not priced below fuel cost. Montana-Dakota keeps specific records of peak and off-peak sales for megawatts by time period. However, the fuel costs shown on the exhibit are actual fuel costs on an average basis for the month as Montana-Dakota does not keep a specific record of the actual fuel costs by peak and off-peak periods.

When energy is sold in the off-peak periods, it is typically sold from a specific unit and Montana-Dakota knows what the incremental fuel cost of that particular unit is at the time of the sale. It is not our common practice to sell below the incremental fuel cost of the unit.

The resulting total margin shown on my Exhibit No. TLB-3 is correct. If specific records had been kept for peak and off-peak fuel costs, we would find that the peak fuel costs would be above the average and the off-peak fuel costs would be below the average. As this information was not available, the actual fuel costs on an average basis were used.

Q. Would you please describe your concern with the reliance on historical information in

light of the known changes and circumstances in the wholesale market?

A. Yes. As I explained in my direct testimony, the wholesale market environment has drastically changed and our opportunities to make higher wholesale sales margins no longer exist. Reliance on the historical actual results in this case will significantly overstate the margins that Montana-Dakota can expect to make in the future.

For example, actual January 2002 wholesale sales were 92,964 megawatt-hours and brought a total margin of 622,000. Actual January 2001 wholesale sales were 83,940 megawatt-hours with an actual margin of 1,316,000. Even though we sold more megawatt-hours in January 2002, the margin was lower by over 50 percent. This is reflective of the drop in price. Similar results can be seen for February 2002 as compared to February 2001.

Q. Have you updated your Exhibit TLB-3 that was part of your direct testimony to reflect changes since the time you've prepared it?

A. Yes, I have. The updated information is shown on Exhibit No. TLB-5.

Q. Would you please explain that exhibit?

A. Yes. The megawatt-hours of sales are the

actual volumes sold for the 11-month period ending January 2002 plus an estimate for February 2002 based on the actual volumes for the first 14 days doubled to reflect the full month of 28 days.

The projected margins shown in the last column represent the actual for January 2002 and the actual level for the first 14 days of February 2002 doubled for the full month.

The margin for the remaining months was calculated using the Cinergy futures prices for on-peak energy as of February 16, 2002, and off-peak prices which reflect prices currently being obtained for off-peak energy.

The resulting total margin that can be expected is 6,429,778. This is about 818,000 less than the expected margin shown on Exhibit No. TLB-3 submitted with my direct testimony.

The megawatt hours of sales are similar but the prices have fallen since preparation of the initial exhibit. This further demonstrates the fact that prices are not rebounding to the levels seen in the last year. I have shown the February 16th, 2002, NYMEX Cinergy energy prices on Exhibit No. TLB-6.

Q. Why is it appropriate, in your opinion, to

rely on the NYMEX futures prices?

A. First, the NYMEX futures price represents the price of actual transactions between willing sellers and willing buyers. Second, the Cinergy hub is a hub nearest Montana-Dakota's service area, MAPP region, and is available to all market participants we typically deal with.

These prices are used as a guide by market participants when buying or selling energy. In fact, the current prices that Montana-Dakota has been able to sell on-peak power at very closely align with the March 2002 futures prices.

I would also know that a recent offer was made to purchase electricity from Montana-Dakota at $35 per megawatt hour for July and August 2002, somewhat below the posted future price of 38-and-a-quarter for July and August 2002.

Finally, as I described earlier in this testimony, Montana-Dakota was able to obtain a contract for the summer season of 2001 last March that was based on the futures prices in existence at that time.

Q. Would you please summarize your position on wholesale sales levels?

A. Yes. Montana-Dakota's ability to make

355

wholesale sales at higher prices peaked in 2001 and will not reoccur in the foreseeable future. It was a market anomaly that allowed us to achieve the higher prices. Currently, there is more supply available than in the past and gas prices are down and expected to stay there, which has the effect of lowering prices for electricity as there are a number of gas-fired generators on line and the price differential between coal-fired and gas-fired generation is now much narrower.

These factors are also supported by other witnesses in this proceeding. This means we will not be able to achieve prices we saw in the last few years. Based on the latest information available, Montana-Dakota can only expect to achieve wholesale sale margins of 6,429,778 as shown on my Exhibit No. TLB-5.

Q. Mr. Blinsky, did you hear Mr. Schiffman's testimony this morning with respect to his Exhibit 9 of which I've handed you a copy?

A. Yes, I did.

Q. And you understand what that exhibit shows?

A. Yes, I do.

Q. And I've also handed you Exhibit 10. Is

356

that an exhibit prepared by you and under your direction and control?

A. Yes.

Q. Would you explain what Exhibit 10 shows?

A. What Exhibit 10 shows is in my earlier exhibits, No. 5, I based the futures margins for 2002 based on the NYMEX future prices, then took a look at the exhibit that Mr. Schiffman had showing the forward prices from the Intercontinental Exchange, and what I did then was to stick those forward prices into the exhibit where I had the futures, and that brought a new estimated margin for 2002 to 6,080,199.

Q. In other words, what your -- what exhibit 10 shows is a calculation parallel to what your TLB-5 shows but using the figures that Mr. Schiffman testified to with his Exhibit 9?

A. That is correct.

Q. And the conclusion is within about $400,000 of the same conclusion that you reached using the NYMEX futures?

A. That is correct.

Q. And those NYMEX futures you used were as of February 16th. I think you testified that appears to be the same date that appears on Exhibit

357

9 for Mr. Schiffman's figures, is it not?

A. That is correct.

Q. Those prices correspond with the same date?

A. Yes.

Q. Does it surprise you that the two methods would reach very nearly the same result?

A. No.

Q. Is Exhibit 10, to the best of your information and belief that you said you prepared, true and correct?

A. Would you restate that?

Q. I'm sorry. I didn't state that very well. Are the data contained in Exhibit 10 which you prepared true to the best of your information and belief?

A. Yes.

MR. PEARCE: I'll offer Exhibit 10.

MR. HOBERG: Any objection?

MR. BINEK: No.

MR. HOBERG: Exhibit 10 is admitted.

MR. PEARCE: And I have nothing further.

MR. HOBERG: Nothing further, did you say, Mr. Pearce?

MR. PEARCE: Right.

358

MR. HOBERG: Thank you. Mr. Binek, please. Any questions?

MR. BINEK: Yes. Thank you.

CROSS-EXAMINATION

BY MR. BINEK:

Q. Referring you to page two of your surrebuttal testimony where you talk about this contract that was entered into in March 2001, can you tell me how many megawatts were contracted for in that contract?

A. For the term -- for the full term or for each hour based in that contract? It was for a block of 50 megawatts.

Q. A block of 50 megawatts. And for how long?

A. Six months.

Q. Was delivery on peak?

A. That would have been the -- the schedule would have been what we called a 7-by-24, seven days a week, 24 hours a day, for the whole length of the 6 months, which would be off peak -- on peak Mondays through Friday, Saturdays on peak, and Sundays of course. Off peak being right from Monday through Sunday.

Q. Was MDU deficient in MAPP reserves at that

359

time?
A. Could you restate that, please?
Q. Was MDU deficient in MAPP reserves at that time?
A. No. Not at the time I made that contract.
Q. But during the time of the contract did MDU fall into a deficit position in their -- with their MAPP reserves?
A. On capacity, yes.
Q. I think you briefly touched on this, but did -- did MDU enter into any futures contracts to sell power in the wholesale market this month?
A. No.
Q. How about last month?
A. When you talk about entering into contracts into the futures, we do not trade futures.
Q. Okay. So you haven't done any -- you don't have any outstanding now. You haven't sold any through the futures market?
A. No.
Q. If MDU believed the wholesale electric market would improve in the next year or two, it would be foolish for MDU to enter into any futures contracts; isn't that true?

360

A. Could you restate that, please?
Q. If MDU believed the wholesale electric market would improve, in other words, there would be more margin in the next year or two, it would be foolish for MDU to enter into any futures contracts today; isn't that correct?
A. That is correct. At the levels I'm seeing in 2002 looking at the gas price, we have two turbines out there that the cost would be greater than the price that we were quoted. So, therefore, we would not sell it at that point.
Q. Were you --
MR. HOBERG: Mr. Lein, could you get the door over there, please, shut it?
Q. (MR. BINEK CONTINUING) Were you present in the hearing room yesterday when Mr. Diller made his proposal to settle the resale issue by using an average of resale margins during the past three years for the purposes of establishing rates in this proceeding?
A. Yes, I was.
Q. What is your response to Mr. Diller's proposal?
A. I believe if we were to use the three-year average as Mr. Diller has suggested, taking into

361

consideration what happened for those three years would overemphasize what we could mark in the year 2000 and forward. In other words, his average is way too high than what we believe looking out into 2002 and the future we can make marginwise.
Q. You talked about the statement that Mr. Diller made on page ten of his rebuttal testimony. Do you think Mr. Diller is unaware that your schedule was -- uses actual sales levels for 2001?
A. I don't have a copy of Mr. Diller's report, if I could look at what you're referring to, please.
MR. DILLER: Well, it's the thing that you said I was incorrect on.
THE WITNESS: Okay. Which line.
MR. DILLER: Line 20.
THE WITNESS: Excuse me?
MR. DILLER: Line 20 and 21.
Q. (MR. BINEK CONTINUING) Would you just read that?
A. We're on page 10, line 20.
Q. (MR. BINEK CONTINUING) 20 to 25 are the lines that you reference in your testimony as being --
A. Okay. You want me to read his starting

362

with "MDU's"?
Q. Right.
A. "MDU's estimate of 2002 off-system sale margins begins by dividing the total sales into on-peak and off-peak units. MDU estimates that the off-peak sales, sales from 10 until 6 a.m. and all day Sunday, comprise about 47 percent of the total sales and the price below the cost of fuel. Such an assumption results in the net loss contribution of 144,319 for 2002. Staff can understand why on occasion the company might" -- that's it?
Q. And my question is: Do you think Mr. Diller is unaware that your schedule uses actual sales levels for 2001?
A. I'm still not sure what you're referring to on this on and off peak. What he's referring to is he was looking at the fuel cost to project 2002 minus the off-peak price and looking like it was a negative, is what I'm reading. Is that your question?
Q. Okay. Is it possible that Mr. Diller uses the word "estimate" to relay the fact that even though MDU's projection is based on actual sales volumes, it is still an estimate for 2002?
A. We're just trying to point out that the

363

margins for 2002 is based on our best possible scenario using the information we had, and I did not think he understood that we're not actually selling off peak at a loss. So I think he was using the estimate in that term of on and off peak.

Q. Isn't the 47 percent an estimate for 2002?

A. Yes, based on 2001.

Q. And the actual sales volumes for 2001 are in fact estimates for 2002?

A. That is correct, except for January and February that we used on the new exhibit for TLB-5.

Q. This 50 megawatts that was sold that you referred to on page two of your surrebuttal testimony, who bought that 50-megawatt block?

A. That was a confidentiality agreement. I cannot disclose the buyer.

MR. PEARCE: Just for the record, I would object, as well. It's not that we're trying to obfuscate, but the contract itself does contain a confidentiality provision that we could not reveal without the consent of the other contracting party.

MR. HOBERG: Thank you, Mr. Pearce. Mr. Binek.

Q. (MR. BINEK CONTINUING) Just a curiosity question, this 47 percent of off-peak capacity,

364

who's purchasing that electricity? Can you tell us that?

A. The off peak?

Q. Yeah.

A. Various companies throughout MAPP. It can either be sold on a daily basis, hourly basis, monthly basis, the party that was sold under this six-month contract. So there's a lot of parties involved in that off-peak price -- or off-peak megawatt hours, I should say.

MR. BINEK: No further questions.

MR. HOBERG: Thank you, Mr. Binek. Mr. Fahn, did you have any questions of Mr. Blinsky?

MR. FAHN: No, thank you.

MR. HOBERG: Thank you. Commissioner Wefald, please, do you have any questions of Mr. Blinsky?

EXAMINATION

BY COMMISSIONER WEFALD:

Q. Exhibit 10 is basically a projection, is that correct, based on the data that you have available about the futures prices at this time?

A. That would be correct.

Q. And that projection could change next week if the futures prices changed. It could go upward

365

or it could go downward?

A. That would be correct.

COMMISSIONER WEFALD: Thank you. That's all I have.

MR. HOBERG: Thank you, Commissioner Wefald. Commissioner Reinbold, please.

COMMISSIONER REINBOLD: I have no questions of this witness at this time.

MR. HOBERG: Thank you. Commissioner Clark, please.

COMMISSIONER CLARK: I have none. Thank you.

MR. HOBERG: No questions. Okay. Thank you. Mr. Pearce, any further questions?

MR. PEARCE: Just one, I think, or perhaps two.

REDIRECT EXAMINATION

BY MR. PEARCE:

Q. Mr. Blinsky, the contract you've testified to entered into in 2001, it wouldn't be the case that that -- the existence of that contract caused a capacity deficit for MDU under its MAPP reserve obligations later in the year, was it?

A. No.

Q. You were selling energy in that contract;

366

is that right?

A. That is correct.

Q. As opposed to capacity?

A. That's correct.

Q. I see you said you had no contracts in place today. Would it be fair to say that if you got an offer from someone wishing a contract at a good price, you'd be happy to enter into a contract?

A. Looking at the futures and what the market is talking about -- every day you talk to marketers as parts of your business and we all discuss what's going to happen in the future, and it seems gloom. If I had somebody approach me and even wanted to negotiate, I would sure listen.

MR. PEARCE: Thank you. That's all I have.

MR. HOBERG: Any further questions then of Mr. Blinsky? Thank you, Mr. Blinsky.

THE WITNESS: Thank you.

MR. HOBERG: Do you want to deal with that Exhibit 8, Mr. Pearce?

MR. PEARCE: Oh, yes.

MR. HOBERG: As I recall Exhibit 8 -- I don't know if we have copies of it. We had marked

Exhibit 8, and it was part of the surrebuttal testimony of Dr. Gaske, but it didn't actually get offered yesterday, and I'm wondering, Mr. Binek, if you'd be willing to stipulate to its admission.

MR. BINEK: Sure.

MR. HOBERG: Do you have copies for the Commission?

MR. PEARCE: We must. Do we have some copies somewhere? It's about a four-page or three-page -- JSG-4 schedule. I'm sure we have some copies here. Perhaps we'd like to -- Dr. Gaske testified about it. As I recall, it's the mathematical calculation of the relation to the --

MR. HOBERG: That's Exhibit 8.

COMMISSIONER REINBOLD: 8?

MR. HOBERG: 8.

MR. PEARCE: This was -- Dr. Gaske talked about this yesterday. He just identified what it is. It's mostly algebraic computations.

MR. HOBERG: Okay. Thank you, Mr. Pearce. All right. Your next witness, please.

MR. PEARCE: I will call Douglass Mahowald.

MR. HOBERG: I should note while he's coming up that Mr. Blinsky's testimony was -- his

direct was Docket No. 48 and his surrebuttal was Docket No. 59, and those are -- again, the direct is found in Exhibit 6 and Exhibit 7 is the surrebuttal. Okay. Mr. -- how do you pronounce that again?

MR. PEARCE: Mahowald.

MR. HOBERG: All right.

COMMISSIONER REINBOLD: Is that Scandinavian?

THE WITNESS: No. It's Luxembourg. Luxembourg in Germany.

COMMISSIONER REINBOLD: Oh, I've been there.

THE WITNESS: Have you?

COMMISSIONER REINBOLD: I didn't see you. Must have been a different time.

MR. HOBERG: Mr. Mahowald, I think you heard the admonition I gave in regard to perjury earlier?

THE WITNESS: Yes.

(Witness sworn.)

MR. HOBERG: Thank you. Mr. Pearce, please.

DOUGLASS A. MAHOWALD,

having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. PEARCE:

Q. Would you state your name and address, please, and your place of business?

A. My name is Douglass A. Mahowald. My business address is 918 East Divide Avenue, Bismarck, North Dakota, 58506.

Q. And in what capacity are you employed by MDU Resources Group, Inc.?

A. I'm assistant treasurer and assistant secretary.

Q. And would you please describe your duties in that capacity?

A. I'm responsible for the treasury services functions of the company, which includes the company's cash management program, maintaining bank and financial relationships, administration of the company's short- and long-term debt financing program, financial analysis, debt compliance. I also assist in the administration of various benefit plans and the company's risk management hedging program.

Q. Would you please outline briefly your educational and professional background?

A. In 1972 I received a Bachelor of Arts degree in business administration with a concentration in finance from the University of St. Thomas, St. Paul, Minnesota. Upon graduating from the University of St. Thomas I held various accounting and financial positions with several firms in Minot, North Dakota, and Minneapolis, Minnesota.

In February 1982 I joined Montana-Dakota as a budget statistician. I was promoted to treasury services manager in November 1982. In that capacity I was responsible for treasury service functions, including the company's cash management program. In August 1992 I was promoted to assistant treasurer and assistant secretary of MDU Resources Group, Inc.

Q. Have you previously testified in proceedings before regulatory commissions?

A. Yes. I have testified before the Montana Public Service Commission and the Wyoming Public Service Commission.

Q. What is the purpose of your testimony here today?

371

A. The purpose of my surrebuttal testimony is to describe the debt refinancing that incurred in April of 1992, which is referenced in the surrebuttal testimony of Dr. Gaske.

Q. What did the company refinance in 1992?

A. The company refinanced 100 million dollars of first mortgage bonds represented by the five series of bond issues shown under the pre-refinancing heading on page one of my Exhibit DAM-1. That long-term debt was replaced with the issues shown under the post-refinancing heading shown on page one of the exhibit.

Q. One point of clarification. When we're using the term "company" here, we're talking about MDU Resources Group, Inc., aren't we?

A. Yes.

Q. Why did the company refinance the first mortgage bonds in 1992?

A. The company's primary objective in refinancing its long-term debt in 1992 was to lower the overall cost of its long-term debt. The company achieved this objective through the refinancing that was completed at that time. This is shown in Exhibit No. DAM-1.

Page one of the exhibit is a comparison of

372

the cost of the issues redeemed and the cost of the new issues, which replace the redeemed issues. As shown, the pre-refinancing coupon interest rate for this group was 9.258 percent, and the post-refinancing cue upon interest rate for the group was 7.657 percent.

Also as shown on page one, the pre-refinancing costs for the group was 10.215 percent, and the post-refinancing costs for the group was 9.508 percent. This resulted in an annual savings of $231,500. Page two of the exhibit shows Montana-Dakota's total embedded cost of long-term debt at 9.965 percent for the 12 months ending December 31st, 1991, immediately before the refinancing.

Page three of the exhibit shows a total embedded cost of long-term debt at 9.69 percent for the 12 months ending December 31st, 1992, or immediately after the refinancing.

This exhibit clearly shows the company was able to lower its cost of the issues redeemed as well as lower its total cost of long-term debt by 2.75 percent through this refinancing in 1992. This lower cost of long-term debt has been a direct benefit to the company's customers.

373

Q. Has the company considered refinancing this debt that was refinanced in 1992?

A. Yes. The company has considered refinancing this group of long-term debt issues. However, the company has not taken any formal action to refinance this debt because this action would cause an increase in the total cost.

Q. Why would refinancing now what appears to be a lower coupon rate increase the total costs?

A. In order to lower the overall cost of its long-term debt in 1992 and provide a direct benefit to its customers, the company issued debt at then prevailing interest rates and market conditions. Based on the current prevailing interest rates, the company anticipates that refinancing this group of existing long-term debt issues may lower the overall interest coupon rate for the group.

However, the company would incur significant costs to reacquire this debt from existing holders in order to refinance. After accounting for the reacquisition costs for this group of existing long-term-debt issues, most notably the loss on reacquired debt, any refinancing action would increase the overall embedded cost of the company's existing long-term

374

debt and penalize its customers.

Q. Mr. Mahowald, you stated a moment ago -- and this goes back to line 15 on page 3 of your written testimony. I believe, unless I misheard, you said 2.75. Did you mean 0.275?

A. Yes. .275.

Q. In the course of your duties with the current corporation, Mr. Mahowald, do you as a regular matter monitor and continually keep in mind the possibility of refinancing if it would be economic and feasible?

A. We look at that on an ongoing basis, almost on a daily basis.

Q. And would you -- you wouldn't anticipate, would you, that the debt costs would necessarily be the same for other utilities, even other utilities in this area because it depends on various factors, does it not?

A. Right.

Q. And what are some of those factors -- I imagine it involves the question of timing, questions of that kind?

A. Well, the cost of debt and the capital market fluctuates over time. As companies issue new debt to finance new plant or repay existing

375

debt as it comes due or for other purposes, they go to the capital markets and must pay the competitive cost that is available in the market at that time.

If all utilities in North Dakota were to issue all of their debt at the same time, they might have debt costs that are nearly identical. However, all utilities in North Dakota do not have the same simultaneous needs to issue debt. Therefore, these differences in debt costs are often explained by the vintage of the debt obligations to the different utilities.

Q. And in the course of your duties with the company I gather from your testimony that you would recommend refinancing in any situation where it would save money, where it would be economically viable to do that?

A. Correct.

MR. PEARCE: That's all the questions I have.

MR. HOBERG: Thank you, Mr. Pearce. Mr. Binek, do you have any questions of Mr. Mahowald?

MR. BINEK: Yes.

CROSS-EXAMINATION

BY MR. BINEK:

Q. Yesterday, I believe it was when I was

376

questioning Dr. Gaske, the discussion about this cost of debt he was raising -- or talking about several factors, and one of the major ones was that during this time period MDU was in the process of constructing a power plant, and he referred specifically to the Coyote power plant. There had been -- Mr. Diller's testimony compared your cost of debt to that of NSP and Otter Tail Power Company, and your debt was considerably higher. I'm referring specifically to Otter Tail Power plant. Wasn't Otter Tail Power Company a partner in the construction of the Coyote plant?

A. Yes.

Q. In fact, Otter Tail Power Company had a larger share of the construction of that power plant than MDU did; isn't that also correct?

A. Yes, I believe so.

Q. Were you present in the hearing room when I asked Mr. King about this 40-million-dollar term loan from the Bank of America?

A. Yes.

Q. Is it true that the 40 million dollars was borrowed on December 29th, 2000, and that it matured on January 2, 2001?

A. That -- that sounds familiar. I'd have to

377

go back and look. I don't know the exact dates, but that sounds appropriate.

Q. Okay. This was basically a four-day loan; is that correct?

A. That would be four days.

Q. Okay. Now, am I also correct that MDU was carrying it on its books as part of its overall debt, the full 40 million dollars?

A. I believe so.

Q. What was the purpose of that loan?

A. For regulatory reasons we borrow short-term commercial paper throughout the year. For regulatory purposes -- not regulatory -- well, for rating agency purposes -- not regulatory purposes -- rating agency purposes we need to be able to demonstrate to the rating agencies that we have capacity to clear our short-term lines. So we basically put that money into clear that -- into the term loan and then --

Q. Okay. You have the capacity to clear what?

A. Well, for rating agency purposes we have the commercial paper program, and they like to see our quarter ratios, year-end ratios within certain lines so we don't have so much classified as short-

378

term debt. So we move that short-term debt into the term loan so we can evidence financial strength.

Q. Well, doesn't that -- isn't that a distortion of what is actually occurring within the company?

A. I wouldn't call it a distortion. I think it's another viable option to finance at that time. I think the prime rate at that time was nine-and-a-half percent, so it was a competitive -- or nine-and-a-quarter percent, so it was a competitive interest rate we received on that money.

Q. Now you said -- I believe you said that the full 40 million dollars was included in the -- in the overall debt of the company at that time; is that right?

A. I believe so. I'd have to check the records.

Q. Well, if that is in fact the case, wasn't that a distortion of the capital structure of the company?

A. I wouldn't think so because at that time prevailing interest rates were very competitive, that 9.75 draw.

Q. Well, when Mr. King reviewed this, he

379

reduced your debt by almost all but 1.3 million of that 40 million; isn't that correct?
A. That I don't know. I haven't looked at that part of the testimony.
Q. Assuming that -- assuming that that is correct, that would have reduced your overall debt by 38-and-a-half-million dollars in your capital structure; isn't that correct?
A. If that was done, that would be correct. Yes.
Q. So when you showed a capital structure with debt at 38-and-a-half-million dollars higher than what it actually was, wasn't that a distortion of the capital structure?
A. Repeat that question.
Q. Well, when your debt -- when you file a report, annual report or whatever -- and I don't know what was provided to Mr. Gaske, but when that shows a debt -- the company's debt at 38-and-a-half-million dollars higher than it should be, isn't that a distortion of the capital structure?
A. Why would that be higher, because it was debt we had on our books?
Q. Well, if -- if you agree that in his report that's been reduced by 38-and-a-half-million

380

dollars, wasn't it 38-and-a-half-million dollars too high?
A. Well, I haven't read his direct testimony, so I --
Q. Well, assuming that was done and assuming that MDU has not objected to it, wouldn't you agree that the debt was overstated by 38-and-a-half-million dollars?
A. Well, if MDU agrees to that, I guess yes.
Q. What's the difference between the coupon cost and the cost-of-money basis?
A. Well, the coupon rate would be the actual interest coupon rate on the debt, where the cost of money would include the reacquired costs, the issuance costs and those various things.
Q. The prefinancing annual cost was 10.2 million? Page one of your schedule, DAM-1, I assume that is.
A. 10.2 million or 10.2 percent? Oh, okay. I see. Yes.
Q. And the post-refinancing annual cost is 10.0, at the bottom of your interest costs in your schedule, page one of three, DAM-1? The last part of that schedule shows interest costs and cost-of-money basis off in the right-hand column.

381

A. Right.
Q. Okay. And the -- so you have 10.2 million as pre-finance, post -- this is rounded off. Post-finance is 10 million. Your net interest savings, .2 million?
A. Right.
Q. Is this a huge savings?
A. At that time that was the -- at the current market rates that was a significant savings.
Q. This is a savings of $231,000 per year to refinance 100 million dollars in debt cost; right?
A. Right.
Q. You mentioned a reduction in the debt cost by .275 percent. If I refinance a home at the cost of 8 percent and I could save .275 percent, what rate would I then have?
A. 7-point -- I don't know what --
Q. 7.975?
A. No. 7-point -- 7.625, I think. 8 percent minus the 2.75.
Q. 8 percent minus the .275.
A. Right. So it would be whatever that difference is, 7-point something.
Q. Okay. So it would be about 7.275, is that

382

it? On page 3 of your testimony, line 15, this .275 percent, where does that number come from?
A. It is the difference between the total found on page two of three in my exhibit, 9.65 at the bottom, versus -- that's the pre-refinancing, and then the post-refinancing shown on Exhibit 3 shows total embedded cost of 9.69 percent. That's your 2.75 differential.
MR. BINEK: I have no further questions.
MR. HOBERG: Thank you, Mr. Binek. Mr. Fahn, did you have any questions of Mr. Mahowald?

EXAMINATION

BY MR. FAHN:
Q. I'm sorry if I -- I'm sure I'm repeating a question here, but I'm still not clear on page three of your testimony. What's the difference between -- okay. What -- you mentioned that the pre-refinancing cost for the group was 10.215 percent.
A. Correct.
Q. Okay. What does that number include?
A. That's the average of the cost of money found on Exhibit 1.
Q. DAM-1?
A. Yeah. Page 1. You've got page two there.

383

Q. And what is the difference between the pre-refinancing cost for the group versus the pre-refinancing coupon interest rate? What is that in terms -- in English language what is the difference?

A. The coupon rate would just be the sole interest coupon on that debt. That's what we have to pay someone who holds that debt. The cost-of-money rate would include all the refinancing -- that would be our cost for all the refinancing costs and the acquisition stuff that we had to include in refinancing this debt.

Q. Okay. My only confusion, I guess, is that it seems to me like if you -- it's just a definition thing. It's the cost of obtaining the financing back from previously what held it?

A. Right.

Q. Seems like it would be a post-cost instead of a prefinancing cost.

A. Well, because we had refinanced some of this debt in this '92 example because some of that debt was already refinanced in '86, that's why the 10.215 is there because that is acquisition costs that we incurred when we refinanced the debt previously.

384

Q. Okay.

A. That's just reacquisition costs. It continues to carry forward until this debt finally matures.

MR. FAHN: Okay. Thank you.

MR. HOBERG: Thank you, Mr. Fahn. Commissioner Wefald, do you have any questions of Mr. Mahowald?

EXAMINATION

BY COMMISSIONER WEFALD:

Q. Why does it -- do you have an exhibit that shows -- is the one on page three of three, 39,901,186, the one that shows your date of maturity of all these different bonds?

A. As of December 31st, 1992, that was the maturity at that time.

Q. So do you have an updated list that tells us what the maturity dates are?

A. I have an updated list, but I don't have one with me. I could prepare one and get one to you if you'd like to see that.

COMMISSIONER WEFALD: That would be great.

MR. HOBERG: Okay. Mr. Pearce, can you make that a late-filed exhibit to -- let's see. What's the last exhibit on his --

385

MR. PEARCE: I believe the data is actually in the record in one of Dr. Gaske's schedules, JSG-2, Schedule 1, page two of two. That would be part of Exhibit 7, I think -- or the direct, Exhibit 6.

MR. HOBERG: The direct?

COMMISSIONER WEFALD: So that's already --

MR. PEARCE: That's already part of Exhibit 6.

MR. HOBERG: Let's take a look. Do you have -- what's --

MR. PEARCE: That's the bound book. It's Exhibit 6, the MDU direct testimony.

MR. HOBERG: Okay. Do you have --

COMMISSIONER WEFALD: MDU direct.

MR. HOBERG: -- the direct of Dr. Gaske?

MR. PEARCE: If you look in his JSG-2, one of his exhibits after the -- JSG-2, Schedule 1, page two of two.

COMMISSIONER WEFALD: Page one of one.

MR. PEARCE: It looks like it's about the --

COMMISSIONER WEFALD: Page two of two is what you want me to look for?

MR. PEARCE: Right. Schedule 1 -- it's

386

JSG-2, Schedule 1, page two of two, and it's entitled Montana-Dakota Utilities Co. Long-term Debt Capital, December 31st, 2000. Looks like it's just the second page after page 48.

MR. HOBERG: Are you finding it?

COMMISSIONER WEFALD: I found it.

MR. HOBERG: Is that what you're looking for?

COMMISSIONER WEFALD: Mm-hmm.

Q. (COMMISSIONER WEFALD CONTINUING) Now I need a little help in -- in understanding why Montana-Dakota Utilities' debt is intermingled with Montana-Dakota Resources' debt. Because yesterday they said that 13-and-a-half percent -- one of the people talked about 13-and-a-half percent of the debt relates to Montana-Dakota Utilities --

A. Okay. The --

Q. -- but when I asked the question -- excuse me, I'll just try to finish. But when I asked the question about refinancing, they said that, well, 100 percent of the debt would have to be refinanced. So now I'm asking you why that's the case if only 13-and-a-half percent relates to the utility?

A. Okay. The debt that we have for MDU

387

Resources evidenced by the first mortgage bonds --
MR. PEARCE: I'm handing Mr. Mahowald a copy of the exhibit page from Dr. Gaske that we're looking at.
MR. HOBERG: Thank you.
Q. (COMMISSIONER WEFALD CONTINUING) This says Montana-Dakota Utilities Company's long-term-debt capital. Is this the debt that only relates to Montana-Dakota Utilities?
A. Correct. This is just MDU -- Montana-Dakota Utilities' debt.
Q. All right. So then do you think he erred in answering my question, that 100 percent of Montana-Dakota Resources' debt would have to be refinanced in order to take care of Montana-Dakota Utilities' debt?
A. No. We could refinance this debt here, just the Montana-Dakota debt, if it was economical to do, but at this time it's not economical to refinance.
Q. Explain why it's not if it's --
A. It goes --
Q. This is 130 million --
A. 6.4 million.
Q. Where are you finding that number?

388

A. We've got the first mortgage bonds and then we have some pollution control bonds, pollution control notes.
Q. Is that $136,450 figure the correct one?
A. Right. That's all Montana-Dakota Utilities' debt.
Q. Okay. And so tell me why it isn't cost-effective to refinance at this present time.
A. You could save some money in your interest coupon rate because rates have come down a little bit for some like -- for instance, the 8.25 and the 8.6, the interest coupon rate has come down. So we could probably generate some annual savings there, but because of the reacquisition costs -- in order for us to get that debt back from the holders, we'd have to pay them a significant cost, and we wouldn't be able to -- we would immediately increase the overall total cost of debt because there wouldn't be enough savings in the coupon rate to overcome the amount of acquisition or the price we'd have to pay to get that debt back from existing holders.
You know, we might be able to save a half-million dollars in interest coupon rate alone, but it would cost us probably a million dollars per

389

year amortized over 20 years to reacquire that debt. So we would increase total costs by half a million dollars a year by trying to refinance the debt at this time.
Q. Do any of these debts relate to the power plants that were built in 1982 or in the early Eighties?
A. I would say the 8.25, the 8.6, those were issued in '92, as you can see here, and those were reissued as part of a refinancing for '86 debt, which was -- which in '86 refinanced some of the original '77, '78 bonds that we put on the books for the plant.
Q. Those are at 8.25 and 8.6. Have you looked at just refinancing those two alone?
A. Yes, we have, and it would -- for example, the 8-point -- just for an example on the 8.6, you could probably save one-and-a-half percent on the coupon rate, which would be about $500,000 a year based on your principal amount.
Q. One-and-a-half percent on the coupon rate?
A. Right. We could probably issue that debt for around seven percent.
Q. What rating are you right now with your bonds?

390

A. A. We're a single A.
Q. Single A?
A. But in order to reacquire that 8.6 debt based on a present-value fair-market estimate, it would probably cost us 10 million dollars that we'd have to pay to the existing holders to have them tender that debt. So we would immediately -- it's just not economical because we'd be saving over 500,000 a year, but we'd be paying at least a million dollars a year to reacquire that debt at these rates.
Q. And you don't -- that's the current rate that's available for A?
A. Right.
Q. Triple A would be less; right?
A. Correct. Probably be maybe six-and-a-half.
Q. Actually, it's five today. Someone called me about buying a bond today. Triple A was five percent.
A. Was that tax exempt or --
Q. Yes. It was tax exempt.
A. I was going to say, that seems kind of low for a taxable issue.
Q. Anyway -- all right. Thank you. Now at

391

least I know that it -- that this is the debt that relates directly to Montana-Dakota Utilities and I'm not confused anymore about the whole --

A. Correct.

Q. -- corporation having to be refinanced in order to take care of this particular debt.

A. Right. And we could refinance this at any time if it was economical.

COMMISSIONER WEFALD: Thank you.

MR. HOBERG: Thank you, Commissioner Wefald. Commissioner Reinbold, please.

COMMISSIONER REINBOLD: I have a question, Mr. Mahowald.

EXAMINATION

BY COMMISSIONER REINBOLD:

Q. You said you were assistant treasurer and assistant secretary of Montana Resources Group, Inc.?

A. Yes.

Q. You're assistant to whom? Who is your -- who is your chief?

A. Warren Robinson.

Q. And he -- he's treasurer and secretary for both --

A. Warren Robinson is the CFO. He's --

392

COMMISSIONER REINBOLD: Okay. That's the only question I had.

MR. HOBERG: Thank you, Commissioner Reinbold. Commissioner Clark, please.

COMMISSIONER CLARK: I do have a couple questions.

EXAMINATION

BY COMMISSIONER CLARK:

Q. Let me just -- first off, what I'm hearing as far as kind of what appear to be two separate issues, and you can tell me if I'm on the wrong track or the right track. It sounds like one of the questions that the Commission is dealing with is just kind of the -- almost like a prudency review of the cost of debt, and on one hand staff witness has kind of claimed because he doesn't think that it's exactly prudent we should be using this accounting method of calculation, and MDU's testified that it is a legitimate or prudent cost of debt and because of that we should use the model that Dr. Gaske put forth. Is that kind of one issue that we're getting at here?

A. Right. And I would agree with Dr. Gaske, that we have to use the yield to maturity; otherwise, we'd be penalizing and wouldn't be able

393

to recover those -- some costs that we used in reacquiring that debt in '92.

Q. Is this -- the 40-million four-day loan from the Bank of America, is that kind of a separate issue? Is that more of an issue of what gets counted as debt on the books?

A. Yes, I guess it would be.

Q. Okay. On that issue -- I just need a little bit of help. I know you'd mentioned it, but I forgot to get it down. The institutions that, in your words, you're clearing the short-term lines for, who are they again?

A. Well, it would be the ratings agency, S&P and Moody's. They like to see that you're able to demonstrate financial strength. Otherwise what'll happen is that debt will be considered short-term, which could affect our commercial paper ratings and our bond ratings, and if they were to negatively impact those ratings, our borrowing costs could go up.

Q. And so that's the reason that they want that 40 million there?

A. Right.

COMMISSIONER CLARK: Okay. That's all the questions I have. Thank you.

394

COMMISSIONER WEFALD: I have one followup.

MR. HOBERG: Thank you, Commissioner Clark. Commissioner Wefald, please.

FURTHER EXAMINATION

BY COMMISSIONER WEFALD:

Q. Then is that 40 million included in the 136 million?

A. No, it would not -- it's not in here. It wouldn't be included.

COMMISSIONER WEFALD: It's not. Okay. Thank you.

MR. HOBERG: Thank you, Commissioner Wefald. Any further questions, Mr. Pearce?

MR. PEARCE: Just a couple extra.

REDIRECT EXAMINATION

BY MR. PEARCE:

Q. Mr. Mahowald, if the company can demonstrate that it can obtain a term loan, say, for 40 million dollars in an amount sufficient to pay your commercial paper, that would demonstrate financial integrity and strength to the rating agencies, wouldn't it?

A. Yes. In fact, it -- yes.

Q. Now I think there was some question about the agreement to Mr. King's use of 1.3 million

dollars with this term loan we're talking about. Is it your understanding that MDU agreed to use the average daily balance of that term loan, and that was 1.3 million dollars? Does that sound right?

A. Yes.

Q. And, of course, if there's an actual outstanding obligation of 40 million dollars at the end of the year, the company's obligated to report that on the appropriate reports it would make of outstanding obligations?

A. Yes.

Q. Now there was a question about Otter Tail's share in the Coyote plant built back in the 1970s. You wouldn't have any information, I assume, as to what kind of financing Otter Tail might or might not have needed to finance its share, would you?

A. No.

Q. You have never worked for Otter Tail, have you?

A. No.

Q. Can I assume that you would not agree with Mr. King's characterization of MDU's current cost of debt as unreasonably high?

A. No, I would not agree with his

characterization.

Q. How would you characterize it?

A. If you look at Dr. Gaske's testimony, his rebuttal testimony on page -- oops, this is not the right book. On page three of Dr. Gaske's rebuttal testimony --

MR. HOBERG: That would be Exhibit 7.

THE WITNESS: -- we have issued some debt since '92, since this refinancing, and if you look at that, our long-term debt issued after April 1992 has an average cost of 7.31 percent, and that is lower than the 7.68 percent debt cost of Otter Tail Power that Mr. King cites in his rebuttal testimony and very close to Northern States Power's 6.99 percent long-term debt cost that he cites. So I think the company's been very prudent in obtaining the least-cost debt. Unfortunately, the '92 debt that is still on the books has a lot of reacquisition costs, and we're just not able to economically refinance it at this time.

MR. PEARCE: I have no further questions.

MR. HOBERG: Thank you, Mr. Pearce. Mr. Binek, anything further of Mr. Mahowald?

MR. BINEK: Yes.

RECROSS-EXAMINATION

BY MR. BINEK:

Q. Getting back to this 40-million-dollar loan, you said they -- I forget. I don't know exactly how you said it, but you said that they want you to be able to show you have the capacity to clear your short-term debt or something like that. Who's "they"?

A. It's the rating agencies, because what we do is when we -- we have a commercial paper program at MDU, and that commercial paper program is backed by a standby letter of credit issued by various banks, and the only way we can really sell commercial paper to investors, you have to have a standby letter of credit because if for some reason we had 40-million-dollars commercial paper outstanding today and we couldn't access the market, September 11th came or we just couldn't sell our paper, those investors would want to be paid back. So we would have to then go into our standby letter of credit and borrow to repay those commercial paper investors, and the rating agencies like to see that you clean out -- or clear your lines so you can demonstrate that you have the financial capacity to do that, and that determines

your short-term credit rating.

Q. Okay. So then was it the rating agencies that told you you needed to do this or who -- who -- who made this determination?

A. It's driven by the rating agencies and their requirements.

Q. But who determined -- who said borrow 40 million dollars for four days?

A. Well, we had -- at that time we had some short-term debt outstanding, and we -- to demonstrate to the rating agencies that we have the capacity under the back-up lines to access credit, we paid that debt -- we moved that debt from short-term over into the term loan.

Q. Okay. And who decided to include the full 40 million dollars as term debt -- or I think the term is what you -- you called it.

A. It was based on our borrowing -- short-term borrowings at that time. We just took the full amount and moved it over.

Q. Okay. And if I understood the exchange between you and Mr. Pearce, it sounds to me like you agree that this 40 million dollars has been removed from your overall debt and there's 1.3 million being shown.

399

A. Correct.
Q. Do you agree with that?
A. Yeah.
Q. Okay. So my point again is the report that you provided or that MDU provided to Mr. King that showed 170-some million dollars in overall debt was incorrect, that that was overstated by 38.5 million?
A. I haven't seen that exhibit, so I can't -- I don't know. I'll take your word for it, but I haven't seen the exhibit. I guess I'd have to see the exhibit to agree with that.
Q. Okay. And can you tell me or not -- do you know who -- who made the determination to include that 40 million dollars in the overall debt?
A. That I don't know.
Q. Okay. Are your records audited by any outside auditing company?
A. Arthur Andersen.
Q. Okay. This is Arthur Andersen of Enron fame?
A. Well, yes. Yes.
Q. Okay. And they approved this showing of 178 million dollars in debt, overall debt?

400

A. I believe so. I'd have to look at the -- the accounting exhibits to make sure.
Q. Why did this happen, this 40-million-dollar loan? Why did it happen at the end of the year?
A. We also do it during -- during the quarters, and we also use the term loan if we have more -- borrowed in excess in our commercial paper program.
MR. BINEK: No further questions.
MR. HOBERG: Thank you, Mr. Binek. Mr. Fahn, anything further?
MR. FAHN: No. No, thank you.
COMMISSIONER WEFALD: I have a question.
MR. HOBERG: Commissioner Wefald, please.

FURTHER EXAMINATION

BY COMMISSIONER WEFALD:
Q. I'm sure there's something I'm not understanding correctly here, and that's this exhibit that you showed me, Exhibit No. JSG-2.
A. Okay.
Q. All right. Now Mr. Diller yesterday gave us an Exhibit 3, cost of capital summary. It looks like this. I don't have a page number, but it's called cost of capital summary.

401

MR. HOBERG: It's in Exhibit 3.
Q. (COMMISSIONER WEFALD CONTINUING) And I'm sure -- I just need to understand then how these numbers are arrived at. Under debt staff shows 8.62 percent cost of debt, and then it says Montana-Dakota Utilities Company, and I believe that's the cost of debt that MDU is stating in this case.
A. Correct.
Q. But when I look at the numbers that you referred me to on JSG-2, none of those interest rates are above 8.6, and so I'm having difficulty understanding how -- there must be something wrong here -- why the cost of debt would be 9.22 percent. So just explain to me how --
MR. PEARCE: Perhaps if I could interject. I don't want to testify for the witness, but the JSG-2, Schedule 1, page one of two, shows how the capital structure and debt works together to end up with the embedded cost.
MR. HOBERG: Is that what you're looking at, Mr. Mahowald?
THE WITNESS: I am now, right.
MR. HOBERG: Okay.
Q. (COMMISSIONER WEFALD CONTINUING) What's

402

the difference between what you're showing on page one, Schedule 1, and what's being shown on Schedule 1, page two of two? How about -- which of those numbers on Schedule 1, page one of two, relates to the next page that you referred me to?
A. Not preparing this exhibit, I'd have to defer that to Dr. Gaske. I'm not sure.
MR. HOBERG: Mr. Binek, Mr. Pearce, do you mind if Dr. Gaske, who's already been sworn, goes up to answer this question --
MR. PEARCE: That's fine.
MR. HOBERG: -- since he's the appropriate person?
MR. PEARCE: Sure. That makes sense, if you're agreeable.
MR. BINEK: That's fine.
MR. HOBERG: Dr. Gaske, do you want to approach the stand and see if you can help us out with that question, please? Do you understand the question, Dr. Gaske?
DR. GASKE: Yes, I do.
MR. HOBERG: Okay.
COMMISSIONER WEFALD: I just need to know how to relate the figures.
DR. GASKE: Right. If you look at

403

Schedule 1, page one, on the very top line it refers to long-term capital.

COMMISSIONER WEFALD: Yes.

DR. GASKE: The balance outstanding -- the numbers on that line are a summary of what you see on page two of that schedule.

COMMISSIONER WEFALD: And I see that number at the bottom of that page.

DR. GASKE: Right. You'll see the -- all three of those numbers appear on the very bottom line of page two.

COMMISSIONER WEFALD: All right. Then when we were talking about the first group, $136,450,000, then what's the second group of numbers then, 130,850,000, because those have much higher debt levels? The cost of money is much higher.

DR. GASKE: That's correct. The cost of money is a combination of the coupon interest rates, which you see up positive and also in the title to most of the bonds. If you go over to sort of the upper right-hand block of numbers on the page, you have "Underwriters' Commission," and you've got "Loss on Reacquirement, Redemption and Issuance Expenses." Those carry down then into the

404

bottom half of the page where the company has calculated the effect of cost of money.

So, for example, the 8.25 percent first mortgage bond has a total cost of 10.17 percent once you include the underwriters' commissions and the reacquisition costs. The overall average for all of the debt way down in the lower right-hand corner of the page, 8.938, carries over then to the first page.

COMMISSIONER WEFALD: I see. Okay. Thank you very much. That's been very helpful.

DR. GASKE: Did you want to follow up on why 9.22 seems to pop out or --

COMMISSIONER WEFALD: Well, then there's an additional 10 million of commercial paper. What is that?

DR. GASKE: Commercial paper is very short-term loans that companies typically issue. They'll --

COMMISSIONER WEFALD: Is that like this one that they were talking about for 40 million dollars for four days?

DR. GASKE: No. It would be paper that they actually issue out in the market. It might be -- I guess Mr. Mahowald probably can tell you

405

the components of it, but it might be 30 days, 60 days, 6 months, something like that, but there's -- there are a couple of items when you look at the annual cost column, the second line has $548,000 of amortizations. So that would tend to increase the overall costs that you end up with way down at the bottom. The 9.22 percent includes that.

COMMISSIONER WEFALD: Thank you.

DR. GASKE: Okay.

MR. HOBERG: Thank you, Dr. Gaske. Anything further of Mr. Mahowald?

COMMISSIONER WEFALD: No.

MR. HOBERG: Thank you. Commissioner Clark, anything further?

COMMISSIONER CLARK: No further questions.

MR. HOBERG: Any further questions of Mr. Mahowald? Thank you, Mr. Mahowald. Okay. Mr. Pearce, I think you have three witnesses left?

MR. PEARCE: Yes.

MR. HOBERG: Should we take a recess here and come back at 1 o'clock? Does that sound appropriate?

COMMISSIONER CLARK: I think so, unless we've got one that's real quick.

MR. HOBERG: Probably don't have one

406

that's that quick.

MR. PEARCE: Probably not. There may be a number of questions of Mr. Espeland.

MR. HOBERG: Okay. Let's stand in recess till one o'clock, promptly at one o'clock.

(Noon recess taken.)

MR. HOBERG: Okay. We're back from luncheon recess, and just for the purposes of a clean record, Mr. Mahowald's testimony we took just before lunch was Docket No. 62, Exhibit 7. I believe we're about to move on to Mr. Espeland.

MR. PEARCE: Yes.

MR. HOBERG: Would you please call him?

MR. PEARCE: I'll call Richard A. Espeland.

MR. HOBERG: And while he's walking up, I'll just refer to his testimony as Docket No. 58, also surrebuttal testimony found in Exhibit 7. Mr. Espeland, did you hear the admonition I gave in regarding to perjury earlier today?

THE WITNESS: Yes, I did.

(Witness sworn.)

MR. HOBERG: Thank you. Mr. Pearce, please.

407

RICHARD A. ESPELAND,

having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. PEARCE:

Q. Would you please state your name and business address?

A. Yes. My name is Richard A. Espeland. My business address is 918 East Divide Avenue, Bismarck, North Dakota.

Q. And what is your business position?

A. I am vice president of human resources for MDU Resources Group, Inc.

Q. What are your duties and responsibilities with MDU Resources in that capacity?

A. I have the overall responsibility for human resources function throughout the corporation. The primary areas include employment, total compensation, and by that I mean both general and executive compensation and the full benefit programs, training and development, employee relations and employee communications.

Q. Would you please outline your educational and professional background?

A. I received my Bachelor of Arts degree from

408

UND in 1996 with a marriage in personnel management and subsequently received my Master's degree in public administration from UND in 1981.

Upon graduating from college I spent 4 years in the U.S. Army as an officer in the infantry, and then I worked 2 years with the City of Grand Forks, 5 years with the State of North Dakota, 12 years with North American Coal Corporation, and currently 12 years with MDU Resources Group.

In December of 1989 I did join MDU Resources as human resources manager and held that position until August 2000 when I was elected vice president of human resources.

I'm currently a member of the Human Resource Management Society and the Central Dakota Human Resource Association. I have spoken on retirement and employee benefit issues on many occasions at national conferences in Boston, Orlando, Chicago and San Francisco.

Q. I may have misheard, but did you say possibly that you received your BA degree in 1996? I think you meant '66.

A. Did I say '96? I may have. '66, as the written testimony shows.

409

Q. What is the purpose of your testimony today?

A. The purpose of my testimony is to address the rebuttal testimony of Mr. Mike Diller of the Commission staff in this case concerning the supplemental income security plan, or SISP, and to further explain the purpose of SISP as it was originally addressed by Mr. Don Ball of Montana-Dakota in his direct testimony.

Q. What are your duties and responsibilities relative to the SISP program?

A. I am the plan administrator assigned the responsibility by the board of directors of MDU Resources Group for the management of the plan, design of the plan, eligibility, interpretation, communication and benefits administration.

Q. At page 16, line 7 of his testimony, Mr. Diller mentions that the SISP has been in effect since 1982 but that Montana-Dakota has not previously sought rate recovery. Would you please explain why that is?

A. Yes, I will. When the SISP was implemented in 1982, it was a visionary plan and was new to the utility industry and many industries at that time. It was not common anywhere within

410

the utility industry in 1982. In the intervening years since then, and particularly in the last few years, supplemental employee retirement plans, which are commonly called SERPs, which are like Montana-Dakota's SISP, have become common practice both in utilities and related companies.

These types of plans have become necessary due to various changes in federal regulations, Social Security benefits and employment practices. These changes have adversely affected Montana-Dakota's key employees as to potential retirement benefits. Because of those changes, SERPs, such as Montana-Dakota's SISP, have become necessary in order to attract, retain and provide equitable benefits for key employees. The SISP costs therefore should be included in Montana-Dakota rates.

Q. Would you please describe the various changes in federal regulations that have adversely affected retirement plans for key employees?

A. In the early Eighties prior to SISP being implemented, a defined benefit pension plan like Montana-Dakota has could provide benefits in consideration of up to $225,000 of salary. That limit was reduced in the mid Eighties to $150,000

411

of salary that could be considered in a defined benefit pension plan, therefore reducing the benefit eligibility and pension benefits provided by about one-third.

This compensation limit has slowly increased to the current $200,000 level but is certainly not at a pace equal to general wage inflation. In addition, the 401(k) plan regulations limit employee contributions to $11,000. The effect is that the employee with a $50,000 annual income can contribute 22 percent of their salary while senior executives are generally limited to 10 percent or less.

Q. What changes in Social Security benefits have adversely affected key employees?

A. The Social Security covered wage base, while increasing over the years, has not kept pace with the general wage inflation, and benefits provided to higher income levels are significantly less than at lower income levels.

Q. At page 16, line 12 of his testimony, Mr. Diller notes that Montana-Dakota participants in the SISP have declined from 38 participants in 1996 to 27 participants in 2001. He suggests that the reduction may indicate that Montana-Dakota no

412

longer sees the same need for this plan. Is there a reason for the decline in SISP participants?

A. Yes, there is a reason. Montana-Dakota has taken aggressive action since 1995 to reduce costs and to streamline their organization and provide the lowest cost to the consumer. As a result of these actions, Montana-Dakota was able to reduce the number of management positions as well within their company and thus reduce the number of SISP participants.

Q. Who are the key employees you refer to who are participants in SISP?

A. Key employees are officers, directors and senior managers of MDU Resources and Montana-Dakota who have the vision to adequately plan for the future, implement appropriate strategies for the company, and see how to reduce costs, streamline the organization, and implement new technologies to maintain and increase efficiencies of the company with fewer employees while keeping the rates stable and competitive within the industry. A perfect example is the fact that Montana-Dakota has not had to seek an electric rate increase in the last 15 years.

Q. Mr. Diller at page 16, line 19 of his

413

rebuttal testimony expresses concern that there is a lack of symmetry in the SISP in that an employee making $50,000 per year would receive a lower percentage of annual income than a higher income employee. Would you please explain the difference?

A. Yes, I will. When the compensation and benefit programs are designed, we look at them in the context of all of the benefit programs, all of the retirement benefit programs specifically. To put the retirement benefits in perspective, I have prepared Exhibit RAE-1, which reflects the retirement programs available to employees in Montana-Dakota, including the SISP.

As you will note from the graph, at the lower income levels the replacement income through retirement programs is about 80 percent. This includes Social Security, the defined benefit pension plan, the company match to the employee contributions to the (k) plan, and as you move up the scale, the percentage of income replaced by retirement plans of these three decreases significantly based on the retirement plan design requirements and the government limitations.

The SISP as a supplemental plan has been designed to replace some, but not all, of the

414

income that is not replaced by Social Security, defined benefit pension and the 401(k) plan. At the higher income levels we target only about 50 percent of the annual income being replaced compared to 80 percent at the lower income levels.

Q. Does the SISP benefit last as long as the other retirement benefits you've noted?

A. No, it does not. The retirement benefits payable under SISP are payable over 15 years beginning at age 65 and not over the remaining lifetime of the individual, which is currently about 20 years for the defined benefit pension, Social Security and the like. So Social Security, the defined benefit pension, and the 401(k) plan income projections cover the entire -- the retiree's lifetime versus just the first 15 years.

Q. Should Montana-Dakota's SISP be included in rates?

A. Yes, it should be. The SISP is a common type of benefit provided in today's business environment. The combined replacement income from all retirement plans when taken together is equitable, reasonable and justifiable. The SISP recognizes the contributions of key employees whose abilities and vision have enabled Montana-Dakota to

415

streamline operations, reduce costs and employee numbers, implement new technologies and, more importantly to the ratepayer, to keep Montana-Dakota's electric rates at 1987 levels at a time when the Consumer Price Index rose 59 percent during the same period of time.

Q. Looking at the question of the security of the SISP benefits, is that the same as for the company's other retirement plans?

A. It is not. It's significantly different. The SISP is a non-qualified benefit plan, which means it is not secured by Pension Benefit Guarantee Corporation. It's only backed by the assets of the corporation itself or by Montana-Dakota Utilities. So the significant difference is if the company was to go bankrupt or become insolvent, there would be no money to pay benefits to these executives under the SISP because those moneys would first go to creditors.

Whereas in a defined benefit pension plan, those are separated in a trust, guaranteed by the Federal Government, as well as the funding within the trust, and are available no matter what happens to the company, the general employees. And I might add that is by design. We want the supplemental

416

income retirement program to be at risk so that the executives have an incentive to maintain the company as a viable organization.

Q. You stated the SISP is necessary to attract and retain key employees. Is this just your theory or your hope, or do you have real-life experiences with this?

A. We have real-life experiences. You know, I can give a couple examples in recent times of -- in power production we had a very young crew in our power plant area. We went to the outside to hire someone that had a lot of experience in the Midwest region. We hired a very experienced person that has been able to coach and develop our current employees to be able to have that seasoned experience. If it had not been for SISP's benefit, we would not have been able to attract that individual. Same with -- and we recently hired a vice president of human resources for Montana. Again, without SISP we would not have been able to get the expertise and the background to really come in and make a difference.

Q. In your opinion then, the existence of a program like SISP provides a real benefit to ratepayers?

417

A. I do. And I'll use one more example, and this may or may not help, but in regards to myself four years ago I was given a very significant offer by another company at substantially higher wages and benefits. Because of SISP and a few other reasons, but one of it was SISP -- we have a vesting provision in SISP, and I was only 50 percent vested so I didn't get the full benefit unless I stayed longer. It was a factor in my decision to stay. Some people may have wished I was fully vested, but it certainly did keep me as a North Dakotan in North Dakota.

MR. PEARCE: Thank you. I have nothing else for Mr. Espeland.

MR. HOBERG: Thank you, Mr. Pearce. Mr. Binek, did you have any questions of Mr. Espeland?

CROSS-EXAMINATION

BY MR. BINEK:

Q. I take it from your last comments here that had you been fully vested, you'd be gone.

A. I wouldn't say I would be because there were other issues there, as well, but it certainly is one factor. We design our programs to have that retention value.

Q. I believe in your testimony you agreed

418

that the costs of this plan have never been included in rates.

A. That's correct.

Q. And you gave some explanation of why you think that this benefits the ratepayers and why the costs should now be borne by ratepayers. Are you saying or suggesting that MDU's shareholders do not benefit from the efforts of these key employees?

A. Well, they certainly do. Yeah. Both ratepayers and stockholders benefit.

Q. But you want the ratepayers to pay the full cost of this; right?

A. I think it's an appropriate cost, just like their salaries are. It's a part of the total compensation package.

Q. But we're talking about key employees, 27 key employees that are doing all these wonderful things for the company, and you want the total cost to be paid by the ratepayers, even though you say that the shareholders benefit?

A. Well, I think -- yes. I think it's an appropriate cost of doing business to have the talents at any level within the organization.

Q. You state that these types of plans have become necessary due to various changes in

419

regulation, Social Security benefits, and employment practices and that those changes have adversely affected MDU's key employees as to potential retirement benefits. I'd like to have you provide a list -- or give us a list of the retirement benefits that are presently available to these key employees.

A. A list of their retirement benefits?

Q. Right.

A. That is summarized on the graph, which was Exhibit RAE-1, which lists those four sources of retirement benefits, Social Security, 401(k) plan, the pension, and the SISP. Those are the four retirement programs we have.

Q. What other benefits does MDU provide to these key employees?

A. The same benefits that we provide to all other employees, healthcare, life, disability.

Q. I'd appreciate it if you'd give us a list of those.

A. Okay. We have healthcare, which includes medical and dental, with cost-sharing by the individuals. We have life insurance available uniformly to all employees to include the key executives. We have holidays, vacations, we have a

420

sick leave program, long-term disability program. I'm trying to think of what I'm forgetting.

Q. Are there some post-retirement benefits?

A. Yeah, retiree healthcare.

Q. Is there a benefit of -- still in place of reduced utility rates for employees?

A. Yes. For employees that are -- reside in the utility area that provides service, they get a utility discount.

Q. How much is that?

A. I believe it's about one-third of the utility.

Q. And that -- key employees also get that, don't they?

A. That's correct.

Q. What's the annual cost of this supplemental income security plan?

A. For the Montana-Dakota Utility electric side it's about $680,000, 600 -- I think that's right, $680,000.

Q. What's the total cost of the plan?

A. Total cost corporatewide?

Q. Right.

A. About two-and-a-half to three million.

Q. That's an annual cost?

421

A. That's an annual cost.

Q. And there are 27 employees?

A. No.

Q. Okay. How many employees -- there are 27 employees -- well, the 27 employees, is that just Montana-Dakota Utilities?

A. That's correct.

Q. This 600-some-odd-thousand, is that just North Dakota's share?

A. Yes.

Q. Okay. So the total -- what is the total cost of the Montana-Dakota Utilities plan?

A. Both gas and electric?

Q. Whatever the --

MR. DILLER: Just electric.

Q. (MR. BINEK CONTINUING) Whatever these 27 employees are?

A. Okay. The cost to Montana-Dakota total, gas and electric, would be about 1.2 million. There's 27 active participants, but also there are 34 inactive, deferred, vested participants which those costs also are funding those costs because they have worked for us or they're retired and you still have that cost, just like our defined benefit pension plan. Our defined benefit pension costs

422

include not only active employees but all those that are retired and the ongoing costs to fund those benefits, as well. So we have about 60 total participants for Montana-Dakota in SISP, former and current, for that 1.2 million.

Q. And with roughly 60 employees, 1.2 million, you're talking about $20,000 a year per employee for --

A. The cost is about 20,000 a year. Correct.

Q. You talked about the total number of employees being covered by this being 60. Haven't those -- the costs for these prior employees been funded previously?

A. No. Since it's a non-qualified plan, there is no provision specifically for prefunding and setting aside moneys. We do have a SISP -- or a rabbi trust that some moneys go into, but it is not fully funded like our defined benefit pension plan. There is no -- there is -- about probably 20 or 30 percent of the liability has some dollars set aside to it, but again those dollars are available to creditors first. So they're not totally set aside like a defined benefit pension plan.

Q. But this plan -- since 1982 money's been going into this plan; right?

423

A. That's correct.
Q. Every year?
A. That's correct.
Q. And we're talking about right now 1.2 million a year. The benefits being paid out aren't being paid out to 60 employees.
A. Montana-Dakota has about 20 employees in pay status at various levels that can take partial or they can take full. So we have about 20 individuals in a pay status. They don't have to take it all at one time. The average cost is about 20,000 per year.
Q. Over the 60?
A. Over the 60.
Q. Of the 20 current employees what's the average cost?
A. Of the 27? If you divide that way, it's about 40,000, you know, but that's not reflecting the full number of people covered, and that's -- that 680,000 also includes the cost of paying current benefits and recognizing the cost of future benefits, and so it's everything in there.
Q. And you said you're one of the key employees?
A. Yes, I am.

424

Q. Will you resign your position if this benefit is eliminated?
A. No.
Q. Isn't it true that even if the Commission does not allow the cost of this plan to be recovered in rates, the shareholders can still continue to provide the benefit at shareholders' expense just like it has been up to now?
A. I'd have to answer yes because the quality and the type of management and employees we have are going to do the best job they can regardless of whether they feel they're paid fairly or treated fairly. That doesn't make it necessarily the appropriate way to establish rates. So, yeah, they're going to continue to do a very good job. That's just their nature.
Q. On page 5, beginning at line 14, you talk about replacement income through retirement programs, and you state that at the lower income levels the replacement income through retirement programs is about 80 percent, and as you move up the income scale, the percentage of income replaced by these plans significantly decreases. The 27 employees that we're talking about are the higher-income employees obviously.

425

A. That's correct.
Q. Aren't these employees in a much better position than lower-income employees to build up savings and other stock portfolios and other investments for their retirement?
A. Yes, they are. They have much more discretionary income than the lower income, and that's why we decline the replacement income to 50 percent rather than at the 80 percent level.
MR. BINEK: I have no further questions.
MR. HOBERG: Thank you, Mr. Binek. Mr. Fahn, did you have any questions of Mr. Espeland?

EXAMINATION

BY MR. FAHN:

Q. Did you indicate anywhere in your testimony what the -- I assume that your Exhibit No. RAE-1, that would be annual salary levels on the bottom of the chart?
A. Right. Annual compensation.
Q. And what is the -- of the key employees you're talking about, what would the lowest annual salary be possibly?
A. The ones included would be around 75 to 80,000.
MR. FAHN: 75 to 80. Okay. That's all I

426

have. Thank you.
MR. HOBERG: Thank you, Mr. Fahn. Commissioner Wefald, please.
COMMISSIONER WEFALD: I have no questions for this person.
MR. HOBERG: Thank you. Commissioner Clark, please. I'm sorry. Commissioner Reinbold.
COMMISSIONER REINBOLD: I have no questions.
MR. HOBERG: Commissioner Clark, please.
COMMISSIONER CLARK: I do have just a couple.

EXAMINATION

BY COMMISSIONER CLARK:

Q. Maybe it would be helpful for me just to -- and I understand kind of what it is in general, but could you talk about in specifics how does the SISP work?
A. Okay. SISP was designed so that we can provide a supplemental retirement benefit at age 65. It is funded -- or we fund it through corporate-owned or trust-owned life insurance policies. Currently they're through Northwestern Mutual Life because they have a cash value buildup which offsets our cost, and the benefit there, as

427

well, is that if the executive were to die during the lifetime, their working career, they would have a life benefit or death benefit for a surviving spouse. But generally it's funds or retirement at age 65 for 15 years based on replacement, and the costs of the program are paid out of corporate funds and the proceeds come in to corporate assets.

Q. If someone were to retire at, say, 70, is it 15 years after retirement date or is it 15 years after 65?

A. Okay. It's 15 years from the date they start receiving benefits. Now at age 65 if they say I don't need it right now, I would like to defer that for 5 years because I'll live till 90 or 100, they can do that.

Q. Okay. You talked about -- in response to a question that Mr. Binek had about other additions that employees -- or other additions, kind of other benefits that employees get. You talked about this utility discount of about a third or something.

A. That's correct.

Q. Is that to all employees, including current ones, or is that just to retirees?

A. No. That's to all employees.

MR. HOBERG: Excuse me. You need to get a

428

little closer to the mike.

THE WITNESS: I'm sorry. That is to all employees.

Q. (COMMISSIONER CLARK CONTINUING) Okay. All employees get this third discount or however it's figured. The income that's not realized there, it has some sort of cost, does that come from shareholder or ratepayer side of the equation?

A. The discount is included in prior rate filings, I believe.

Q. So that would be included prior to rate filings. In other words, it comes from shareholder -- it comes on the ratepayer side?

A. It's my understanding from the design of it, that all costs are covered in the -- you know, in the cost the employee pays, but there is no additional costs incurred there, but I would have to defer to Don Ball on the specifics.

COMMISSIONER CLARK: Okay. I'll maybe ask Mr. Ball when he gets up here. That's all I have. Thanks.

MR. HOBERG: Thank you, Commissioner Clark. Anything further? Commissioner Wefald?

COMMISSIONER WEFALD: I just had a question.

429

EXAMINATION

BY COMMISSIONER WEFALD:

Q. Is Mr. Ball going to be covering the pension and post-retirement issues that are separate from SISP?

A. I believe he is, yes.

COMMISSIONER WEFALD: Thank you.

MR. HOBERG: Mr. Pearce, anything further for Mr. Espeland?

MR. PEARCE: No.

MR. HOBERG: Anyone have anything further for Mr. Espeland?

MR. BINEK: Yes. I just have a question.

MR. HOBERG: Mr. Binek.

RECROSS-EXAMINATION

BY MR. BINEK:

Q. It's a followup from Commissioner Clark's question when he asked about these discounts. I think he asked if they were also available to retirees, and you said to all employees. Are you including retired employees?

A. Yes. Those that live in the service territory.

Q. Okay. So that continues on after they retire? They still get that utility discount?

430

A. That's correct.

MR. BINEK: Thank you.

MR. HOBERG: Anything further then of Mr. Espeland? Thank you, Mr. Espeland.

THE WITNESS: Thank you.

MR. PEARCE: Call Donald Ball.

MR. HOBERG: Mr. Ball, please. Mr. Ball, I believe you heard the admonition I gave in regard to perjury earlier; is that correct?

THE WITNESS: I did.

(Witness sworn.)

MR. HOBERG: Thank you. Mr. Pearce, please.

DONALD R. BALL,

having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. PEARCE:

Q. Would you please state your name, business address and position?

A. My name is Donald R. Ball. My business address is 400 North Fourth Street, Bismarck, North Dakota, 58501. I'm the director of regulatory affairs of Montana-Dakota Utilities Company, a division of MDU Resources Group.

431

Q. And you have previously filed some direct testimony in this proceeding, have you not?
A. Yes, I have.
Q. What is the purpose of your testimony today?
A. The surrebuttal testimony -- the purpose is to address concerns I have with the rebuttal testimony of staff witness Mike Diller in the areas of the Mid-Continent Area Power Pool, or MAPP, penalty, pension costs, insurance costs and office supplies and expenses.
Q. Would you please explain your concerns with Mr. Diller's treatment of the MAPP penalty costs?
A. Yes. At pages 11 and 12 of his rebuttal testimony Mr. Diller discusses his reasons for not allowing the MAPP penalty costs. He indicates that the Commission should not encourage further penalties in the future by granting rate recovery and that the Commission should assume that appropriate reserve margins will be maintained and no additional penalties will be incurred. He eliminates about $458,000 of penalties that were included in 2001 results.
I would note at the outset that

432

Montana-Dakota, through its extensive planning and forecasting activities, makes every effort to ensure that it has adequate capacity to meet the reserve obligation for serving retail customers. There are a number of employees involved in the process and the latest state of the art tools and techniques are used. The load forecasting process is described in detail in Section 2 of the integrated resource plan filed with the Commission on July 1, 2001.
Despite Montana-Dakota's best efforts at forecasting peak load and resulting reserve obligation, it fell short of capacity to meet the reserve obligation in the summer seasons of 2000 and 2001 due to higher than normal temperatures at the time of the peak and incurred penalties. I should note that the 1999 penalty mentioned by Mr. Diller was for only 0.9 megawatts, a very small difference.
Application of hindsight indicates that Montana-Dakota should have acquired more capacity during these periods, particularly in 2001, to avoid the penalties. As I explained above, Montana-Dakota makes every effort to assure that it has adequate reserve margin to avoid any penalty.

433

However, with the disallowance of all costs related to the penalty that was incurred and the update to the 2001 actual information, the staff position now has sales levels and expense levels reflective of 2001 results but has no costs included for the added capacity that was required to achieve those results. This is an obvious mismatch that should be corrected.
The Commission should include, as a proxy for capacity that would have been purchased for the summer of 2001, an amount representative of what the cost would have been for added capacity that would otherwise necessarily have been purchased to avoid the penalty. Montana-Dakota, had it known that it would be deficient in 2001, would have purchased additional capacity for the four months of June, July, August and September 2001 as it is now planning on doing for 2002. However, the precise cost of that capacity is not known.
Based on bids received by Montana-Dakota for capacity purchases planned in 2002, the cost for additional capacity is $4,000 per megawatt month. Using this as a proxy for what would have been purchased in 2001 translates to a cost for the 16.9 megawatts of $270,000. That would be 16.9

434

megawatts times $4,000 times 4 months. This is the minimum amount that the Commission should include to recognize the cost of the actual capacity used in 2001 to meet the needs of Montana-Dakota's retail customers.
Q. Would you please explain your concerns regarding pension expense?
A. Yes. Mr. Diller denied Montana-Dakota's increase in pension expense for two reasons. First, because there was no actuarial data provided in the discovery process and, second, because overall benefits expense decreased by $43,000 from 2000 to 2001. I will address both of those concerns.
When Montana-Dakota was preparing its direct testimony, we looked at current or 2002 cost levels versus the cost levels for 2000 as included in Mr. Diller's cost of service. Where the 2002 cost level was different from the 2000 level we reviewed the cost to determine the appropriate expense given current information.
The benefits account, that is FERC account 926 labeled employee benefits, includes pension, medical and dental insurance, post-retirement, 401(k), employee discounts and other benefits. The

435

pension account was the only benefit that significantly changed from 2000 to current or 2002 levels, so that was the only benefit that was adjusted in my direct testimony.

The primary reason for the slight decrease in benefit expense from 2000 to 2001 is because the pension and post-retirement amounts were less in 2001 than 2000. But that situation has turned around and those expenses increased and are currently higher than the 2001 level.

Montana-Dakota externally funds the pension and post-retirement accounts with the annual expense based on an actuarial study performed by Towers Perrin. I should note that the actuarial study is considered confidential information and as such cannot be provided as a public document. Montana-Dakota, as it has done with such information in the past, will agree to let Mr. Diller review that information on a confidential basis.

As explained in my direct testimony, the reason for the increase is because of low investment returns in 2000 and 2001 and a lower discount rate for future years than in the previous studies. These increases for 2002 are real,

436

they're currently being booked, and they are expected to continue to increase through 2006.

To deny recovery of current expenses because the expenses decreased between 2000 and 2001 when current expense levels are demonstrably higher is not reasonable. Exhibit DRB-1 shows the 2001 level of expense and the current expense levels that Montana-Dakota is recording on its books for pension and post-retirement benefits. The amount of the adjustment for pension is $179,000, and the adjustment for post-retirement benefits is $62,000.

I should note that the amount for the supplemental income security plan discussed in the surrebuttal testimony of Mr. Espeland is $683,000 currently. This reflects an update from the amount contained in my direct testimony.

Q. Would you please explain your concerns with the insurance expenses?

A. Yes. Mr. Diller proposes to leave insurance expense at the 2001 levels because the 2001 level of expense changed very little from 2000. He also says that he needs additional proof from Montana-Dakota that insurance expenses have increased. Most of Montana-Dakota's insurance

437

policies expire in November or December of each year. Therefore, the significant increases in insurance expense as outlined in my direct testimony became effective in late 2001 and therefore are not visible when comparing 2001 expense to 2000 expense.

However, the level of expense that we are incurring today is significantly higher than we experienced in 2001. The increase in insurance costs is affecting companies nationwide, not just Montana-Dakota.

I have been advised by the company's risk management personnel that the year 2000 and beginning of 2001 were reflective of soft market conditions, that is, expanded coverage at lower prices, and the insurance costs for these years reflect that market.

The situation changed in 2001 when the market changed to hard market conditions reflective of lower coverage and higher prices. The September 11, 2001, terrorist attack further exacerbated the situation by increasing costs and changing available policy coverages.

One example of the change is the All Risk Property Insurance premium, which went from an

438

annual premium of approximately $377,000 in effect through December 2001 to an annual premium of $550,600 through December 2002, an increase of 46 percent. These increases are real and the higher premiums are in effect today.

Exhibit DRB-2 lists each of the insurance policies along with the expiration date of the policy and the current annual expense. As shown on the exhibit, the annual expense being incurred today is 37 percent higher than the 2001 level for insurance. Montana-Dakota's proposed insurance expense adjustment of $155,000 reflects the level being incurred today and is reasonable.

Q. Would you please explain your concerns with Mr. Diller's adjustment to office supplies and expense?

A. Yes. At pages 18 and 19 of his rebuttal testimony Mr. Diller discusses his adjustment to office supplies and expenses. His adjustment reflects a five percent increase over the 2000 level with a net result of decreasing the actual 2001 result by $678,000. His testimony indicates that he is not aware of what caused the increase and that he made the adjustment to reflect a more normal operating expense level.

439

I take exception to this adjustment because the items that caused the increase from 2000 to 2001 are not one-time aberrations but are continuing expenses. Items causing the increase from 2000 to 2001 are the costs for a corporate aircraft, which was acquired in 2001, increased service and supply costs for the company's computer infrastructure, an increase in phone expenses due to expanding cell phone use, and improvement of the computer frame relay network, an increase in subcontract work which is continuing, and reclassification of subcontract fees and bank service fees from other accounts. The last item simply means that other accounts were reduced to reflect the reclassification.

As these are recurring expenses, the amounts should be included which reflects an increase in expense of $678,000 from the staff position.

Q. Mr. Ball, in connection with your responsibilities with the company, are you familiar with how the capital structure is computed and the debts are carried on the books?

A. Generally I am, yes.

Q. There may be some confusion in the record,

440

I think, regarding the term loan that was testified to earlier this morning. Could you explain that and your understanding of how that was booked?

A. The term loan was discussed by Mr. Mahowald in his testimony, and as he explained, the company periodically will exercise that term loan to draw down its short-term debt to demonstrate to rating agencies and to the financial world that the company does have the financial ability to pay down its short-term debt.

Typically, the term loan is exercised at the end of quarters and typically for a very short duration. In this proceeding I believe we were asked to provide what the company's capital structure was, and I believe we have provided that in a number of places, primarily even in the annual report to the Commission. It's a balance sheet item, and the numbers there reflect the balances that were in existence for the time -- for the day indicated, typically balances as of December 31 of each year. So -- so the reports in that respect reflect the books and records of the company at that point in time, as it does with any other balance sheet item.

In this proceeding staff witness, Mr.

441

King, looked at that item. He took exception to including 40,000 -- or 40 million dollars in the capital structure. Instead, he looked at the average balance of that particular item that would be outstanding, and that is what he reflected in his capital structure. For purposes of this proceeding we are not contesting the use of the average balance of the term loan in the capital structure. The average balance, I believe, was 1.3 million.

Q. And it was testified, of course, that MDU, as every major company does, has its books and records audited by every year. Are you aware that the company has made a public announcement already that it's going to be changing its auditors?

A. Yes, I am aware of that.

Q. So it will no longer be Arthur Andersen?

A. That is correct.

Q. And I'm not suggesting that's a result -- you don't know of anything wrong that Arthur Andersen did, but it's customary, is it not, from time to time to periodically review and perhaps change auditors?

A. Yes, that is correct.

MR. PEARCE: I have nothing further for

442

Mr. Ball.

MR. HOBERG: Thank you, Mr. Pearce. Mr. Binek, did you have any questions of Mr. Ball?

MR. BINEK: Yes.

CROSS-EXAMINATION

BY MR. BINEK:

Q. Getting back to this 40-million-dollar debt item, if -- if a staff witness had not reduced that item, would the overall debt in the capital structure have reflected something in the neighborhood of $40,000 above what it is now -- today, that you've agreed to -- or 40 million, I mean.

A. You mean 40 million? Yes. As a matter of fact, if you go back in history to rate cases that this company has had in the four-state area that it serves, it was a very common practice to include that, the entire 40 million in the capital structure in determining the ratios.

Q. This supplemental income security plan, are you one of the key employees?

A. Yes.

Q. Do you plan to leave the company if the benefit is discontinued?

A. I guess I haven't really considered it.

443

Q. On the expense items, this corporate aircraft, what benefit does Montana-Dakota Utilities Company in its North Dakota operations derive from the corporate airplane?
A. Well, I think there are a number of benefits. The company, you know, has a number of employees that to conduct their business are required to travel, and in the -- in using a corporate aircraft before any trip is made, you have to request to use the aircraft. If -- and we have a travel coordinator, and if it does not appear to be cost-effective to use the corporate aircraft, we will use other means of travel, such as commercial aircraft or drive.
Q. Has there been any study done to quantify the savings that the company realizes through the use of this corporate aircraft?
A. I believe there was one --
Q. I'm talking about the North Dakota -- Montana-Dakota Utilities Company in North Dakota.
A. Not to my knowledge.
Q. What is the percentage increase in expenses from the year 2000 to 2001, administrative and general expenses?
A. Percentage increase?

444

Q. Right.
A. Oh, you mean for the administrative and general --
Q. Expenses.
A. -- expense category?
Q. Right.
A. All accounts? I guess I don't have that information in front of me.
Q. Okay. Do you recall Mr. Diller's slide show where he had that up?
A. Yes. Yes, I do.
Q. Okay. Can --
A. Well, however, my copy is the reduced slides, and the numbers are very small. I can't read them.
MR. HOBERG: Could you provide him a copy of that, please?
MR. DILLER: Yes. It's slide 23, but Bill and I only have the numbered pages.
MR. HOBERG: What's it titled at the top?
MR. DILLER: Administrative and general.
MR. HOBERG: Thank you.
MR. BINEK: Administrative and general expenses.
THE WITNESS: And your question again was

445

what was the --
Q. (MR. BINEK CONTINUING) Percentage increase from 2000 to 2001.
A. According to Mr. Diller's slide, it's 12.4 percent.
Q. And the increase projected from 2001 to 2002?
A. According to Mr. Diller's slide, it's 12.3 percent.
Q. And do you have any reason to disagree with the figures on Mr. Diller's slide?
A. No, I don't.
Q. Prior to 2001 and 2002 what -- what range were increases?
A. Again, from Mr. Diller's slide, the '98 to '99 was a decrease of 3.4 percent, '99 to 2000 was a decrease of 3.8 percent.
Q. Are you going to respond with any analysis -- any additional analysis to Mr. Diller's concern regarding the adjustments you've proposed for office supplies expense, property insurance and employee pensions and benefits?
A. Yes, I was. Mr. Pearce was going to ask me a question about that.
Q. Oh, I thought he was done.

446

MR. HOBERG: Well, he may have some questions on redirect then.
MR. BINEK: Apparently he didn't know he was done.
COMMISSIONER WEFALD: Is that called leading the lawyer? I don't know.
MR. BINEK: Good point.
THE WITNESS: Something like that.
MR. BINEK: Well, I guess we're waiting. I have no further questions at this time.
MR. HOBERG: Thank you, Mr. Binek. Mr. Fahn, did you have any questions of Mr. Ball?
MR. FAHN: No, thank you.
MR. HOBERG: Commissioner Wefald, please.
COMMISSIONER WEFALD: I have one.

EXAMINATION

BY COMMISSIONER WEFALD:

Q. It relates to A&G salaries, and that's found on page 18 of the rebuttal testimony of Mr. Diller, and in that paragraph it says, "Staff noticed that administrative and general salaries increased by 20 percent in 2001 or 843,000 on a total company basis and that transmission supervision and engineering costs were up 35 percent or $294,000 on a total company basis.

447

While the expense levels seemed quite inflated in comparison to recent years, staff agreed in principle with the company's 2002 overall labor expense projection," which is in another paragraph, I believe. "Therefore, staff proposes no adjustment to these inflated expense accounts, as they are primarily labor related."

Would that explain why your pension costs went up if your administrative and general salaries increased by 20 percent? Are your pension costs related to your salary levels?

A. Pension costs are related to salary levels, but I don't think we can make the conclusion that the changes that we see in these two particular accounts for labor expense would drive up the pension costs because pensions are based on total.

Q. Well, if I had a salary at your firm of -- if I received a 20 percent salary increase in 2001 from MDU Utilities, wouldn't I expect to see an increase in my pension?

A. Yes, you would.

Q. So could that partially explain the dramatic increase in the pension dollars that were shown?

448

A. Well, actually I would not categorize the pension increase as dramatic. On an overall basis the average pay increases have been in the three to three-and-a-half percent range.

Q. Well, then how did they get to be 20 percent?

A. That's just one particular account.

Q. Well, it's all administrative and general salaries.

A. Well, that would simply be the administrative and general salary category.

Q. Right.

A. There are a number of employees whose labor is charged to other accounts.

Q. I understand that, and that's why labor is in another paragraph that he's referring to.

A. Right.

Q. But I was just referring to this group of employees.

A. Yeah. To this -- those employees whose time is charged to this particular account, we did see an increase of this magnitude in the dollars booked in that account from 2000 to 2001.

Q. About how many employees are in that category?

449

A. Oh, that -- I guess I don't -- I would have to hazard a guess.

Q. A guess is fine.

A. But overall, you know, the company has 900-some employees. I would guess that probably 300 to 350 would have some time charged to the administrative and general accounts.

Q. But that wouldn't -- that wouldn't be under Montana-Dakota Utilities?

A. Yes.

Q. Montana-Dakota Utilities employs 900 --

A. Yes.

Q. -- itself?

A. Yes.

COMMISSIONER WEFALD: Okay. Thank you. That answers my questions.

MR. HOBERG: Thank you, Commissioner Wefald. Commissioner Clark, please.

EXAMINATION

BY COMMISSIONER CLARK:

Q. Just to bring hopefully final closure to this term loan thing, just to make sure that I understand it, I think I understand the reasoning for MDU entering into this. It's kind of a show of financial strength, I guess, to these rating

450

agencies which hopefully would result in lower interest rates down the line that you would have to pay. So I guess I understand it from that, but what you're saying is from a regulatory standpoint the -- the way that Mr. King has -- for dealing with this, it's not contested, it's kind of okay, that average balance method that he's offered is all right. Is that MDU's position?

A. Yes. In a nutshell, that's it.

Q. Okay. Now just to do a quick followup on the -- something which wasn't brought up by staff but kind of piqued my interest on the break that current and former employees -- or retired employees get on utility bills. Is -- it sounds like that's something that -- it's just -- it's reflected in a decreased net income; is that right?

A. You're referring to the utility discount?

Q. Yeah.

A. Actually, that has been in place for a number of years. There's actually a tariff on file here at the Commission specifying what that is.

Q. Okay.

A. And our employees who actually take gas and/or electric service from us simply get one-third off of their bill.

451

Q. Okay.
A. Now --
Q. So the cost is fully recovered of providing the service; is that right?
A. Yeah. The cost -- at least the incremental cost is fully recovered. For -- and the discount applies to MDU Resources employees, as well. It also applies to Knife River Corporation employees or Williston Basin Interstate Pipeline Company employees. For all employees of companies other than Montana-Dakota, those other companies reimburse us in full for the amount of those employee discounts. So from that perspective our consumers are not paying, if you will, or there's nothing in the costs for those discounts for employees of the other companies. For Montana-Dakota employees and the allocated portion of the Resources employees there is no specific reimbursement, and the amount of the utility discount would be a cost-of-service item.
Q. Okay. Do you have any idea what that cost is in dollar figures?
A. I guess I don't specific to North Dakota, but I do know that in -- the utility discounts for 2001 were about $290,000 companywide.

452

Q. Just from a -- kind of justification standpoint, what is the rationale for that?
A. For the discount?
Q. Yeah.
A. The rationale for the discount is that it's part of compensation, and one way to look at that would be it's -- if you will, it's a tax-exempt compensation. So, in other words, if we were to make it equivalent in actual pay, on a net basis we would have to raise salaries by more than the amount of the discounts because people would have to pay taxes on that if it's part of their payroll. So this happens to be the least costly way to do it.
COMMISSIONER CLARK: Okay. That's all the questions I have. Thank you.
THE WITNESS: Thank you.
MR. HOBERG: Thank you, Commissioner Clark. Mr. Pearce, anything further then of this witness?
MR. PEARCE: Just one -- well, perhaps two.

REDIRECT EXAMINATION

BY MR. PEARCE:
Q. Getting back to the question of the

453

corporate aircraft, is there any kind of -- is there an employee or department -- sort of a centralized department that keeps track of the aircraft use and decides whether it's economic or not?
A. Yes, there is, and that's done on a trip-by-trip basis.
Q. So, for example, I suppose you wouldn't send one employee to a meeting in Washington or New York on the company plane?
A. We would not.
Q. Because that would not be economical?
A. That would not be cost-effective.
Q. But you might send four or five because that would be less than the total airfare commercially?
A. Yes, that's true, and you also consider the factor of the other -- you know, the other costs related to alternative means. You know, for example, many times you won't have to stay overnight, you can avoid meal costs, accommodation costs.
Q. Right.
A. Those are factored in as well.
Q. And it's simply a matter of the time of

454

the employees, I suppose --
A. Yes.
Q. -- to be most economically used.
A. That is true.
Q. Okay. Is there anything else I've failed to ask that you'd like to respond to?
A. Yes. In Mr. Diller's slide show yesterday he talked about three areas where he remained unconvinced of what was going on, and I would like to take a few minutes just to hopefully shed some more light on those particular areas.
I'd like to start with pension and post-retirement benefits expense. As I indicated in my surrebuttal testimony, pension and post-retirement benefits are included in the FERC account number 926 along with several other items. I think I mentioned medical and dental, 401(k), utility discounts are in that particular account, those types of things.
In our analysis of that we can compare the results, and what we saw from 2000 to 2001 would be a slight decrease in the pension and benefits area, and I would note that all of the changes in that account are caused by the pension and post-retirement benefit areas. There were some minor

455

changes to the other accounts or other items in there, some are up, some are down, but they're all typically under the $10,000 range of change, either up or down.

With pensions and the post-retirement benefits the company uses an actuary. The firm's name is Towers Perrin, and they provide periodic actuarial studies as to what the funding requirements are to meet the pension obligation and the post-retirement benefit obligation that the company has.

The latest study from Towers Perrin indicated that there would be increases in both of those categories, and the study really relates to the period beginning now, with 2002. So for 2001 we were operating under the prior study. The new study clearly indicates an increase that is necessary in the amounts that the company will need to accrue to cover these costs.

We began recording the higher costs on our books in January of 2002. So primarily you will not see any increase on our books in 2001 because we didn't start doing it until almost two months ago now.

In reviewing the results of the actuarial

456

study, we know what we need to accrue for pensions and post-retirement benefits. We began doing that, and the numbers that I have provided to you for the electric utility and then as allocated to North Dakota electric operations reflect the amounts that we are now accruing on our books, and very simply we took the January accrual times 12 because that is what the actuarial study indicates that we need to do.

I would note that in spite of the fact that there is an increase in the pension expense, that the grand total pension expense is still a negative number. In other words, the plan has adequate funding and we can have a negative expense, if you will, which simply reduces our overall costs. However, when you go from a bigger negative to a smaller negative, that's a bigger increase. On post-retirement it's the other way. It is a positive number that we need to accrue, and that is what we're doing. On a net basis the difference is very small when you get down to it.

I guess I would offer that additional information on pensions. It is based on an actuarial study. As I indicated in my testimony, the actuarial study is confidential in nature.

457

However, if Mr. Diller would like to review it on a confidential basis, he's certainly welcome to do so, and quite frankly, there was only one week between the submission of our surrebuttal testimony and the beginning of our hearing. So there was relatively little time to deal with that matter as we typically have done in the past.

With regard to insurance expense, some additional comments there. Insurance expense covers primarily property insurance and then the other miscellaneous areas, you know, related injuries and damages. The amounts are recorded in FERC account 925 for property insurance -- I'm sorry, 924 for property insurance and 925 for injuries and damages.

In looking at the actual results for 2001, and I will refer you to my Exhibit DRB-2, which is attached to my surrebuttal testimony, our actual expense for North Dakota electric operations was $420,193, and before I go further, let me make one minor correction to the exhibit in the first column labeled "type of insurance." The third item from the bottom says aircraft coverage. Strike that and insert the word "subtotal."

MR. HOBERG: Did everyone get that? Okay.

458

THE WITNESS: As you'll note, the bulk of our insurance policies have expiration dates of around -- like October 31 there's a whole group there. We have another group where the policies expire at the end of the year, and those are renewed annually, and what we now have is that you will not see again increased expenses there for the year 2001 because the new costs have just taken over and we're just now incurring those new costs beginning either like November 1 or January 1, depending upon the expiration of the policies.

So just looking at the activity for insurance in 2001 really won't show you what the -- what the real picture is with respect to those costs. The annual premium that I've listed here is the current premium. You begin booking those costs the day that the new premium took over, and it's fairly clear that there is a substantial increase in insurance costs. We're booking those costs today, and we believe that it would be appropriate to include those cost levels in your determinations here because those are the costs that we are now incurring.

The last area was office supplies expenses. In -- and I guess I explained in my

459

surrebuttal what Mr. Diller did. He saw a fairly substantial increase in the office supply expense account, and in looking at that I looked at the items that made up that change, and they're not just one-time things.

For example, we already talked briefly about a corporate aircraft. This was an aircraft acquired in January 2001. You've never seen those costs for that aircraft in that account before. That's about $226,000 worth of change. There was also a reclassification of certain costs that used to be included in account 930. Those relate primarily to annual report preparation, annual report printing, interim report printing, items like that. That was simply moved from the 930 account and placed in the 921 account, and you can clearly see that there's a reduction in the 930 account for that.

There was also a reclassification of bank service fees. I believe those were primarily related to transfer agent fees for stock transactions, items like that. It's just that they had been booked in account 930 in the past. It was believed that they would be more appropriately accounted for in account 921, which is defined as

460

office supplies and expenses.

There were also some changes in account 921, the office supplies accounts, that relate to an increase in costs related to the ongoing use and maintenance of personal computers. We're using a lot more on-line capability today than we used to. There's added telephone fees, there's added fees for relays in there, and those, in my opinion, are ongoing costs and should be included here, and with that --

MR. HOBERG: Mr. Pearce, anything further questions?

MR. PEARCE: I have nothing else.

MR. HOBERG: Thank you. Mr. Binek, any further questions of Mr. Ball?

MR. BINEK: Yes. We will have some. Can we just take a couple minutes?

MR. HOBERG: Sure. Let's just take five minutes, just strictly five minutes.

(Recess taken.)

MR. HOBERG: We're back from a short recess, and, Mr. Binek, you had a few more questions of Mr. Ball?

MR. BINEK: Yes.

461

RECROSS-EXAMINATION

BY MR. BINEK:

Q. Mr. Ball, do you have a schedule to support what you've testified to here --

A. I can provide you --

Q. -- concerning pension, post-retirement benefits, insurance expenses that would show the 2001 expense as well as your 2002 expenses and the changes that you talked about with the office supplies?

A. I can provide that information as a late-filed exhibit.

MR. HOBERG: Did you want a late-filed exhibit?

MR. BINEK: Yes.

MR. HOBERG: Specifically what was that again?

MR. BINEK: Well, maybe Mr. Diller can ask specifically what it is he feels the Commission needs.

MR. HOBERG: Okay.

MR. DILLER: That will eliminate some of the talking back and forth. I think Don has a very good schedule here laying out miscellaneous general expenses, has every account, the 2001 costs, 2000.

462

The titles do need to be filled in for all of those.

THE WITNESS: Yes.

MR. DILLER: I think that would be a small thing to ask. Then the Commission can go through there and make its own mind up as to whether it wants to grant increases in the various accounts. That one, I think, would be very helpful.

And then on the pension and post-retirement benefits I understand that none of the other 926 costs -- the company won't have any knowledge of what 2002 costs will be for those other expenses within that account, and so I'm okay with what they've recommended here with Towers & Perrin. It's an actual cost. I don't need to see the Towers & Perrin -- is that the right name?

THE WITNESS: Yes.

MR. DILLER: -- report, and so to me that one we don't need any information on, but the office supplies, and the last one is insurance expense, and I think this one will be a real easy one for the company to provide, as well, and make a lot of sense to the Commissioners. You have 2002 annual premiums on your DRB-2. It would be a

simple matter to put in 2001 annual premiums and then total those up, just like you've done for 2002. The difference times North Dakota factor is the answer for insurance expense adjustment. I don't know what that 420,193 is on DRB-2, but then the Commission can see exactly which premiums went up, which ones didn't. It's a mathematical calculation from there.

COMMISSIONER WEFALD: Are you telling us that you're agreeing with the 3,883,000 for the MDU employee benefits? Are you agreeing with their number? Is that what you just said?

MR. DILLER: Based on what I've heard Don explain -- based on his explanation I understand -- I understand what they've done, and you can decide based on what they've -- I'm just saying that I don't need any more information on that.

COMMISSIONER WEFALD: All right. Thank you.

MR. DILLER: You can decide for yourself.

MR. HOBERG: Mr. Diller, on the office supplies one, was that DRB-2 -- or 1? I'm sorry.

MR. DILLER: It's DRB-2 on the insurance expense.

MR. HOBERG: Insurance, yeah, but what was

the office supply one?

MR. DILLER: That's just a schedule that Mr. Ball's been talking from the last five or ten minutes.

MR. HOBERG: Is that designated something DRB or --

THE WITNESS: There was no exhibit on that.

MR. HOBERG: Okay.

MR. DILLER: It's to be provided later.

MR. HOBERG: Okay.

MR. BINEK: I guess I do have -- I have a question.

MR. HOBERG: Just a minute, Mr. Binek. So we have two late-filed exhibits then, one on office supplies and one on insurance expense?

MR. DILLER: Right.

MR. HOBERG: Okay. So that would be late-filed Exhibit 17 and then 18. Is that satisfactory, Mr. Pearce?

MR. PEARCE: Yes.

MR. HOBERG: Okay. Thank you. Mr. Binek, please.

MR. BINEK: Yes. I just have a couple questions on the expenses related to the airplane.

Q. (MR. BINEK CONTINUING) How are the costs of the airplane determined for Montana-Dakota Utilities?

A. The corporate aircraft that was acquired in January of 2001 is owned by someone other than Montana-Dakota, and the costs that we're looking at represent Montana-Dakota's allocated share of the fixed costs of that airplane.

Q. Okay. And how is that share determined? Is it just a percentage -- a percentage of the cost of the airplane that's applied to Montana-Dakota Utilities, or is it based on the use that Montana-Dakota Utilities makes of the plane -- or I guess that's what I'm getting to. How do you determine what costs Montana-Dakota Utilities should cover?

A. The fixed costs will be allocated among the various companies based on a standard corporate overhead allocation process.

Q. So for the fixed cost of the airplane like depreciation?

A. Depreciation, maintenance, the capital cost.

Q. Okay. Doesn't matter how much -- how much use Montana-Dakota Utilities has of the airplane or

makes of the airplane. It's going to get a set amount -- it's going to get a percentage charge of the depreciation, maintenance and all of that irregardless of the use it makes of the plane?

A. That is correct. Now the actual use of the airplane is billed out on an hourly basis, based upon who actually uses the aircraft.

Q. What is Montana-Dakota Utilities' share of the fixed costs of the airplane?

A. I guess I don't know right off the top of my head.

Q. Could you provide that information, also?

A. Sure.

MR. HOBERG: Okay. Can we make that late-filed Exhibit 19 then?

Q. (MR. BINEK CONTINUING) Do you know -- excuse me. Do you know how much Montana-Dakota Utilities uses the airplane or can you provide that information?

A. I would have to provide it because I do not know.

Q. Okay. Would you also please provide that as a late-filed exhibit?

MR. HOBERG: Make that a part of 19, please.

Q. (MR. BINEK CONTINUING) And would you also show what the percentage use for Montana-Dakota Utilities is as compared to the other participants? Can you make that comparison, like does Montana-Dakota Utilities utilize the airplane ten percent of the time or --

A. And others 90 percent?

Q. Yeah.

A. Yeah. I think by definition if I say we use it 10 percent of the time, somebody else uses it 90 percent of the time.

Q. Well, can you break it out as to -- do you want it for each one?

MR. LEIN: You'd like take the number of hours it was in the air and how many of those were MDU's and how many of them belonged to somebody else.

THE WITNESS: If I just based it on hours' use, would that suffice?

MR. BINEK: Yes.

MR. HOBERG: Make that a part of 19 also, please.

MR. BINEK: Nothing further.

MR. HOBERG: Nothing further? Thank you, Mr. Binek. Mr. Fahn, anything further?

MR. FAHN: No thanks.

MR. HOBERG: Nothing? Any further Commission questions?

COMMISSIONER WEFALD: I do.

MR. HOBERG: Commissioner Wefald, please.

FURTHER EXAMINATION

BY COMMISSIONER WEFALD:

Q. I'm confused with some numbers here and maybe you can help me.

A. We hope so.

Q. Under the employee benefits -- pensions and benefits, on Mr. Diller's chart that's included in Exhibit 3 entitled administrative and general expenses.

MR. HOBERG: Do you still have that, Mr. Ball?

Q. (COMMISSIONER WEFALD CONTINUING) Is that the small copy?

A. I have the small version.

Q. I'm looking at the last two columns.

MR. HOBERG: Just a minute. He's getting it from Mr. Diller.

MR. DILLER: That's a little bigger, but not much.

Q. (COMMISSIONER WEFALD CONTINUING) I'm looking at -- the number under 2001 is $2,415,000. Do you see that number?

A. Yes.

Q. And then I'm seeing the MDU number, which is $3,883,000?

A. Yes.

Q. All right. Now, you maybe can't comment on this, but "Mr. Ball argues for a small increase in pension costs of 116,000 for North Dakota operations based on information received from its actuary," and that's on page 15 of Mr. Diller's testimony?

A. Okay.

Q. What is he referring to there when he talks about the small increase in pension costs of 116,000 when this number to me looks like it's 1.4 million dollars difference in employee pensions and benefits? What am I missing here?

A. I know part of it would be the costs related to SISP.

Q. Okay.

A. About 680,000.

Q. But that cost has been defined in another paragraph?

A. That would be about $680,000.

Q. $680,000. So then what's the other 1.4 million? What's the other part of it?

A. What he's looking at is the 2,415,000 --

Q. Yes.

A. -- for 2001. He's included a 285,000 pension adjustment, $99,000 post-retirement benefit adjustment, and 1,084,000 for SISP, and another thing -- I believe these are total company numbers, not just North Dakota numbers.

Q. The administrative and general expense numbers are total company numbers?

A. Yes. And the million-84, for example, that he included I believe he extrapolated the $680,000 North Dakota number upward to a total company number.

Q. All right. Okay. That helps me understand that. Thank you. And then on your salaries line item where there was the jump -- I need that same chart.

A. Okay.

Q. On the salaries line item where it went from 4,181,000 in year 2000 to 5,024,000 in 2001, those are again total company numbers?

A. Yes, they are.

Q. When were those -- what month were those

471

salary adjustments given?
A. The salary adjustments typically occur at the first of the year, January 1.
Q. Did they occur last January 1 --
A. Yes.
Q. -- of 2001?
A. Yes. And January 1 of 2000.
Q. And January 1 of 2000?
A. Correct.
COMMISSIONER WEFALD: All right. Thank you.
MR. HOBERG: Thank you, Commissioner Wefald. Commissioner Clark, anything further.
COMMISSIONER CLARK: I do. It's maybe just a followup to Commissioner Wefald.

EXAMINATION

BY COMMISSIONER CLARK:
Q. The jump between 2000, 2001 on that salary line item, I noticed in your direct testimony you had mentioned 4.32 percent increase January 1, 2001, and there must have been one on January 1, 2000, as well, and then there's a three-and-a-half percent on '02, which all certainly seem very reasonable, but I'm wondering then why the -- looks like about 20 percent increase in that one year,

472

from 2000 to 2001, whereas most of the others on Mr. Diller's spreadsheet seem to be percentagewise much less. Was there some reason behind that that drove that particular year?
A. The overall -- you know, the percentage increases that you quoted would represent the percent change in overall labor costs, but from -- from year to year we do see differences in the amount of labor that is booked in, for example, operation and maintenance expense accounts versus capitalized as part of capital projects. So it's difficult to see a direct relationship between the overall percent and then the amount that might go to any particular account.
Q. Okay.
A. And I guess that's -- a long way of saying that is I don't know how to explain that difference adequately at this point.
Q. And the salary line item would be kind of inclusive of all those types of things, like maybe you had some reason you needed to hire a lot of temporary employees for some project or something. It could be any one of a number of things; right?
A. That is correct.
Q. Okay. And then this is just more kind of

473

out of curiosity. The regulatory commission line that Mr. Diller has on his sheet there, what type of things does that include?
A. That includes any expenses directly related to matters, to docketed items before a regulatory commission.
Q. It doesn't mean to imply that when Commissioner Hagen left, he was costing MDU 158,000, does it?
A. No, not at all. And this would represent, you know, four states, too.
Q. Okay. That does seem to be highly variable, though, doesn't it?
A. Yes, it does.
COMMISSIONER CLARK: Thanks. That one's just out of curiosity.
MR. HOBERG: Thank you, Commissioner Clark. Anything further then of Mr. Ball? Anything further? Thank you, Mr. Ball.
THE WITNESS: Thank you.
MR. PEARCE: Could we have about maybe two minutes to confer briefly? I might be able to clarify something else.
MR. HOBERG: Sure. Let's take a recess in place here for a couple minutes.

474

(Recess taken.)
MR. PEARCE: Okay. We're back from a short recess, and before -- well, we're maybe not done with Mr. Ball yet.
MR. PEARCE: One final, final question, if I may, Mr. Ball.

REDIRECT EXAMINATION

BY MR. PEARCE:
Q. Don, just before our little break here you were responding to a question from Commissioner Clark, and I think -- would you be willing to put together some additional data filed as a late exhibit to clarify the matter of what that increase was that you were talking about?
A. Yes, I would. We were discussing the approximate 20 percent change in the account 920, administrative salaries, and I was not adequately able to explain that. It's certainly not a 20 percent increase in salaries for our employees, but I would -- I would offer to explain more fully why the change occurred in that particular area.
MR. HOBERG: Okay. Late-filed Exhibit 20 then?
MR. PEARCE: No. 20, right.
MR. HOBERG: Okay.

475

MR. PEARCE: And that's all I have.
MR. HOBERG: Anything further then of Mr. Ball?
MR. BINEK: No.
MR. HOBERG: Thank you, Mr. Ball. I'll just note for the record that his direct testimony is Exhibit 6, Docket No. 46, and surrebuttal, Exhibit 7, Docket No. 57.
COMMISSIONER WEFALD: In that exhibit would it be possible to put the dates that the changes occurred?
THE WITNESS: Sure.
COMMISSIONER WEFALD: If it wasn't salary-related, you know, like on July 1, if you could indicate the dates when the other changes occurred.
THE WITNESS: Sure.
COMMISSIONER WEFALD: Thank you.
MR. HOBERG: Thank you, Mr. Ball. Mr. Pearce, your last witness, I believe.
MR. PEARCE: Last witness will be Rita Mulkern.
MR. HOBERG: Please be seated. Ms. Mulkern, I think you heard the admonition I gave earlier in regard to perjury; is that correct?
THE WITNESS: Yes, I did.

476

(Witness sworn.)
MR. HOBERG: Thank you. Mr. Pearce, please.

RITA A. MULKERN,

having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. PEARCE:

Q. Would you please state your name and business address?

A. My name is Rita A. Mulkern, and my business address is 400 North Fourth Street, Bismarck, North Dakota.

Q. And you're employed by Montana-Dakota Utilities Company, are you not?

A. I'm employed by Montana-Dakota Utilities Company as the regulatory analysis manager.

Q. And have you previously filed direct testimony that's been made an exhibit in this proceeding?

A. Yes, I have.

Q. What is the purpose of your testimony today?

A. The purpose of my testimony is to quantify the adjustments that -- to the North Dakota

477

Commission staff's rebuttal testimony that was discussed earlier by the previous witnesses and the effects of those adjustments on the North Dakota electric revenue requirements. I am sponsoring Exhibit -- and these were part of Exhibit 7 -- RAM-3 and Exhibit RAM-4, which quantify the effect of these adjustments to the North Dakota electric revenue requirement.
MR. HOBERG: Are those part of your surrebuttal?
THE WITNESS: Yes, they are.

Q. (MR. PEARCE CONTINUING) Would you explain the first sheet, RAM-3, please?

A. Yes. The exhibit summarizes the adjustments to the income statement that were supported by the other witnesses. Each of the adjustments was developed either on a total company basis and allocated to North Dakota or directly assigned to North Dakota.

Q. And what does the next sheet, RAM-4, show?

A. RAM-4 is a summary showing the income statement and rate of return for 2001, the staff adjustments and the staff's position, Montana-Dakota's adjustments from RAM-3, and then the resulting income statement, rate of return and

478

revenue deficiency calculation. Page two shows the same information for the rate base statement.

Q. Why does your exhibit show a staff revenue excess of 7.135 million dollars rather than the 7.327 million dollars in Mr. Diller's rebuttal testimony?

A. The difference is in the income taxes. And the interest expense that's deductible for calculating income taxes should have been restated to reflect Mr. King's proposed debt costs. With the lower debt cost, the interest deduction is lower and results in higher income taxes. So the income tax adjustment has been restated to reflect the higher level of income taxes.

Q. What effect do the adjustments have on the revenue requirement?

A. As shown on page one of RAM-4 under the column labeled "adjusted," Montana-Dakota's adjusted return on equity is 11.091 percent, which is below the 12.75 percent return on equity required. Montana-Dakota will experience a revenue deficiency of $1,727,000 at a 12.75 percent return on equity based on the adjusted calendar year 2001 results.

Q. Does that complete your testimony?

479

A. Yes, it.
MR. PEARCE: I have nothing further.
MR. HOBERG: Thank you, Mr. Pearce. Mr. Binek, did you have any questions of Ms. Mulkern?
MR. BINEK: Yes.

CROSS-EXAMINATION

BY MR. BINEK:

Q. The purpose of your testimony is to quantify the adjustments that MDU has made and to determine the revenue excess or revenue deficiency based on all of Montana-Dakota Utilities' calculations and using Montana-Dakota Utilities' proposed return on equity?
A. That's correct.
Q. Okay. Are you one of MDU's key employees?
A. That depends on what -- how you define "key employee."
Q. Well, we realize you're a key employee, but for the purpose of answering my question are you one of the key employees who receives this SISP benefit?
A. I am not a part of the SISP program.
Q. Okay. So you fall into one of the lower-income category employees?
A. I guess so.

480

MR. BINEK: Okay. Thank you. I have no further questions.
MR. HOBERG: Thank you, Mr. Binek. Mr. Fahn, do you have any questions?
MR. FAHN: No, I don't think so.
MR. HOBERG: No questions. Thank you. Commissioner Wefald, please.

EXAMINATION

BY COMMISSIONER WEFALD:

Q. What's the income tax number?
A. The current income tax number reflects the level of federal and state income taxes in the cost of service.
Q. Rita, I'm not an accountant, so I need a little help with the numbers.
A. Okay.
Q. So when there's a number with a parenthesis around it, is that a positive or a negative number?
A. That is a negative number. It reduces -- if it's an adjustment, it reduces the amount of the initial number.
Q. So 2001 test year, I'm looking at RAM-3, page one of one. Then explain to me what you did with the Pool sales.

481

A. The Pool sales number -- the total company number that Mr. Blinsky came up with was -- and this was based on the 6.4-million Pool number. We compared that to the Pool number that was in Mr. Diller's initial testimony and took the difference between the 15.1, I believe, number Mr. Diller had --
MR. DILLER: Pretty close.
THE WITNESS: -- and the 6.4 million and took that times approximately 66 percent, which is North Dakota's share of that total company amount, and so basically what this 5.754 million dollars difference is between the 6.4 million total company Pool sales that we believe is the correct level and the level that Mr. Diller had in his position.
Q. (COMMISSIONER WEFALD CONTINUING) So this isn't the actual amount of Pool sales that were received in 2001 from different sources?
A. That's correct.
Q. This is an adjustment that you're making to show if this is used as the test year for -- to determine future income needs you're making an adjustment in that actual Pool sales number from 2001?
A. That's correct.

482

Q. Okay. All right. And then you're adding $1,670,000 of costs to the staff rebuttal case?
A. That's right. We're adding that much to the expense side.
Q. All of these different adjustments that Mr. Ball was just up discussing?
A. That's right.
Q. All right. I just wanted to make sure I understand this particular document. Okay. And then you're subtracting, though, an amount for income taxes?
A. Yes. We're saying because we're going to have less revenue and higher expenses, we're going to pay less income taxes. So we're reducing the income tax number.
Q. I see. Okay. And then -- so then your net adjustment is $4,346,000?
A. That's correct.
Q. And you're using those figures then on the next page and substituting them in the appropriate prices. All right. I'm fine.
A. Yes. That's right.
COMMISSIONER WEFALD: Thank you.
MR. HOBERG: Thank you, Commissioner Wefald. Commissioner Clark, any questions of Ms.

Mulkern?
COMMISSIONER CLARK: I have none. Thank you.
MR. HOBERG: Thank you. Anything further then of Ms. Mulkern? No further questions? Thank you, Ms. Mulkern.
MR. PEARCE: At this time I would offer Exhibits 6 and 7, which are the two books containing the original testimony and the surrebuttal testimony of the MDU witnesses.
MR. HOBERG: Okay. Any objection? Exhibits 6 and 7 are admitted.
(Off the record.)
MR. HOBERG: Okay. We're back on the record. Commissioner Wefald, you had another question of Ms. Mulkern?
COMMISSIONER WEFALD: I do.
Q. (COMMISSIONER WEFALD CONTINUING) Under the -- under the sales for resale line -- page one of two, exhibit -- it's actually under RAM-4 in the surrebuttal testimony of MDU, that shows an adjusted number of $11,395,000 for sales for resale; is that correct?
A. That's correct.
Q. That's the number that MDU is projecting

with adjustments?
A. That's right.
Q. Well, how is that -- how much different is that from the number that Mr. Diller was proposing for the three-year average?
A. Well, this -- the 11,395,000 first, it represents the revenue received from the Pool sales. In this exhibit the cost associated with that Pool sales is in the fuel and purchase power line. So you can't directly look at this and see the same -- and see the Pool sales margin, which is what Mr. Diller refers to using what Mr. Ball referred to as the margin, the revenue less the expense.
Q. All right. So where's your expense number on this?
A. The expense for it is included in the fuel and purchased power line, the first line under operating expenses.
Q. The 31,762,000?
A. It's included in that number. It's not --
COMMISSIONER WEFALD: Okay. All right. Thank you. I understand now. Thank you.
MR. HOBERG: Thank you, Commissioner Wefald. Anything further then of Ms. Mulkern?

Thank you, Ms. Mulkern. Anything further of Ms. Mulkern?
MR. PEARCE: No.
MR. HOBERG: Thank you. Okay. Mr. Pearce, you've completed your presentation?
MR. PEARCE: Yes.
MR. HOBERG: Anything in rebuttal, Mr. Binek?
MR. BINEK: No.
MR. HOBERG: Nothing in rebuttal? Okay. Just a reminder then, we have Exhibits 1 through 20, of which 16, 17, 18, 19 and 20 will be late-filed exhibits.
MR. PEARCE: Do we have a time frame?
MR. HOBERG: We're going to talk about time frames in a minute here, but anything else to bring to the attention of the Commission at this time in regard to evidence outside of the late-filed exhibits? Mr. Pearce?
MR. PEARCE: No. Just procedurally -- I don't know if it's appropriate to do it yet, but at this point since the evidence is all in, we'd basically by way of motion renew our request to dismiss the case on the grounds that the Commission's case has not been proven by a

preponderance of the evidence.
MR. HOBERG: Thank you, Mr. Pearce. Response, Mr. Binek?
MR. BINEK: We'll obviously resist that motion. We feel we have set forth a sufficient case for the Commission to consider.
MR. HOBERG: Okay. You don't have any further evidence today, Mr. Binek?
MR. BINEK: No.
MR. HOBERG: Okay. Let's talk a little bit about time frames then. I'm assuming the Commission will want proposed findings of facts, conclusions of law and order from each of the parties, staff and MDU.
COMMISSIONER WEFALD: That would be helpful.
COMMISSIONER CLARK: I'm sure Illona, if she were here, would be shaking her head vigorously. Yes.
COMMISSIONER WEFALD: And Pat.
COMMISSIONER CLARK: But Pat is.
MR. BINEK: Settle down back there.
MR. HOBERG: So I imagine you want the late-filed exhibits before that. So can you have those in what -- how long?

MR. PEARCE: Next Monday, a week.
MR. HOBERG: Okay. A week?
MR. PEARCE: Next Tuesday.
MR. HOBERG: One week.
MR. BINEK: I guess another question is how long will it take for the transcript to be prepared.
MR. HOBERG: Right. You want that before the proposed findings.
THE REPORTER: Couple, three weeks.
MR. HOBERG: Three weeks. Okay. So the late-filed exhibits will be filed with the Commission a week from today. The transcript should be ready in about two to three weeks. Proposed findings, et cetera, what, two weeks after the transcript? Is that enough time?
MR. BINEK: Let me see what's happening.
MR. PEARCE: That's fine for me.
COMMISSIONER WEFALD: I hope that'll be okay. We want to keep the case moving along.
MR. BINEK: Well, I realize that, but we've got things coming up, too, that I don't have anybody to share with.
COMMISSIONER WEFALD: You could give that job to Jerry.

MR. BINEK: Yes.
COMMISSIONER CLARK: In that case --
MR. HOBERG: Okay. Let's keep it together. She's recording all this here now.
MR. BINEK: You got that "yes"?
MR. HOBERG: In other words, five weeks from today; is that --
MR. BINEK: I think that probably works.
MR. HOBERG: So the late-filed exhibits in a week, the transcript in three weeks, and findings of facts, et cetera, five weeks from today.
MR. FAHN: Electronic versions, as well.
MR. HOBERG: Electronic version?
MR. FAHN: Yes.
MR. HOBERG: Okay.
MR. BINEK: That works.
MR. HOBERG: Anything else to bring to the attention of the Commission before I ask for closing comments from the Commissioners? Mr. Binek?
MR. BINEK: No.
MR. HOBERG: Mr. Pearce?
MR. PEARCE: No.
MR. HOBERG: Anything else we need to discuss? It's satisfactory? Okay. And in reverse

order, starting with Commissioner Clark, any closing comments?
COMMISSIONER CLARK: Reverse order? I would just say thank you to both sides. Both MDU and staff did a very admirable job in presenting a case and building a very good record for the Commission to work with, and I thank them for that and for a good hearing.
MR. HOBERG: Thank you, Commissioner Clark. Commissioner Wefald, please.
COMMISSIONER WEFALD: There's a daunting amount of material here that we've been presented with over the last few days and many interesting numbers to go over, and I echo Commissioner Clark's comments about the good presentation from both sides. It takes a great deal of work to prepare all of this, and we understand the importance both to the ratepayers of MDU and to the company for this particular case. So I know we'll all be looking carefully at what additional information is filed in making a careful examination of this whole case. Thank you.
MR. HOBERG: Thank you, Commissioner Wefald. Then it's approximately three o'clock, and we'll close this hearing. Thank you very much,

everyone.
(Concluded at 2:57 p.m., Tuesday, the 26th day of February, 2002.)

CERTIFICATE OF COURT REPORTER

I, Stephanie A. Smith, a Registered Professional Reporter,

DO HEREBY CERTIFY that I recorded in shorthand the foregoing proceedings had and made of record at the time and place hereinbefore indicated.

I DO HEREBY FURTHER CERTIFY that the foregoing typewritten pages contain an accurate transcript of my shorthand notes then and there taken.

Dated at Bismarck, North Dakota, this 13th day of March, 2002.

_____
Stephanie A. Smith
Registered Professional Reporter

$

$1,670,000 [1] 482:2
$1,727,000 [1] 478:22
$10,000 [1] 455:3
$100 [1] 317:18
$11,000 [1] 411:10
$11,395,000 [1] 483:22
$120 [1] 287:5
$1250 [2] 282:10 306:6
$126 [1] 349:12
$136,450 [1] 388:4
$136,450,000 [1] 403:14
$142 [2] 287:2 307:15
$1426 [2] 282:11 306:11
$15 [1] 287:11
$150,000 [1] 410:25
$155,000 [1] 438:12
$179,000 [1] 436:11
$2,415,000 [1] 469:1
$20,000 [1] 422:7
$200 [1] 317:6
$200,000 [1] 411:6
$21.10 [1] 324:23
$225,000 [1] 410:24
$226,000 [1] 459:10
$231,000 [1] 381:11
$231,500 [1] 372:11
$270,000 [1] 433:25
$290,000 [1] 451:25
$294,000 [1] 446:25
$3,883,000 [1] 469:5
$35 [2] 286:22 354:15
$377,000 [1] 438:1
$4,000 [2] 433:22 434:1
$4,346,000 [1] 482:17
$40 [1] 286:23
$40,000 [1] 442:11
$400,000 [1] 356:20
$420,193 [1] 457:20
$43,000 [1] 434:12
$458,000 [1] 431:23
$46.75 [1] 349:25
$47 [3] 287:9 307:24 308:2
$5,000 [1] 272:10
$50 [1] 317:15
$50,000 [2] 411:11 413:3
$500,000 [1] 389:19
$548,000 [1] 405:4
$550,600 [1] 438:3
$62,000 [1] 436:12
$678,000 [2] 438:22 439:18
$680,000 [5] 420:19 420:20 469:25 470:1 470:14
$683,000 [1] 436:15
$99,000 [1] 470:6

'

'02 [1] 471:23
'66 [2] 408:23 408:24
'77 [1] 389:12
'78 [1] 389:12
'86 [3] 383:22 389:10 389:11
'92 [5] 383:21 389:9 393:2 396:9 396:17
'96 [1] 408:24
'98 [2] 275:8 445:15
'99 [2] 445:16 445:16

0

0.275 [1] 374:5
0.9 [1] 432:18

1

1 [27] 270:22 299:19 323:23 382:23 382:25 385:3 385:18 385:25 386:1 401:18 402:2 402:3 402:4 403:1 405:21 432:10 458:10 458:10 463:22 471:3 471:4 471:7 471:8 471:20 471:21 475:14 485:11
1,084,000 [1] 470:7
1,316,000 [1] 352:14
1,774 [1] 327:11
1.2 [4] 421:19 422:5 422:6 423:4
1.3 [5] 379:1 394:25 395:4 398:24 441:9
1.4 [2] 469:16 470:1
10 [21] 287:11 307:3 307:7 346:5 350:17 355:25 356:4 356:5 356:15 357:9 357:14 357:18 357:21 361:21 362:6 364:20 381:4 390:5 404:15 411:13 467:10
10,000 [4] 300:2 331:22 343:15 343:16
10.0 [1] 380:22
10.17 [1] 404:4
10.2 [4] 380:16 380:19 380:19 381:2
10.215 [3] 372:8 382:18 383:23
100 [5] 371:6 381:12 386:21 387:13 427:15
11 [11] 294:23 294:25 295:17 295:22 297:12 307:4 307:5 307:19 336:24 431:15 437:21
11,395,000 [1] 484:6
11-month [1] 353:1
11.091 [1] 478:19
110 [2] 343:20 344:4
110-megawatt [1] 343:23
116,000 [2] 469:9 469:16
11th [1] 397:18
12 [12] 287:3 307:14 307:16 307:24 346:5 372:13 372:18 408:8 408:9 411:21 431:15 456:7
12,000 [1] 288:17
12.3 [1] 445:8
12.4 [1] 445:4
12.75 [2] 478:20 478:22
13 [14] 274:16 294:24 295:2 296:2 296:10 296:14 296:19 296:20 297:11 300:8 302:6 302:11 302:14 326:4
13-and-a-half [3] 386:14 386:15 386:23
130 [1] 387:23
130,850,000 [1] 403:15
136 [1] 394:7
13th [1] 491:13
14 [4] 296:24 353:3 353:7 424:17
142-and-a-half [1] 350:2
144,319 [1] 362:10
15 [34] 270:22 271:4 294:24 295:3 297:5 298:3 299:9 300:4 301:6 301:25 302:12 302:14 307:6 307:19 310:19 320:10 325:25 326:2 326:10 326:11 326:12 332:10 336:10 343:8 374:3 382:1 412:23 414:9 414:16 427:5 427:9 427:9 427:11 469:11
15.1 [1] 481:6
150 [1] 311:18
158,000 [1] 473:9
16 [9] 338:18 338:23 338:24 348:5 353:11 409:17 411:21 412:25 485:12
16.9 [2] 433:25 433:25
16th [4] 293:17 293:20 353:23 356:24
17 [3] 318:5 464:19 485:12
170-some [1] 399:6
178 [1] 399:25
18 [4] 438:17 446:19 464:19 485:12
19 [6] 412:25 438:17 466:15 466:24 467:21 485:12
1970s [1] 395:14
1972 [1] 370:3
1981 [1] 408:3
1982 [7] 370:11 370:13 389:6 409:19 409:23 410:1 422:24
1987 [1] 415:4
1988 [2] 275:22 275:23
1989 [1] 408:11
1990 [2] 275:8 275:23
1990s [2] 280:23 298:11
1991 [1] 372:14
1992 [11] 370:16 371:3 371:5 371:18 371:20 372:18 372:23 373:2 373:11 384:15 396:10
1995 [1] 412:4
1996 [5] 287:19 288:7 408:1 408:22 411:23
1997 [1] 281:12
1998 [7] 274:24 280:19 281:22 282:11 306:6 306:18 340:21
1999 [9] 280:19 281:23 282:12 290:21 306:12 306:19 314:1 340:21 432:17
1999-2000 [1] 286:24

2

2 [4] 376:24 381:5 408:6 432:8
2,000 [1] 321:13
2,415,000 [1] 470:3
2.4 [1] 296:23
2.75 [4] 372:23 374:5 381:21 382:8
20 [22] 350:17 361:16 361:18 361:21 361:22 389:1 414:12 422:19 423:7 423:9 423:15 446:22 447:10 447:19 448:5 471:25 474:16 474:18 474:22 474:24 485:12 485:12
20,000 [2] 422:9 423:12
200 [1] 329:23
2000 [52] 267:6 271:10 274:24 276:9 276:19 277:1 282:17 282:25 283:22 285:17 286:17 287:3 287:6 287:8 287:21 288:11 289:3 290:21 292:6 307:16 308:20 361:3 376:23 386:3 408:13 432:14 434:13 434:17 434:19 435:2 435:6 435:8 435:23 436:4 436:23 437:6 437:13 438:20 439:3 439:5 443:23 445:3 445:16 448:23 454:21 461:25 470:22 471:7 471:8 471:18 471:22 472:1
2000-2001 [3] 286:20 308:2 335:24
2001 [122] 276:20 277:1 282:19 282:23 283:1 283:23 284:23 285:7 285:18 286:3 286:18 287:6 287:8 287:21 288:4 289:4 289:5 289:14 289:17 291:2 291:14 292:7 292:13 295:20 295:24 297:4 308:20 308:21 313:8 313:23 317:4 327:3 327:15 339:6 342:16 348:7 348:10 348:11 348:14 348:16 348:18 348:19 348:25 349:6 349:10 349:11 350:10 352:12 352:18 354:20 355:1 358:8 361:9 362:14 363:7 363:8 365:20 376:24 411:24 431:24 432:10 432:15 432:22 433:3 433:5 433:11 433:15 433:17 433:24 434:4 434:13 435:6 435:8 435:10 435:23 436:5 436:7 436:21 436:22 437:4 437:5 437:9 437:14 437:18 437:21 438:2 438:10 438:22 439:3 439:5 439:6 443:23 445:3 445:6 445:13 446:22 447:19 448:23 451:25 454:21 455:15 455:22 457:16 458:8 458:13 459:8 461:8 461:25 463:1 465:5 469:1 470:5 470:22 471:6 471:18 471:21 472:1 477:22 478:23 480:23 481:18 481:24
2001-2002 [1] 317:5
2002 [72] 267:18 271:3 271:7 276:20 277:2 287:19 288:8 288:12 289:6 289:23 290:18 290:22 290:25 291:10 292:14 292:25 293:17 310:20 310:20 314:5 314:15 314:21 324:3 324:10 324:19 324:21 324:23 335:3 335:18 339:3 342:18 352:10 352:15 352:18 353:2 353:2 353:6 353:8 353:11 353:23 354:12 354:15 354:17 356:7 356:13 360:8 361:5 362:3 362:10 362:17 362:24 363:1 363:6 363:9 433:18 433:21 434:16 434:18 435:2 435:25 438:3 445:7 445:13 447:3 455:15 455:21 461:8 462:13 462:24 463:3 490:3 491:14
2003 [1] 335:3
2004 [1] 336:6
2005 [4] 299:11 299:13 299:23 335:18
2006 [1] 436:2
2010 [8] 295:21 295:25 297:13 299:24 300:2 327:24 331:23 343:16
21 [1] 361:18
21.10 [1] 324:4
22 [1] 411:11
23 [1] 444:18
24 [2] 348:5 358:20
25 [3] 286:22 350:17 361:22
26 [1] 267:18

26th [3] 271:3 271:6 490:2
27 [9] 411:24 418:16 421:2 421:4 421:5 421:16 421:20 423:17 424:23
271 [2] 269:3 270:22
272 [1] 269:11
275 [5] 374:6 381:15 381:16 381:22 382:2
28 [1] 353:4
285,000 [1] 470:5
29th [1] 376:23
2:57 [1] 490:2

3

3 [8] 336:10 345:14 374:3 382:1 382:6 400:23 401:1 468:13
3,000 [3] 329:3 329:10 331:13
3,883,000 [1] 463:10
3.4 [1] 445:16
3.8 [1] 445:17
30 [2] 405:1 422:20
300 [1] 449:6
302 [2] 270:22 270:22
306 [1] 269:12
30th [1] 297:4
31 [2] 440:20 458:3
31,762,000 [1] 484:20
3100 [1] 272:22
314 [1] 268:13
318 [1] 269:12
31st [4] 372:14 372:18 384:15 386:3
323 [1] 269:13
337 [1] 269:13
34 [1] 421:21
340 [1] 269:14
341 [1] 269:14
343 [1] 269:15
345 [1] 269:15
346 [1] 269:17
35 [1] 446:24
350 [1] 449:6
358 [1] 269:18
364 [1] 269:18
365 [1] 269:19
369 [1] 269:21
37 [1] 438:10
375 [1] 269:21
38 [1] 411:23
38-and-a [2] 354:16 379:19
38-and-a-half [1] 380:7
38-and-a-half-million [4] 379:7 379:12 379:25 380:1
38.5 [1] 399:8
382 [1] 269:22
384 [1] 269:22
39,901,186 [1] 384:13
391 [1] 269:23
392 [1] 269:23
394 [2] 269:24 269:25
396 [1] 269:25

4

4 [2] 408:4 434:1
4,181,000 [1] 470:22
4.32 [1] 471:20
40 [17] 376:22 377:8 378:14 379:2 393:22 394:6 394:19 395:7 398:7 398:16 398:23 399:15 404:21 441:2 442:12 442:14 442:18
40,000 [2] 423:18 441:2
40-million [2] 393:3 400:3
40-million-dollar [3] 376:19 397:3 442:7
40-million-dollars [1] 397:16
400 [6] 268:13 268:17 270:3 347:3 430:22 476:12
401(k [6] 411:8 414:2 414:14 419:12 434:25 454:17
407 [1] 270:5
417 [1] 270:6
420,193 [1] 463:5
425 [1] 270:6
426 [1] 270:7
428 [1] 270:7
429 [1] 270:8
430 [1] 270:10
44 [1] 336:23
442 [1] 270:10
446 [1] 270:11
449 [1] 270:11
452 [1] 270:12
46 [2] 438:3 475:7
460 [1] 270:12
468 [1] 270:13
47 [4] 350:20 362:7 363:6 363:25
471 [1] 270:14
474 [1] 270:15
475 [1] 270:17
479 [1] 270:17
48 [2] 368:1 386:4
480 [1] 270:18
485 [1] 269:3
486 [2] 269:4 269:5
489 [1] 269:5
491 [1] 269:7

5

5 [5] 272:9 356:6 408:7 424:17 427:14
5,000 [1] 282:6
5,024,000 [1] 470:22
5,108 [1] 295:23
5.754 [1] 481:12
50 [8] 315:20 352:16 358:13 358:14 363:12 414:3 417:7 425:8
50-megawatt [1] 363:14
500 [1] 329:21
500,000 [1] 390:9
57 [1] 475:8
58 [1] 406:17
58501 [2] 347:4 430:23
58502-0400 [1] 268:14
58502-4092 [1] 268:18
58505-0480 [2] 268:8 268:23
58506 [1] 369:10
59 [2] 368:2 415:5

6

6 [11] 336:6 358:21 362:6 368:3 385:5 385:9 385:13 405:2 475:7 483:8 483:12
6,000 [1] 299:23
6,080,199 [1] 356:13
6,429,778 [2] 353:15 355:16
6.4 [3] 387:24 481:9 481:13
6.4-million [1] 481:3
6.99 [1] 396:14
60 [8] 315:20 405:1 422:3 422:6 422:11 423:6 423:13 423:14
600 [4] 268:8 268:23 272:23 420:19
600-some-odd-thousand [1] 421:8
61 [1] 305:24
62 [1] 406:10
622,000 [1] 352:12
65 [5] 414:10 426:21 427:5 427:10 427:12
6500 [1] 299:11
66 [1] 481:10
680,000 [2] 423:20 469:22

7

7 [15] 305:23 336:6 338:20 338:25 339:1 368:3 385:4 396:7 406:10 406:18 409:17 475:8 477:5 483:8 483:12
7,000 [3] 282:4 288:16 299:24
7,614 [1] 327:25
7-by-24 [1] 358:19
7-point [3] 381:18 381:20 381:24
7.135 [1] 478:4
7.275 [1] 381:25
7.31 [1] 396:11
7.327 [1] 478:5
7.625 [1] 381:20
7.657 [1] 372:6
7.68 [1] 396:12
7.975 [1] 381:19
70 [2] 315:20 427:8
730 [1] 324:15
75 [2] 425:23 425:25

8

8 [9] 366:22 366:24 367:1 367:14 367:15 367:16 381:16 381:20 381:22
8-point [1] 389:17
8.25 [4] 388:11 389:8 389:14 404:3
8.6 [6] 388:12 389:8 389:14 389:17 390:3 401:12
8.62 [1] 401:5
8.938 [1] 404:8
80 [5] 413:16 414:5 424:21 425:9 425:25
80,000 [1] 425:24
818,000 [1] 353:15
83,940 [1] 352:13
843,000 [1] 446:22
8:33 [1] 271:2

9

9 [15] 293:2 293:15 294:13 294:16 294:18 294:21 305:7 314:20 323:24 323:25 324:2 348:5 355:20 356:17 357:1
9.22 [3] 401:14 404:13 405:7
9.258 [1] 372:4
9.508 [1] 372:10
9.65 [1] 382:4
9.69 [2] 372:17 382:7
9.75 [1] 378:24
9.965 [1] 372:13
90 [3] 427:14 467:7 467:11
900 [1] 449:11
900-some [1] 449:5
918 [2] 369:9 407:9
92,964 [1] 352:11
920 [1] 474:16
921 [3] 459:16 459:25 460:3
924 [1] 457:14
925 [2] 457:13 457:14
926 [3] 434:23 454:16 462:12
930 [4] 459:12 459:15 459:17 459:23
95760 [1] 272:23

---------- [1] 491:17

A

A&G [1] 446:18
A.m. [1] 362:6
Aberrations [1] 439:3
Abilities [1] 414:25
Ability [3] 336:24 354:25 440:9
Able [29] 277:8 278:1 278:3 278:7 316:12 320:12 322:23 341:1 341:2 349:6 349:20 354:11 354:19 355:13 372:21 377:16 388:17 388:23 392:25 393:14 396:19 397:6 412:7 416:14 416:15 416:17 416:20 473:22 474:18
Abnormal [4] 282:20 284:4 284:25 289:10
Abnormally [3] 288:2 289:13 289:21
Absent [2] 284:21 349:4
Absorbed [1] 339:13
Acceleration [1] 335:25
Access [3] 280:3 397:17 398:12
Accommodation [1] 453:21
According [2] 445:4 445:8
Account [25] 315:3 322:18 434:22 434:22 435:1 448:7 448:21 448:23 454:16 454:18 454:24 457:13 459:3 459:

9 459:12 459:16 459:16 459:18 459:23 459:25 460:2 461:25 462:14 472:14 474:16
Accountant [1] 480:14
Accounted [1] 459:25
Accounting [4] 370:8 373:21 392:18 400:2
Accounts [12] 435:12 439:13 439:14 444:7 447:6 447:15 448:14 449:7 455:1 460:3 462:8 472:10
Accrual [1] 456:7
Accrue [3] 455:19 456:1 456:19
Accruing [1] 456:6
Accurate [3] 325:14 344:14 491:10
Accused [1] 338:14
Achievable [1] 288:14
Achieve [4] 355:3 355:13 355:16 433:6
Achieved [1] 371:22
Acquired [4] 432:21 439:6 459:8 465:4
Acquisition [3] 383:11 383:23 388:20
Action [4] 373:6 373:6 373:24 412:4
Actions [2] 285:7 412:7
Active [4] 273:17 298:6 421:20 422:1
Actively [2] 300:19 326:20
Activities [1] 432:2
Activity [4] 285:13 285:21 310:15 458:12
Actual [35] 319:17 325:9 325:15 344:14 347:24 348:10 350:25 351:6 351:8 351:22 352:7 352:10 352:12 352:14 353:1 353:3 353:6 353:7 354:3 361:9 362:13 362:23 363:8 380:12 395:6 433:3 434:3 438:21 452:9 457:16 457:18 462:16 466:5 481:17 481:23
Actuarial [8] 434:10 435:13 435:15 455:8 455:25 456:8 456:24 456:25
Actuary [2] 455:6 469:11
Add [6] 297:8 327:23 328:1 331:13 331:21 415:25
Added [4] 433:6 433:12 460:7 460:7
Adding [2] 482:1 482:3
Addition [7] 274:20 283:21 291:21 292:2 328:6 328:7 411:8
Additional [22] 282:6 282:15 288:22 295:4 295:4 295:23 303:6 314:13 317:18 331:4 331:15 404:15 428:17 431:22 433:16 433:22 436:23 445:19 456:22 457:9 474:12 489:20
Additions [4] 300:9 303:6 427:17 427:18
Address [18] 272:20 272:22 276:7 276:13 347:1 347:3 347:15 369:6 369:9 407:7 407:9 409:3 430:20 430:22 431:7 434:13 476:10 476:12
Addressed [1] 409:8
Adequate [5] 277:21 298:8 432:3 432:25 456:14
Adequately [3] 412:15 472:18 474:17
Adjacent [1] 322:22
Adjusted [5] 435:4 478:18 478:19 478:23 483:22
Adjustment [17] 436:10 436:11 438:12 438:15 438:18 438:19 438:24 439:1 447:6 463:4 470:6 470:7 478:13 480:21 481:20 481:23 482:17
Adjustments [14] 445:20 471:1 471:2 476:25 477:3 477:7 477:15 477:17 477:23 477:24 478:15 479:9 482:5 484:1
Administration [6] 275:21 369:20 369:23 370:4 408:3 409:16
Administrative [12] 443:23 444:2 444:21 444:23 446:21 447:9 448:8 448:11 449:7 468:13 470:10 474:17
Administrator [1] 409:12
Admirable [1] 489:5
Admission [1] 367:4
Admitted [5] 294:21 294:25 302:15 357:21 483:12
Admonition [6] 272:6 346:14 368:18 406:19 430:8 475:23
Adopted [1] 339:14
Advance [2] 281:2 341:4
Advantage [1] 316:5
Adversely [4] 410:10 410:19 411:15 419:3
Advised [1] 437:12
Advising [1] 275:14
ADVISOR [1] 268:24
Affairs [1] 430:24
Affect [4] 278:6 308:14 310:14 393:17
Affected [5] 322:5 410:10 410:20 411:15 419:3
Affecting [2] 321:25 437:10
Affects [1] 320:25
Age [4] 414:10 426:20 427:5 427:12
Agencies [9] 377:16 394:22 397:9 397:22 398:2 398:5 398:11 440:8 450:1
Agency [4] 377:14 377:15 377:22 393:13
Agency's [1] 274:15
Agent [1] 459:21
Aggressive [1] 412:4
Ago [7] 297:24 303:5 328:22 334:10 374:2 417:3 455:24
Agree [13] 318:4 332:17 344:25 345:17 379:24 380:6 392:23 395:22 395:25 398:23 399:2 399:12 435:18
Agreeable [1] 402:15
Agreed [7] 342:11 348:22 349:17 395:2 417:25 442:12 447:2
Agreeing [2] 463:10 463:11
Agreement [3] 286:2 363:15 394:25
Agrees [1] 380:9
Ahead [3] 296:22 316:12 335:13
Air [1] 467:15
Aircraft [15] 439:6 443:2 443:9 443:10 443:13 443:14 443:17 453:1 453:4 457:23 459:7 459:7 459:9 465:4 466:7
Airfare [1] 453:15
Airplane [12] 443:4 464:25 465:2 465:8 465:11 465:20 465:25 466:1 466:6 466:9 466:18 467:5
Algebraic [1] 367:19
Align [1] 354:12
ALLEN [1] 267:23
Allocated [5] 451:17 456:4 465:7 465:17 477:18
Allocation [1] 465:19
Allow [1] 424:5
Allowed [1] 355:3
Allowing [1] 431:17
Almost [4] 374:13 379:1 392:14 455:23
Alone [2] 388:24 389:15
Alternative [3] 293:8 293:14 453:19
America [3] 279:21 376:20 393:4
American [5] 273:18 274:2 274:20 296:1 408:8
Amortizations [1] 405:5
Amortized [1] 389:1
Amount [32] 278:25 281:21 297:10 297:11 297:13 299:5 299:14 301:4 301:21 312:10 320:5 328:1 388:20 389:20 394:19 398:20 433:11 434:2 436:10 436:13 436:16 451:12 451:19 452:11 466:2 472:9 472:13 480:21 481:11 481:17 482:10 489:12
Amounts [9] 295:18 299:17 299:21 342:5 435:7 439:17 455:18 456:5 457:12
Analysis [10] 273:20 274:7 275:4 275:11 275:12 369:22 445:19 445:19 454:20 476:17
Analyst [1] 275:9
And-a-quarter [1] 378:11
Andersen [4] 399:20 399:21 441:17 441:21
Announcement [1] 441:14
Annual [28] 267:6 271:11 372:10 379:17 380:16 380:21 388:13 405:4 411:11 413:4 414:4 420:16 420:25 421:1 425:17 425:19 425:21 435:13 438:1 438:2 438:8 438:9 440:16 458:15 459:13 459:13 462:25 463:1
Annually [1] 458:6
Anomaly [2] 286:20 355:3
Answer [7] 315:22 338:4 339:7 339:13 402:10 424:9 463:4
Answering [2] 387:13 479:19
Answers [1] 449:16
Anticipate [2] 305:11 374:14
Anticipates [1] 373:15
Anticipation [1] 332:1
Anyway [2] 342:15 390:25
Appear [3] 392:10 403:10 443:12
Application [1] 432:20
Applied [1] 465:11
Applies [2] 451:7 451:8
Appreciate [2] 308:8 419:19
Approach [4] 292:16 292:20 366:14 402:18
Appropriate [14] 353:25 377:2 395:9 402:12 405:22 412:16 418:13 418:22 424:14 431:21 434:20 458:20 482:20 485:21
Appropriately [1] 459:24
Approved [3] 301:20 329:15 399:24
Approximate [1] 474:16
April [2] 371:3 396:10
Area [19] 274:3 279:4 303:20 304:5 304:6 312:1 320:19 321:15 322:20 347:17 354:5 374:17 416:11 420:8 431:9 442:16 454:22 458:24 474:21
Areas [14] 318:19 318:23 319:9 321:24 322:3 322:10 322:13 322:15 407:18 431:8 454:8 454:11 454:25 457:11
Argues [1] 469:8
Army [1] 408:5
Arose [1] 284:7
Arrangement [1] 349:5
Arrangements [1] 285:19
Array [1] 337:18
Arrived [1] 401:4
Art [1] 432:6
Arthur [4] 399:20 399:21 441:17 441:20
Arts [2] 370:3 407:25
Aside [3] 422:16 422:21 422:23
Assess [1] 292:23
Assessment [4] 273:20 275:2 299:8 311:1
Assessments [2] 297:19 298:23
Asset [1] 274:6
Assets [3] 275:4 415:14 427:7
Assigned [2] 409:12 477:19
Assist [1] 369:23
Assistant [7] 369:13 369:13 370:17 370:17 391:16 391:17 391:20
Associated [2] 277:23 484:8
Association [1] 408:17
Assume [6] 284:20 380:18 395:15 395:22 425:16 431:20
Assumed [1] 288:16
Assuming [6] 344:4 379:5 379:5 380:5 380:5 486:11
Assumption [1] 362:9
Assumptions [1] 310:21
Assure [1] 432:24
Asynchronously [1] 284:3
Attached [1] 457:18
Attack [1] 437:21
Attention [6] 274:18 284:9 301:13 301:15 485:17

488:18
Attorney [1] 268:17
Attorneys [1] 268:12
Attract [3] 410:14 416:5 416:17
Attractive [1] 332:6
Attributed [1] 288:23
Audited [2] 399:18 441:13
Auditing [1] 399:19
Auditors [2] 441:15 441:23
August [11] 287:5 287:6 317:7 349:10 349:12 350:3 354:15 354:17 370:16 408:13 433:17
Availability [3] 337:2 340:14 340:15
Available [19] 286:13 292:10 308:7 320:14 344:15 351:22 354:6 355:5 355:15 364:22 375:3 390:13 413:12 415:23 419:6 419:23 422:21 429:19 437:23
Avenue [5] 268:8 268:13 268:23 369:9 407:9
Average [28] 276:21 306:17 307:17 308:3 313:9 313:11 315:9 317:12 324:14 351:6 351:20 351:21 351:22 360:18 360:25 361:3 382:22 395:3 396:11 404:6 423:11 423:16 441:4 441:8 441:9 448:3 450:7 484:5
Avoid [4] 432:23 432:25 433:14 453:21
Aware [7] 271:22 312:9 312:13 312:24 438:23 441:13 441:16

B

BA [1] 408:22
Bachelor [3] 275:20 370:3 407:25
Back-up [1] 398:12
Backed [2] 397:11 415:13
Background [4] 275:19 370:2 407:24 416:21
Balance [11] 279:13 332:20 336:14 395:3 403:4 440:17 440:24 441:4 441:8 441:9 450:7
Balances [3] 291:22 440:18 440:20
Ball [28] 270:9 409:8 428:18 428:20 429:3 430:6 430:7 430:7 430:14 430:21 439:20 442:1 442:3 446:12 460:15 460:23 461:3 468:16 469:8 473:18 473:19 474:4 474:6 475:3 475:5 475:18 482:6 484:12
Ball's [1] 464:3
Bank [5] 369:19 376:20 393:4 439:12 459:19
Banking [1] 275:21
Bankrupt [1] 415:16
Banks [1] 397:13
Barely [1] 320:10
Bars [1] 299:22
Base [5] 273:14 281:10 332:16 411:16 478:2
Base-load [1] 332:16
Based [52] 286:4 286:8 288:6 288:6 288:19 288:25 289:1 289:10 289:11 293:24 305:9 310:21 310:23 310:23 310:25 315:16 317:21 320:12 333:12 342:3 342:8 353:3 354:21 355:14 356:6 356:7 358:12 362:23 363:1 363:7 364:21 373:14 389:20 390:4 398:18 413:22 427:5 433:20 435:13 447:17 456:23 463:13 463:14 463:16 465:12 465:18 466:7 467:18 469:10 478:23 479:11 481:3
Basin [3] 313:4 320:4 451:9
Basis [22] 285:8 288:9 349:21 351:6 351:23 364:6 364:6 364:7 374:12 374:13 380:11 380:25 435:20 446:23 446:25 448:2 452:10 453:7 456:20 457:2 466:6 477:18
Became [4] 281:2 281:7 317:22 437:4
Become [6] 297:21 410:5 410:7 410:13 415:17 418:25
Began [3] 281:16 455:20 456:2
Begin [1] 458:16
Beginning [11] 281:12 287:18 296:23 296:24 313:5 414:10 424:17 437:14 455:15 457:5 458:10
Begins [1] 362:4
Behalf [2] 276:1 276:3
Behind [2] 313:1 472:3
Belief [4] 294:16 302:3 357:10 357:16
Belonged [1] 467:16
Below [7] 350:21 351:3 351:14 351:21 354:16 362:8 478:20
Beneficial [2] 322:7 322:12
Benefit [47] 272:4 369:24 372:25 373:11 407:20 408:18 410:22 411:2 411:3 413:7 413:8 413:9 413:17 414:2 414:6 414:12 414:14 414:20 415:11 415:12 415:20 416:16 416:24 417:8 418:8 418:10 418:20 420:5 421:24 421:25 422:18 422:23 424:2 424:7 426:20 426:25 427:3 427:3 435:1 435:3 435:6 442:24 443:2 454:25 455:10 470:6 479:21
Benefits [48] 409:16 410:9 410:12 410:15 410:23 411:3 411:14 411:18 413:10 414:7 414:8 415:8 415:18 417:5 418:5 419:1 419:4 419:6 419:8 419:12 419:15 419:17 420:3 422:3 423:5 423:21 423:22 427:12 427:19 434:12 434:22 434:23 434:25 436:9 436:12 443:6 445:22 454:13 454:15 454:22 455:6 456:2 461:7 462:11 463:11 468:11 468:12 469:18
Best [8] 294:15 302:2 330:8 357:9 357:15 363:1 424:11 432:11
Better [2] 322:3 425:2
Between [32] 277:11 278:9 283:16 286:14 286:22 287:11 293:12 302:18 302:21 303:1 304:22 305:10 322:24 331:24 341:20 347:21 348:3 350:7 354:3 355:9 380:10 382:3 382:17 383:1 398:22 402:1 436:4 457:4 471:18 472:12 481:6 481:13
Beyond [2] 276:20 284:8
Bid [2] 275:12 293:12
Bid-and-offer [1] 293:12
Bidding [3] 301:19 304:15 329:14
Bids [1] 433:20
Big [1] 336:5
Bigger [3] 456:16 456:17 468:23
Bilateral [4] 285:11 288:2 290:12 293:11
Bill [2] 444:19 450:25
Billed [1] 466:6
Billion [1] 274:17
Bills [1] 450:14
Binding [1] 321:11
Binek [120] 268:6 269:4 269:12 269:15 269:18 269:21 269:25 270:6 270:8 270:10 270:12 270:17 271:21 271:22 294:19 294:20 296:7 296:9 302:13 305:24 306:1 306:3 306:23 307:12 307:23 308:13 316:15 316:17 316:20 316:24 318:3 318:9 343:4 343:5 343:7 345:5 345:7 357:20 358:1 358:3 358:5 360:15 361:19 361:22 363:23 363:24 364:11 364:12 367:3 367:5 375:21 375:22 375:24 382:9 382:10 396:23 396:24 397:2 400:10 400:11 402:8 402:16 417:16 417:18 421:16 425:10 425:11 427:17 429:13 429:14 429:16 430:2 442:3 442:4 442:6 444:23 445:2 446:3 446:7 446:9 446:11 460:14 460:16 460:22 460:24 461:2 461:15 461:18 464:12 464:14 464:22 464:24 465:1 466:16 467:1 467:20 467:23 467:25 475:4 479:4 479:5 479:7 480:1 480:3 485:8 485:9 486:3 486:4 486:8 486:9 486:22 487:5 487:17 487:21 488:1 488:5 488:8 488:16 488:20 488:21
Birds [1] 301:23
Bismarck [11] 267:18 268:8 268:14 268:18 268:23 347:4 369:10 407:10 430:22 476:13 491:13
Bit [7] 273:11 295:18 338:2 340:3 388:11 393:9 486:11
Blackout [1] 284:22
Blackouts [1] 317:2
Blinsky [21] 269:16 282:21 290:1 291:3 292:17 292:19 293:22 305:14 305:16 319:16 346:12 346:13 346:20 347:2 355:18 364:13 364:17 365:19 366:19 366:19 481:2
Blinsky's [5] 285:22 286:1 293:19 314:18 367:25
Block [4] 358:13 358:14 363:14 403:22
Blow [1] 344:12
Board [1] 409:13
Bolstered [2] 290:10 311:10
Bond [4] 371:8 390:19 393:18 404:4
Bonds [9] 371:7 371:18 384:14 387:1 388:1 388:2 389:12 389:25 403:21
Book [2] 385:12 396:5
Booked [5] 436:1 440:3 448:23 459:23 472:9
Booking [2] 458:16 458:19
Books [13] 377:7 379:23 389:12 393:6 396:18 436:9 439:23 440:22 441:12 455:21 455:22 456:6 483:8
Borne [1] 418:6
Borrow [3] 377:11 397:21 398:7
Borrowed [2] 376:23 400:8
Borrowing [2] 393:19 398:18
Borrowings [1] 398:19
Boston [1] 408:19
Bottom [10] 327:23 343:20 380:22 382:5 403:8 403:10 404:1 405:7 425:18 457:23
Bought [1] 363:14
Boulevard [2] 268:8 268:23
Bound [1] 385:12
Box [1] 268:13
Break [3] 450:12 467:12 474:9
Breakdown [1] 317:23
Brevities [1] 338:17
Brevity [1] 338:15
Briefly [4] 359:10 370:1 459:6 473:22
Bring [3] 449:21 485:17 488:17
Bringing [1] 316:2
Brings [1] 341:16
British [1] 312:19
Broader [2] 279:14 322:19
Broke [1] 331:18
Broker [2] 284:21 322:23
Brokered [1] 321:6
Brought [3] 352:11 356:12 450:11
Brownouts [1] 317:1
Btus [2] 288:16 288:18
Budget [1] 370:12
Build [3] 328:25 333:5 425:3
Building [7] 328:14 330:21 330:24 331:5 331:7 331:9 489:6
Buildup [1] 426:24
Built [2] 389:6 395:13
Bulk [3] 276:7 347:5 458:1
Burn [1] 303:7
Burned [1] 315:24
Burning [1] 292:8
Business [21] 272:20 272:22 273:1 275:20 302:8 346:25 347:3 366:12 369:7 369:9 370:4 407:7 407:9 407:11 414:20 418:22 430:19 430:21 443:7 476:10 476:12
Buy [2] 323:3 325:16
Buyer [5] 348:18 348:22 349:2 349:17 363:16
Buyers [3] 291:7 304:17 354:4
Buying [2] 354:9 390:19
By-trip [1] 453:7

C

Calculated [2] 353:10 404:2
Calculating [1] 478:9
Calculation [5] 356:15 367:13 392:18 463:8 478:1
Calculations [1] 479:12
Calendar [1] 478:23
California [20] 272:23 274:14 283:24 284:5 284:7 284:14 284:15 284:19 285:4 312:3 312:15 312:18 316:10 316:13 316:25 317:8 317:11 317:14 334:1 338:4
Canada [1] 282:2
Cannot [2] 363:16 435:16
Capability [1] 460:6
Capacity [96] 281:22 282:5 282:7 282:14 295:13 295:19 295:24 297:9 297:10 297:12 297:25 298:19 298:22 299:5 299:7 299:12 299:17 301:4 301:8 301:10 301:17 301:21 301:22 303:6 303:25 304:4 312:21 314:3 315:13 315:15 320:6 320:9 326:5 326:7 326:17 326:24 327:13 328:1 328:6 328:10 328:12 329:20 329:23 329:24 329:25 330:15 330:17 331:3 331:22 332:9 332:11 334:3 334:24 335:1 335:3 335:16 335:19 336:6 341:21 342:5 343:11 343:11 343:13 343:15 343:17 343:22 343:24 344:1 344:2 344:6 344:6 344:15 359:9 363:25 365:22 366:3 369:11 369:16 370:14 377:17 377:20 397:6 397:25 398:12 407:15 432:3 432:13 432:21 433:6 433:10 433:12 433:16 433:19 433:21 433:22 434:3
Capital [24] 275:15 281:8 374:23 375:2 378:20 379:7 379:11 379:14 379:21 386:3 387:8 400:23 400:25 401:19 403:2 439:22 440:14 441:3 441:6 441:8 442:9 442:18 465:22 472:11
Capital-intensive [1] 281:8
Capitalized [1] 472:11
Capitol [3] 267:17 268:7 268:22
Card [1] 340:11
Care [2] 387:15 391:6
Career [1] 427:2
Careful [2] 274:20 489:21
Carefully [1] 489:20
Carried [1] 439:23
Carries [1] 404:8
Carry [2] 384:3 403:25
Carrying [1] 377:7
Case [20] 267:5 271:13 271:13 271:15 339:16 352:8 365:20 378:19 386:23 401:8 409:5 482:2 485:24 485:25 486:6 487:20 488:2 489:6 489:19 489:22
Cases [2] 326:21 442:15
Cash [3] 369:19 370:15 426:24
Categories [5] 299:20 326:6 326:15 330:13 455:14
Categorize [2] 326:5 448:1
Category [10] 326:14 326:24 327:16 327:22 328:9 331:24 444:5 448:11 448:25 479:24
Caused [4] 365:21 438:23 439:2 454:24
Causing [1] 439:4
Cell [1] 439:9
Centers [1] 273:22
Central [1] 408:16
Centralized [1] 453:3
Certain [5] 321:24 326:17 344:24 377:24 459:11
Certainly [7] 411:7 417:11 417:22 418:9 457:2 471:23 474:18
Certainty [1] 285:12
CERTIFICATE [2] 269:7 491:1
CERTIFY [2] 491:5 491:9
Cetera [2] 487:15 488:11
CFO [1] 391:25
Change [10] 300:6 364:24 437:24 441:23 455:3 459:4 459:10 472:7 474:16 474:21
Changed [7] 276:23 352:5 364:25 435:2 436:22 437:18 437:19
Changes [19] 279:10 300:7 347:25 352:1 352:21 410:8 410:10 410:12 410:19 411:14 418:25 419:2 447:14 454:23 455:1 460:2 461:9 475:11 475:15
Changing [4] 278:11 280:10 437:22 441:15
Characteristics [4] 303:17 303:17 303:21 314:16
Characterization [4] 347:23 350:16 395:23 396:1
Characterize [4] 310:11 332:4 340:11 396:2
Characterized [2] 278:18 328:11
Charge [1] 466:2
Charged [3] 448:14 448:21 449:6
Chart [6] 299:22 323:19 325:24 425:18 468:12 470:19
Check [1] 378:17
Chicago [4] 304:5 321:14 321:19 408:20
Chief [1] 391:21
Chilling [1] 344:21
Chosen [1] 294:6
Cinergy [6] 293:21 294:2 294:4 353:10 353:23 354:4
Circumstances [3] 280:11 347:25 352:1
Cites [2] 396:13 396:15
City [1] 408:6
Claimed [1] 392:16
Clarification [2] 294:1 371:13
Clarify [2] 473:23 474:13
Clark [47] 268:4 269:14 269:23 270:7 270:11 270:14 325:8 339:23 339:24 340:2 341:8 341:11 365:10 365:11 392:4 392:5 392:8 393:24 394:3 405:14 405:15 405:23 426:7 426:10 426:11 426:14 428:4 428:19 428:23 449:18 449:20 452:15 452:19 471:13 471:14 471:17 473:15 473:18 474:11 482:25 483:2 486:17 486:21 488:2 489:1 489:3 489:10
Clark's [3] 341:16 429:17 489:14
Class [1] 272:9
Classified [1] 377:25
Clean [2] 397:23 406:9
Clear [10] 297:22 298:18 307:10 377:17 377:18 377:20 382:15 397:7 397:23 458:18
Clearing [6] 283:8 308:25 323:8 342:8 345:24 393:11
Clearly [6] 284:25 286:20 316:5 372:20 455:17 459:17
Client [1] 273:14
Clients [2] 274:4 275:7
Close [3] 396:14 481:8 489:25
Closely [3] 289:9 289:16 354:11
Closeness [1] 320:3
Closer [3] 311:20 319:7 428:1
Closing [3] 269:5 488:19 489:2
Closure [1] 449:21
Co [4] 267:5 268:16 268:19 386:2
Coach [1] 416:14
Coal [25] 277:14 287:24 288:3 288:6 288:18 288:19 288:25 289:10 289:15 304:22 315:16 316:4 320:3 320:4 320:12 328:25 328:25 333:6 333:13 333:16 340:4 340:10 340:17 355:9 408:8
Coal-based [6] 288:6 288:19 288:25 289:10 315:16 320:12
Coal-fired [4] 288:3 288:18 328:25 355:9
College [1] 408:4
Columbia [1] 312:19
Column [8] 300:6 305:9 327:8 353:6 380:25 405:4 457:21 478:18
Columns [1] 468:20
Combination [4] 281:19 290:6 290:23 403:19
Combine [1] 279:10
Combined [3] 316:6 335:23 414:21
Coming [15] 282:15 290:6 298:8 298:15 298:19 303:11 309:6 309:15 309:18 310:1 311:2 332:8 336:17 367:25 487:22
Commencing [1] 271:2
Comment [3] 295:6 295:14 469:7
Comments [9] 269:3 269:5 328:16 347:21 417:19 457:9 488:19 489:2 489:15
Commercial [13] 377:12 377:23 393:17 394:20 397:10 397:11 397:14 397:16 397:22 400:8 404:15 404:17 443:14
Commercially [1] 453:16
Commission [47] 267:3 267:17 268:7 268:9 268:22 268:24 271:9 275:9 275:14 280:2 281:16 296:14 301:20 318:22 322:1 322:8 322:12 328:17 329:16 339:14 367:7 370:22 370:23 392:13 403:23 409:5 424:4 431:18 431:20 432:9 433:9 434:2 440:17 450:21 461:19 462:5 463:6 468:3 473:1 473:6 477:1 485:17 486:6 486:12 487:13 488:18 489:7
Commission's [3] 293:24 305:17 485:25
Commissioner [178] 268:3 268:4 268:4 269:13 269:13 269:14 269:18 269:22 269:23 269:23 269:24 270:3 270:7 270:7 270:11 270:11 270:13 270:14 270:18 271:20 296:16 300:14 316:14 316:18 316:21 323:15 323:16 323:18 323:23 324:1 325:8 326:1 328:21 335:7 335:9 335:12 337:8 337:10 337:11 337:12 337:15 339:20 339:22 339:23 339:24 340:2 341:8 341:10 341:16 364:15 364:19 365:3 365:5 365:6 365:7 365:9 365:11 367:15 368:8 368:12 368:15 384:7 384:10 384:22 385:7 385:15 385:20 385:23 386:6 386:9 386:10 387:6 391:9 391:10 391:11 391:12 391:15 392:1 392:3 392:4 392:5 392:8 393:24 394:1 394:2 394:3 394:5 394:10 394:12 400:14 400:15 400:17 401:2 401:25 402:23 403:3 403:7 403:12 404:10 404:14 404:20 405:8 405:12 405:13 405:15 405:23 426:3 426:4 426:6 426:7 426:8 426:10 426:11 426:14 428:4 428:19 428:22 428:23 428:24 429:2 429:7 429:17 446:5 446:14 446:15 446:17 449:15 449:17 449:18 449:20 452:15 452:18 463:9 463:18 468:4 468:5 468:7 468:17 468:25 471:10 471:12 471:13 471:14 471:15 471:17 473:8 473:15 473:17 474:10 475:9 475:13 475:17 480:7 480:9 481:16 482:23 482:24 482:25 483:2 483:15 483:17 483:18 484:22 484:24 486:15 486:17 486:20 486:21 487:19 487:24 488:2 489:1 489:3 489:9 489:10 489:11 489:14 489:23
Commissioners [6] 268:2 269:5 271:18 341:11 462:24 488:19
Commissioners' [1] 300:12
Commissions [2] 370:20 404:5
Common [6] 276:12 351:14 409:25 410:5 414:19 442:17
Commonly [1] 410:4
Communication [1] 409:16
Communications [1] 407:22
Companies [11] 279:17 281:7 364:5 374:24 404:18 410:6 437:10 451:10 451:11 451:16 465:18
Company [70] 271:10 347:6 362:11 369:18 371:5 371:6 371:14 371:17 371:22 372:

20 373:1 373:3 373:5 373:12 373:15 373:18 375:13 376:9 376:11 376:14 378:6 378:15 378:21 394:17 399:19 401:6 404:1 412:9 412:17 412:19 413:18 415:16 415:24 416:3 417:4 418:18 430:24 439:21 440:6 440:9 440:22 441:12 441:14 442:16 442:23 443:3 443:6 443:16 443:20 446:23 446:25 449:4 451:10 453:10 455:6 455:11 455:18 462:12 462:23 470:8 470:11 470:15 470:23 476:15 476:17 477:17 481:1 481:11 481:13 489:18
Company's [16] 369:19 369:21 369:24 370:15 371:19 372:25 373:25 379:19 387:7 395:8 396:16 415:9 437:12 439:7 440:14 447:3
Companywide [1] 451:25
Comparable [4] 291:14 293:18 316:3 339:6
Compare [1] 454:20
Compared [9] 290:25 314:9 314:10 325:10 352:18 376:7 414:5 467:3 481:4
Compares [1] 300:4
Comparing [2] 279:6 437:5
Comparison [4] 315:5 371:25 447:2 467:4
Compensate [1] 277:23
Compensation [8] 407:19 407:20 411:5 413:6 418:15 425:19 452:6 452:8
Competition [2] 291:23 291:25
Competitive [9] 276:24 279:9 280:6 329:14 375:2 378:10 378:11 378:23 412:21
Competitively [1] 275:12
Competitors [2] 292:9 340:4
Complaint [1] 271:9
Complete [1] 478:25
Completed [14] 270:22 271:12 271:14 299:21 325:18 326:7 326:23 327:3 327:7 327:9 327:14 331:20 371:23 485:5
Completely [1] 319:6
Completing [1] 275:5
Complex [1] 279:16
Compliance [2] 282:1 369:22
Compliment [1] 337:16
Complimented [1] 338:15
Components [1] 405:1
Comprise [2] 350:20 362:7
Computations [1] 367:19
Computed [1] 439:22
Computer [4] 273:24 279:16 439:7 439:10
Computers [1] 460:5
Concentration [1] 370:5
Concern [3] 351:24 413:1 445:20
Concerned [2] 282:23 300:14
Concerning [4] 275:16 343:10 409:5 461:6
Concerns [12] 281:25 347:15 347:18 347:20 348:2 350:15 431:7 431:12 434:6 434:14 436:18 438:14
Concluded [1] 490:2
Concludes [1] 348:6
Conclusion [3] 356:19 356:20 447:14
Conclusions [3] 269:5 276:16 486:13
Concrete [1] 285:21
Condition [1] 336:7
Conditions [35] 276:8 276:10 276:12 276:14 276:22 277:1 278:6 278:8 278:11 279:6 279:20 280:10 280:22 281:24 282:18 286:11 286:17 290:11 291:11 292:12 311:11 311:23 312:17 313:3 314:12 319:24 333:3 333:17 339:3 341:21 342:1 342:7 373:13 437:15 437:19
Conduct [1] 443:7
Conducting [1] 275:15
Confer [1] 473:22
Conferences [1] 408:19
Confidential [4] 435:15 435:20 456:25 457:2
Confidentiality [2] 363:15 363:20
Confused [2] 391:3 468:8
Confusion [3] 295:18 383:13 439:25
Congratulations [1] 337:19
Conjunction [1] 329:16
Connected [1] 319:21
Connection [2] 298:17 439:20
Consent [1] 363:21
Conservation [1] 290:7
Consider [3] 279:5 453:17 486:6
Considerable [1] 280:7
Considerably [2] 343:24 376:9
Consideration [4] 293:25 305:18 361:1 410:24
Considered [7] 331:13 373:1 373:3 393:16 411:1 435:15 442:25
Considering [3] 329:9 330:21 333:13
Constant [2] 274:18 304:25
Constraints [4] 278:24 320:25 321:11 323:11
Constructing [1] 376:5
Construction [7] 326:22 327:17 333:1 333:2 335:21 376:12 376:15
Consultant [2] 272:24 274:25
Consulting [4] 272:25 273:3 274:4 275:6
Consumed [1] 338:3
Consumer [2] 412:6 415:5
Consumers [1] 451:14
Contain [2] 363:19 491:10
Contained [2] 357:14 436:17
Containing [1] 483:9
Contested [1] 450:6
Contesting [1] 441:7
Context [1] 413:8
Continent [1] 431:9
Continually [1] 374:9
Continue [5] 283:18 290:22 424:7 424:15 436:2
Continued [5] 270:1 270:2 280:1 287:24 289:20
Continues [2] 384:3 429:24
Continuing [34] 294:22 295:11 296:21 302:16 307:12 307:23 308:13 316:15 316:24 324:1 326:1 328:21 335:12 360:15 361:19 361:22 363:24 386:10 387:6 401:2 401:25 421:16 428:4 439:4 439:11 445:2 465:1 466:16 467:1 468:17 468:25 477:12 481:16 483:18
Continuous [1] 342:12
Contract [31] 274:6 286:14 298:17 324:13 324:17 324:22 345:4 348:18 348:20 348:23 349:2 349:3 349:11 349:17 349:18 350:1 350:5 350:9 354:20 358:8 358:10 358:12 359:5 359:6 363:19 364:8 365:19 365:21 365:25 366:7 366:9
Contracted [1] 358:9
Contracting [3] 286:9 286:12 363:21
Contracts [16] 274:16 285:11 286:5 290:13 291:6 292:22 293:6 293:20 332:2 332:13 350:11 359:11 359:16 359:25 360:5 366:5
Contractual [1] 349:4
Contribute [2] 290:17 411:11
Contributed [2] 280:22 290:8
Contribution [1] 362:9
Contributions [3] 411:9 413:19 414:24
Control [4] 322:11 356:2 388:2 388:3
Controlling [1] 321:25
Conversation [2] 309:3 340:6
Conversion [1] 329:1
Convince [1] 329:2
Coordinated [1] 337:17
Coordinator [2] 347:5 443:11
Copies [4] 366:25 367:6 367:9 367:11
Copy [7] 296:9 355:20 361:10 387:3 444:13 444:16 468:18
Cordova [1] 272:23
Corner [1] 404:8
Corporate [13] 426:22 427:6 427:7 439:5 443:1 443:4 443:9 443:12 443:17 453:1 459:7 465:4 465:18
Corporate-owned [1] 426:22
Corporatewide [1] 420:22
Corporation [7] 374:8 391:5 407:18 408:9 415:13 415:14 451:8
Correct [62] 294:16 302:4 309:1 310:10 310:22 311:5 311:6 324:20 346:15 350:22 351:17 356:18 356:22 357:2 357:11 360:6 360:7 363:10 364:21 364:23 365:2 366:2 366:4 375:17 376:16 377:4 377:6 379:2 379:6 379:8 379:9 382:20 387:10 388:4 390:16 391:4 399:1 401:9 403:18 418:3 420:15 421:7 422:9 423:1 423:3 425:1 427:21 430:1 430:9 441:18 441:24 466:5 471:9 472:24 475:24 479:14 481:14 481:19 481:25 482:18 483:23 483:24
Corrected [1] 433:8
Correction [2] 349:13 457:21
Correctly [1] 400:19
Correlation [13] 283:16 302:18 303:1 304:9 304:12 304:22 304:25 305:2 347:21 348:3 348:14 350:6 350:8
Correspond [1] 357:3
Correspondingly [2] 291:17 348:9
Corresponds [1] 289:12
Cost [128] 275:6 275:11 277:8 277:13 278:4 278:19 278:21 281:5 292:8 316:5 316:9 320:2 320:3 320:15 320:24 340:18 350:21 351:3 351:13 351:15 360:9 362:8 362:17 371:21 372:1 372:1 372:12 372:17 372:21 372:22 372:24 373:7 373:10 373:25 374:23 375:3 376:2 376:7 380:11 380:11 380:13 380:16 380:21 380:24 381:12 381:14 381:15 382:7 382:18 382:22 383:2 383:8 383:10 383:15 383:18 383:19 388:7 388:16 388:18 388:25 390:5 392:15 392:19 395:23 396:11 396:12 396:15 396:17 400:23 400:25 401:5 401:7 401:14 401:20 403:16 403:18 404:2 404:4 405:4 412:6 418:12 418:13 418:18 418:22 419:22 420:16 420:21 420:22 420:25 421:1 421:12 421:18 421:24 422:9 423:11 423:16 423:20 423:21 424:5 426:25 428:7 428:16 433:12 433:19 433:21 433:24 434:3 434:16 434:17 434:18 434:19 434:20 443:12 451:3 451:5 451:6 451:20 451:21 453:13 458:21 462:16 465:10 465:20 465:23 469:23 478:11 480:12 484:8
Cost-effective [2] 443:12 453:13
Cost-of [2] 380:24 383:8
Cost-of-money [1] 380:11
Cost-of-service [1] 451:20
Cost-sharing [1] 419:22
Costing [1] 473:8
Costly [1] 452:13
Costs [96] 277:21 288:14 288:23 316:7 351:5 351:6 351:8 351:18 351:19 351:20 351:22 372:8 372:9 373:9 373:19 373:21 374:15 375:6 375:9 380:14 380:15 380:22 380:24 383:11 383:23 384:2 388:14 389:2 393:1 393:19 396:19 404:6 405:6 410:16 412:5 412:17 415:1 418:1

418:6 421:22 421:22 421:25 422:2 422:12 427:6 428:15 428:17 431:10 431:10 431:14 431:17 433:1 433:5 437:10 437:16 437:22 439:5 439:7 446:24 447:8 447:10 447:12 447:16 451:15 453:19 453:21 453:22 455:19 455:20 456:16 458:8 458:9 458:15 458:16 458:19 458:19 458:22 459:9 459:11 460:4 460:9 461:25 462:12 462:13 465:1 465:6 465:8 465:15 465:17 466:9 469:9 469:15 469:19 472:7 478:10 482:2

Council [1] 296:1

Councils [2] 297:17 298:20

Counsel [1] 338:22

Counted [2] 301:11 393:6

Country [2] 309:14 318:19

Couple [13] 323:16 332:22 333:18 337:12 392:5 394:14 405:3 416:9 426:12 460:17 464:24 473:25 487:10

Coupon [16] 372:3 373:9 373:17 380:10 380:12 380:13 383:3 383:6 383:7 388:10 388:12 388:19 388:24 389:19 389:21 403:19

Course [6] 302:7 358:23 374:7 375:12 395:6 441:11

COURT [2] 269:7 491:1

Cover [3] 414:15 455:19 465:16

Coverage [3] 437:15 437:20 457:23

Coverages [1] 437:23

Covered [5] 348:18 411:16 422:11 423:19 428:15

Covering [1] 429:3

Covers [1] 457:10

Coyote [3] 376:6 376:12 395:13

Cracks [1] 281:14

Create [3] 279:10 285:11 330:6

Created [5] 277:11 285:4 292:5 298:4 309:12

Credit [5] 397:12 397:15 397:21 398:1 398:12

Creditors [2] 415:19 422:22

Credits [2] 317:18 317:19

Crew [1] 416:10

Crises [1] 298:11

Crisis [5] 283:23 284:7 284:18 284:24 285:4

Critical [2] 279:18 282:3

Cross-examination [12] 269:12 269:18 269:21 270:6 270:10 270:17 306:2 358:4 375:23 417:17 442:5 479:6

Cue [1] 372:5

Culmination [1] 341:24

Cumulative [2] 327:9 331:20

Curiosity [3] 363:24 473:1 473:16

Curious [3] 328:16 336:22 337:4

Current [35] 286:11 289:18 290:3 291:5 291:24 292:23 303:10 311:3 311:17 341:18 348:1 349:3 349:22 354:10 373:14 374:8 381:9 390:12 395:23 411:6 416:14 422:5 423:15 423:21 427:23 434:16 434:21 435:2 436:3 436:5 436:7 438:8 450:13 458:16 480:11

Curve [3] 283:14 293:15 293:24

Customary [1] 441:21

Customers [6] 281:4 372:25 373:12 374:1 432:4 434:5

Cutbacks [1] 312:10

Cycle [3] 316:2 316:6 335:23

D

Daily [5] 287:17 288:6 364:6 374:13 395:3

Dakota [53] 267:2 267:18 268:8 268:14 268:18 268:19 268:23 271:8 271:9 303:15 313:2 319:7 321:4 331:6 331:8 339:4 347:4 351:12 369:10 370:9 375:4 375:7 386:2 387:11 407:10 408:8 408:16 413:13 417:12 430:23 432:1 433:14 435:17 437:11 443:3 443:19 443:20 451:11 451:23 456:5 457:19 463:3 465:6 469:9 470:9 470:14 476:13 476:25 477:3 477:7 477:18 477:19 491:13

Dakota's [24] 276:11 277:4 277:5 277:13 278:17 285:24 354:5 354:25 372:12 410:5 410:11 410:13 414:17 415:4 421:9 432:11 434:4 434:8 436:25 438:11 465:7 477:24 478:18 481:11

Dakotan [1] 417:12

DAM-1 [5] 371:10 371:24 380:17 380:23 382:24

Damages [2] 457:12 457:15

Data [12] 288:9 288:11 294:16 302:3 306:20 308:7 327:18 357:14 364:21 385:1 434:10 474:12

Date [10] 297:2 324:6 324:8 325:17 356:25 357:4 384:13 427:9 427:11 438:7

Dated [1] 491:13

Dates [5] 377:1 384:18 458:2 475:10 475:15

Daunting [1] 489:11

Day-to-day [1] 349:21

Days [10] 353:3 353:4 353:7 358:20 377:5 398:8 404:22 405:1 405:2 489:13

Deal [4] 354:7 366:21 457:6 489:16

Dealing [2] 392:13 450:5

Deals [1] 274:10

Death [1] 427:3

Debt [115] 369:21 369:22 371:2 371:10 371:20 371:21 372:13 372:17 372:22 372:24 373:2 373:4 373:6 373:11 373:12 373:16 373:19 373:22 373:23 374:1 374:15 374:23 374:25 375:1 375:5 375:6 375:8 375:9 375:10 376:2 376:8 376:9 377:8 378:1 378:1 378:15 379:1 379:6 379:12 379:16 379:19 379:19 379:23 380:7 380:13 381:12 381:14 383:7 383:8 383:12 383:21 383:22 383:24 384:3 386:3 386:12 386:13 386:16 386:21 386:25 387:8 387:8 387:11 387:14 387:16 387:17 387:18 388:6 388:15 388:18 388:21 389:2 389:4 389:10 389:22 390:3 390:7 390:10 391:1 391:6 392:15 392:20 393:2 393:6 393:16 395:24 396:8 396:10 396:12 396:15 396:17 396:17 397:7 398:10 398:13 398:13 398:16 398:24 399:7 399:16 399:25 399:25 401:4 401:5 401:7 401:14 401:19 403:16 404:7 440:7 440:10 442:8 442:9 478:10 478:11

Debts [2] 389:5 439:23

December [12] 287:3 307:16 372:14 372:18 376:23 384:15 386:3 408:11 437:1 438:2 438:3 440:20

Decide [2] 463:15 463:20

Decided [1] 398:15

Decides [1] 453:4

Decision [2] 333:11 417:10

Decline [5] 348:8 348:11 348:12 412:2 425:8

Declined [4] 286:6 348:7 348:10 411:23

Declining [1] 281:6

Decrease [4] 435:5 445:16 445:17 454:22

Decreased [3] 434:12 436:4 450:16

Decreases [2] 413:21 424:23

Decreasing [1] 438:21

Deductible [1] 478:8

Deduction [1] 478:11

Defer [4] 310:16 402:7 427:14 428:18

Deferred [1] 421:21

Deficiency [5] 334:23 334:25 478:1 478:22 479:10

Deficient [3] 358:25 359:3 433:15

Deficit [2] 359:7 365:22

Deficits [1] 300:15

Define [2] 277:2 479:16

Defined [13] 410:22 411:1 413:17 414:2 414:12 414:14 415:20 421:24 421:25 422:18 422:23 459:25 469:23

Defining [1] 279:13

Definition [2] 383:15 467:9

Degree [5] 322:1 370:4 407:25 408:2 408:22

Delayed [1] 306:25

Delivered [3] 291:7 324:11 324:12

Delivery [9] 293:21 294:8 324:10 324:25 325:3 325:5 342:3 349:4 358:17

Demand [39] 274:19 276:25 278:5 278:7 278:11 279:12 280:10 281:6 281:9 290:7 290:16 291:9 291:22 300:4 300:6 300:10 303:17 305:5 309:11 309:21 314:12 314:21 314:24 318:16 318:23 319:11 319:24 320:17 321:7 322:2 323:6 325:21 331:2 331:15 331:17 332:20 342:4 342:7 345:1

Demonstrably [1] 436:5

Demonstrate [7] 377:16 393:15 394:18 394:20 397:24 398:11 440:7

Demonstrates [1] 353:20

Denied [1] 434:8

Dental [3] 419:22 434:24 454:17

Deny [1] 436:3

Department [3] 274:14 453:2 453:3

Departs [1] 288:25

Departure [1] 289:10

Dependable [1] 344:15

Depreciation [3] 465:21 465:22 466:3

Derated [1] 344:18

Derating [1] 344:11

Deregulate [1] 334:2

Deregulation [6] 279:25 281:2 333:24 334:5 334:12 336:5

Derive [1] 443:4

Derived [1] 273:24

Describe [9] 273:1 274:22 275:18 319:16 348:2 351:24 369:15 371:2 410:18

Described [3] 286:1 354:18 432:8

Describing [1] 285:22

Description [1] 270:21

Design [5] 409:15 413:22 415:25 417:23 428:14

Designated [1] 464:5

Designed [4] 285:11 413:7 413:25 426:19

Despite [1] 432:11

Detail [4] 318:25 319:16 322:8 432:8

Detailed [3] 273:21 273:24 274:18

Determinant [1] 277:25

Determination [3] 329:6 398:4 399:14

Determinations [1] 458:21

Determine [8] 319:1 319:2 319:11 321:8 434:20 465:15 479:10 481:22

Determined [6] 277:6 278:4 345:21 398:7 465:2 465:9

Determines [1] 397:25

Determining [2] 277:3 442:19

Develop [4] 328:13 330:3 333:16 416:14

Developed [6] 298:16 298:17 326:19 331:25 333:25 477:17

Developers [1] 332:7

Developing [3] 300:19 330:5 332:11

Development [15] 275:11 280:24 296:5 297:2 298:9 298:14 299:1 300:23 326:5 328:4 334:3 334:9 336:3 337:6 407:21

Developments [2] 274:21 330:20

Dictated [1] 349:1

Die [1] 427:1

Difference [21] 278:9 299:16 305:10 380:10 381:24 382:3 382:16 383:1 383:

5 402:1 413:5 415:16 416: 22 432:19 456:21 463:3 469: 17 472:17 478:7 481:5 481: 13
Differences [4] 297:9 305:9 375:9 472:8
Different [13] 296:2 299:20 300:25 318:19 326:6 368:16 375:11 384:14 415: 10 434:19 481:18 482:5 484: 3
Differential [3] 278: 5 355:9 382:8
Difficult [3] 292:21 318:7 472:12
Difficulties [1] 284: 14
Difficulty [3] 297:18 298:21 401:12
Diller [54] 276:17 313:6 313:10 345:15 347:16 348:6 348:12 350:18 360:16 360: 25 361:7 361:8 361:13 361: 16 361:18 362:13 362:21 400:22 409:4 409:18 411:22 412:25 421:15 431:8 431:16 432:18 434:8 435:19 436:20 438:18 444:18 444:21 446: 20 457:1 459:1 461:18 461: 22 462:4 462:19 463:13 463: 20 463:21 463:23 464:2 464: 10 464:17 468:22 468:23 473:2 481:6 481:8 481:15 484:4 484:12
Diller's [21] 313:16 347:19 350:15 360:22 361: 10 376:7 431:13 434:18 438: 15 444:9 445:4 445:8 445: 11 445:15 445:19 454:7 468: 12 469:11 472:2 478:5 481:5
Direct [43] 269:11 269: 17 269:21 270:5 270:10 270: 17 272:17 285:23 295:5 295: 8 295:10 338:19 346:23 347: 8 350:6 352:3 352:20 353: 17 368:1 368:2 369:4 372: 24 373:11 380:3 385:5 385: 6 385:13 385:15 385:16 407: 4 409:9 430:17 431:1 434: 16 435:4 435:21 436:17 437: 3 471:19 472:12 475:6 476: 7 476:18
Direction [3] 279:2 279: 4 356:2
Directly [6] 286:10 289: 12 391:2 473:4 477:18 484: 10
Director [1] 430:23
Directors [2] 409:13 412:13
Disability [2] 419:18 420:1
Disagree [1] 445:10
Disallowance [1] 433:1
Disclose [1] 363:16
Disconnect [1] 298:4
Discontinued [1] 442: 24
Discount [11] 420:9 427: 20 428:5 428:9 429:25 435: 24 450:17 451:7 451:20 452: 3 452:5
Discounts [7] 429:18 434:25 451:13 451:15 451: 24 452:11 454:18
Discovery [4] 284:1 284: 6 336:20 434:11
Discretionary [1] 425: 7
Discuss [4] 271:17 295: 15 366:12 488:25
Discussed [8] 282:21 290:1 291:3 292:4 313:24 436:14 440:4 477:2
Discusses [3] 348:6 431: 16 438:18
Discussing [2] 474:15 482:6
Discussion [5] 269:4 302:25 308:16 343:9 376:1
Discussions [1] 309:4
Dismiss [2] 269:3 485:24
Distortion [5] 378:5 378:7 378:20 379:13 379:21
Distress [2] 284:15 318: 1
Divide [3] 369:9 407:9 423:17
Dividing [1] 362:4
Division [3] 276:4 347: 6 430:25
Docket [8] 305:23 305:24 368:1 368:2 406:10 406:17 475:7 475:8
Docketed [1] 473:5
Document [2] 435:17 482: 9
Dollar [2] 400:4 451:22
Dollars [38] 274:17 317: 13 371:6 376:22 377:8 378: 14 379:7 379:12 379:20 380: 1 380:1 380:8 381:12 388: 24 388:25 389:3 390:5 390: 10 394:19 395:1 395:4 395: 7 398:8 398:16 398:23 399: 6 399:15 399:25 404:22 422: 20 422:21 441:2 447:24 448: 22 469:17 478:4 478:5 481: 12
Domestic [1] 284:6
Dominated [1] 315:19
Don [5] 409:8 428:18 461: 23 463:13 474:9
Donald [4] 270:9 430:6 430:14 430:21
Done [16] 297:5 325:11 326:12 344:10 359:18 379:9 380:5 435:17 443:15 445:25 446:4 453:6 457:7 463:2 463:15 474:4
Door [3] 320:21 328:19 360:14
Doubled [2] 353:4 353:8
DOUGLAS [1] 268:16
Douglass [5] 269:20 270: 2 367:22 369:1 369:8
Down [14] 355:5 388:10 388:12 393:10 403:25 404:7 405:6 440:7 440:9 450:2 455:2 455:4 456:21 486:22
Downloaded [1] 302:9
Downturn [1] 291:25
Downward [1] 365:1
Dr [26] 367:2 367:11 367: 17 371:4 376:1 385:2 385: 16 387:3 392:21 392:23 396: 3 396:5 402:7 402:9 402:17 402:20 402:21 402:25 403:4 403:9 403:18 404:12 404:17 404:23 405:9 405:10
Dramatic [2] 447:24 448: 2
Drastically [3] 304:3 304:10 352:5
Draw [2] 378:24 440:7
DRB [1] 464:6
DRB-1 [1] 436:6
DRB-2 [6] 438:6 457:17 462:25 463:5 463:22 463:23
Drew [1] 284:8
Drilling [1] 310:15
Drive [3] 272:22 443:14 447:16
Driven [1] 398:5
Drop [1] 352:17
Drought [1] 311:13
Drove [1] 472:4
Dry [1] 311:15
Dryer [1] 311:21
Due [12] 280:13 280:14 283:18 291:24 311:12 312: 11 314:16 375:1 410:8 418: 25 432:15 439:8
Duly [6] 272:15 346:21 369:2 407:2 430:15 476:5
Duplication [1] 331:23
Duration [1] 440:13
Durick [1] 268:12
During [47] 280:5 280:19 281:9 281:22 282:4 282:9 282:17 282:19 282:25 283:1 284:23 285:17 286:7 287:2 287:7 287:13 287:23 289:2 289:5 289:14 290:21 290:22 291:2 291:14 292:25 295:24 304:20 307:15 308:19 311:2 313:11 321:17 324:16 339:6 342:6 342:7 348:10 348:25 349:21 359:6 360:18 376:4 400:6 400:6 415:6 427:1 432:22
Duties [6] 275:1 369:15 374:7 375:12 407:14 409:10
Dynamics [4] 282:23 308: 21 319:19 319:19

E

Early [7] 280:23 285:7 285:18 297:14 312:6 389:6 410:21
Earn [1] 288:21
Earned [5] 275:20 286:9 287:22 291:14 339:6
Earthquake [2] 316:14 316:19
East [5] 268:8 268:13 268:23 369:9 407:9
Easterly [1] 279:1
Eastern [2] 278:22 284:2
Easy [1] 462:22
ECAR [4] 282:14 304:6 334:1 336:1
Echo [1] 489:14
Economic [5] 275:11 279: 11 291:25 374:11 453:4
Economical [5] 387:18 387:19 390:8 391:8 453:12
Economically [3] 375: 15 396:20 454:3
Economics [1] 275:17
Educational [3] 275:18 370:2 407:23
Effect [9] 276:20 355:6 404:2 409:18 411:10 438:1 438:5 477:6 478:15
Effective [4] 388:8 437: 4 443:12 453:13
Effects [2] 318:16 477:3
Efficiencies [1] 412: 19
Efficiency [3] 277:18 316:8 344:2
Efficient [1] 323:6
Effort [2] 432:2 432:24
Efforts [4] 274:15 280: 2 418:8 432:11
EI-411 [1] 300:5
Eight [1] 308:17
Eighties [3] 389:7 410: 21 410:25
Either [12] 296:25 298: 15 321:14 326:17 326:23 328:2 332:9 332:25 364:6 455:3 458:10 477:17
Elaborate [1] 302:17
Elaborated [1] 339:9
Elected [1] 408:13
Electric [23] 267:6 271: 10 296:1 308:21 314:8 315: 11 347:4 347:22 348:24 359: 22 360:2 412:23 415:4 420: 18 421:13 421:15 421:19 450:24 456:4 456:5 457:19 477:4 477:7
Electricity [49] 273: 18 273:20 273:23 274:1 275: 2 275:3 276:22 278:10 280: 6 282:23 283:3 283:16 283: 25 285:6 285:15 286:3 286: 6 287:16 287:17 287:20 289: 18 289:20 290:5 290:17 290: 24 291:16 291:24 292:5 293: 8 294:6 302:18 302:22 305: 2 309:25 311:2 312:21 318: 23 318:24 324:5 324:11 324: 12 324:21 325:10 325:15 329:7 348:21 354:14 355:7 364:1
Electronic [2] 488:12 488:13
Element [1] 304:24
Eligibility [2] 409:15 411:3
Eliminate [1] 461:22
Eliminated [1] 424:2
Eliminates [1] 431:23
Embark [1] 338:16
Embedded [5] 372:12 372: 17 373:25 382:7 401:20
Emissions [1] 317:18
Emphasized [1] 309:5
Employed [5] 274:25 275: 8 369:11 476:14 476:16
Employee [23] 407:21 407:22 408:18 410:3 411:9 411:10 413:2 413:5 413:18 415:1 422:8 428:16 434:23 434:25 445:22 451:13 453:2 453:9 463:11 468:11 469:17 479:17 479:18
Employees [74] 410:11 410:15 410:20 411:15 412: 11 412:13 412:20 413:12 414:24 415:24 416:5 416:15 418:8 418:16 418:17 419:3 419:7 419:16 419:18 419:24 420:6 420:7 420:13 421:2 421:4 421:5 421:5 421:17 422:1 422:6 422:11 422:12 423:6 423:7 423:15 423:24 424:10 424:24 424:25 425:2 425:3 425:20 427:18 427:19 427:22 427:24 428:3 428:5 429:20 429:21 432:5 442:21 443:7 448:13 448:19 448:20 448:24 449:5 450:13 450:14 450:23 451:7 451:9 451:10 451:10 451:16 451:17 451: 18 454:1 472:22 474:19 479:

15 479:20 479:24
Employment [3] 407:18 410:9 419:2
Employs [1] 449:11
Enabled [1] 414:25
Encourage [1] 431:18
End [11] 292:13 311:8 317:25 319:25 377:24 395:8 400:4 401:19 405:6 440:12 458:5
Ending [4] 339:12 353:1 372:13 372:18
Ends [1] 320:16
Energy [35] 272:24 273:4 273:5 273:6 273:13 274:25 278:20 278:25 280:2 281:15 285:1 286:16 291:7 292:20 314:8 315:11 316:15 316:25 318:6 318:16 319:9 320:6 320:7 320:8 320:14 320:25 321:13 324:25 325:5 351:10 353:11 353:13 353:23 354:9 365:25
Engaged [1] 275:23
Engagement [1] 274:13
Engineering [2] 273:7 446:24
England [2] 336:1 336:17
English [1] 383:4
Enjoy [2] 291:12 339:5
Enjoyed [3] 286:8 286:12 289:14
Enron [1] 399:21
Ensure [1] 432:3
Enter [5] 324:22 359:11 359:24 360:5 366:8
Entered [5] 286:2 290:13 297:1 358:8 365:20
Entering [4] 285:10 348:17 359:15 449:24
Entire [2] 414:15 442:18
Entities [5] 281:3 293:12 301:2 319:15 320:21
Entitled [5] 327:9 328:9 330:13 386:2 468:13
Entry [1] 283:10
Environment [4] 279:11 308:15 352:4 414:21
Equal [1] 411:7
Equation [1] 428:8
Equilibrium [1] 289:7
Equitable [2] 410:15 414:23
Equity [4] 478:19 478:20 478:23 479:13
Equivalent [1] 452:9
Erred [1] 387:12
Espeland [15] 270:4 406:3 406:11 406:15 406:19 407:1 407:8 417:14 417:16 425:12 429:9 429:12 430:4 430:4 436:15
Essentially [2] 301:17 348:22
Establish [2] 280:3 424:14
Establishing [4] 283:8 308:25 313:12 360:19
Estimate [7] 353:2 362:3 362:22 362:24 363:5 363:6 390:4
Estimated [2] 290:18 356:12
Estimates [4] 350:19 350:24 362:5 363:9
Estimating [1] 288:15
Et [2] 487:15 488:11
Evaluation [4] 274:6 274:21 275:6 275:12
Event [1] 284:25
Evidence [7] 294:24 295:1 378:2 485:18 485:22 486:1 486:8
Evidenced [1] 387:1
Evident [1] 350:8
Evidentiary [1] 271:17
Evolution [1] 279:24
Evolve [1] 333:17
Evolved [2] 279:21 297:20
Exacerbated [2] 281:25 437:21
Exact [1] 377:1
Exactly [7] 319:1 325:4 327:12 344:8 392:17 397:5 463:6
Examination [63] 269:11 269:12 269:13 269:13 269:14 269:14 269:15 269:17 269:18 269:19 269:21 269:22 269:22 269:23 269:23 269:24 269:25 270:3 270:5 270:6 270:7 270:7 270:10 270:11 270:11 270:12 270:13 270:14 270:15 270:17 270:18 272:17 318:12 323:17 337:14 340:1 341:14 345:12 346:23 364:18 365:17 369:4 382:12 384:9 391:14 392:7 394:4 394:15 400:16 407:4 425:13 426:13 429:1 430:17 446:16 449:19 452:23 468:6 471:16 474:7 476:7 480:8 489:21
Examined [6] 272:15 346:21 369:2 407:2 430:15 476:5
Example [22] 285:21 298:3 299:6 324:12 324:20 327:24 334:4 344:18 349:23 352:10 383:21 389:16 389:17 404:3 412:22 417:1 437:24 453:8 453:20 459:6 470:12 472:9
Examples [1] 416:9
Exceeded [1] 284:16
Except [1] 363:10
Exception [2] 439:1 441:1
Excess [11] 300:1 312:2 330:25 331:2 331:3 332:5 333:22 343:11 400:8 478:4 479:10
Excesses [3] 336:19 336:19 336:21
Exchange [9] 293:9 293:10 293:16 305:8 305:12 325:2 328:23 356:10 398:21
Excuse [6] 273:9 316:21 361:17 386:18 427:25 466:17
Executed [4] 348:20 348:23 349:11 349:18
Executive [2] 407:20 427:1
Executives [4] 411:12 415:18 416:2 419:25
Exempt [3] 390:21 390:22 452:8
Exercise [5] 280:13 292:21 317:24 318:7 440:6
Exercised [1] 440:11
Exhibit [154] 271:4 273:21 283:5 287:16 288:5 288:8 288:10 288:24 288:24 289:12 289:15 290:18 293:1 293:15 293:19 294:13 294:16 294:18 294:21 294:23 294:24 294:24 294:25 295:2 295:3 295:17 295:22 296:2 296:9 296:19 297:5 297:11 297:12 299:9 299:18 300:3 300:8 301:6 301:7 301:25 302:3 302:6 305:7 305:10 305:23 306:25 307:19 308:10 314:20 323:20 323:24 324:2 325:25 326:1 326:4 326:10 326:11 326:12 327:24 330:12 336:24 343:8 345:14 349:8 349:8 351:6 351:17 352:19 352:23 352:24 353:16 353:20 353:23 355:17 355:19 355:22 355:25 356:1 356:4 356:5 356:8 356:11 356:14 356:17 356:25 357:9 357:14 357:18 357:21 363:11 364:20 366:22 366:24 367:1 367:14 368:3 368:3 371:9 371:12 371:24 371:25 372:11 372:16 372:20 382:4 382:6 382:23 384:11 384:24 384:25 385:4 385:5 385:9 385:13 387:3 396:7 399:9 399:11 399:12 400:20 400:20 400:23 401:1 402:6 406:10 406:18 413:11 419:11 425:16 436:6 438:6 438:9 457:17 457:21 461:12 461:14 464:7 464:19 466:15 466:23 468:13 474:13 474:22 475:7 475:8 475:9 476:19 477:5 477:5 477:6 477:14 478:3 483:20 484:8
Exhibited [1] 280:7
Exhibits [19] 270:20 295:12 295:12 295:15 295:16 302:11 302:14 356:6 385:18 400:2 464:15 483:8 483:12 485:11 485:13 485:19 486:24 487:12 488:9
Exist [2] 306:7 352:6
Existed [4] 348:23 349:9 349:18 349:25
Existence [4] 354:21 365:21 416:23 440:19
Existing [9] 273:13 332:2 373:16 373:20 373:22 373:25 374:25 388:22 390:6
Expand [1] 280:17
Expanded [1] 437:15
Expanding [3] 283:13 283:20 439:9
Expands [1] 291:21
Expansion [1] 290:15
Expect [13] 289:19 311:1 314:5 314:25 315:1 315:19 332:5 333:22 336:18 342:14 352:9 355:15 447:20
Expectation [7] 291:4 291:10 314:14 315:2 339:2 344:23 345:22
Expectations [9] 284:8 284:17 291:5 292:24 310:4 310:21 314:21 341:25 343:9
Expected [12] 288:21 290:16 292:14 312:11 315:13 323:10 335:17 345:24 353:15 353:16 355:6 436:2
Expense [50] 424:8 433:4 434:7 434:9 434:12 434:21 435:6 435:13 436:5 436:7 436:7 436:21 436:22 437:3 437:6 437:6 437:7 438:8 438:9 438:12 438:16 438:25 439:18 443:1 444:5 445:21 447:1 447:4 447:6 447:15 454:13 456:11 456:12 456:15 457:8 457:9 457:19 459:2 461:8 462:22 463:4 463:24 464:16 470:10 472:10 478:8 482:4 484:14 484:15 484:17
Expenses [27] 403:25 431:11 435:9 436:3 436:4 436:19 436:24 438:19 439:4 439:8 439:16 443:23 443:24 444:4 444:24 458:7 458:25 460:1 461:7 461:8 461:25 462:14 464:25 468:14 473:4 482:13 484:19
Expensive [2] 315:23 315:25
Experience [7] 273:21 274:23 277:1 280:17 416:12 416:16 478:21
Experienced [6] 276:18 289:3 303:14 313:8 416:13 437:9
Experiences [2] 416:7 416:8
Expert [1] 337:23
Expertise [1] 416:21
Expiration [3] 438:7 458:2 458:11
Expire [2] 437:1 458:5
Explain [24] 293:3 323:19 324:2 331:16 352:24 356:4 387:21 401:15 409:7 409:21 413:5 431:12 434:6 436:18 438:14 440:2 447:8 447:23 463:14 472:17 474:18 474:20 477:12 480:24
Explained [7] 277:1 352:3 375:10 432:23 435:21 440:5 458:25
Explanation [2] 418:4 463:14
Export [2] 278:24 340:16
Exposure [1] 281:5
Expresses [1] 413:1
Extended [3] 281:13 281:21 282:2
Extensive [2] 296:25 432:1
Extent [2] 280:4 284:7
External [1] 337:1
Externally [1] 435:11
Extra [1] 394:14
Extrapolated [1] 470:13
Extreme [2] 285:12 285:14

F

Face [3] 281:6 291:22 292:1
Faced [4] 281:13 284:15 285:5 318:1
Fact [18] 269:5 286:21 287:4 309:5 309:10 309:24 312:24 344:11 353:21 354:10 362:22 363:9 376:14 378:19 394:23 412:22 442:15 456:10
Factor [8] 282:22 283:18 308:21 341:19 417:9 417:23 453:18 463:3
Factored [1] 453:24
Factors [14] 277:3 279:5 279:18 284:16 290:23 308:14 315:2 345:15 345:18 345:23 355:11 374:17 374:20 376:3
Facts [2] 486:12 488:11

Fahn [31] 268:21 269:12 269:22 270:6 318:10 318:11 318:13 323:13 323:14 345:8 345:9 364:13 364:14 382:11 382:13 384:5 384:6 400:12 400:13 425:12 425:14 425:25 426:2 446:12 446:13 467:25 468:1 480:4 480:5 488:12 488:14
Failed [1] 454:5
Fair [5] 280:3 301:4 330:7 366:6 390:4
Fair-market [1] 390:4
Fairly [4] 424:12 424:13 458:18 459:1
Fall [3] 342:24 359:7 479:23
Fallen [1] 353:19
Fame [1] 399:22
Familiar [2] 376:25 439:21
Far [6] 284:16 299:10 316:12 322:6 334:23 392:10
Farm [4] 343:20 343:23 343:23 344:5
Feasibility [1] 274:7
Feasible [1] 374:11
February [18] 267:18 271:3 271:6 287:19 288:8 288:12 293:17 293:20 352:18 352:18 353:2 353:7 353:11 353:22 356:24 363:11 370:11 490:3
Federal [5] 280:2 410:8 410:19 415:22 480:12
Fees [6] 439:12 439:13 459:20 459:21 460:7 460:7
Fell [2] 348:24 432:13
Felony [1] 272:9
FERC [3] 434:22 454:15 457:13
Few [9] 306:8 318:18 331:4 355:14 410:2 417:5 454:10 460:22 489:13
Fewer [1] 412:20
Figure [2] 299:19 388:4
Figured [1] 428:6
Figures [7] 305:12 356:16 357:1 402:24 445:11 451:22 482:19
File [2] 379:16 450:20
Filed [20] 347:9 384:24 431:1 432:9 461:12 461:13 464:15 464:19 466:15 466:23 474:12 474:22 476:18 485:13 485:19 486:24 487:12 487:12 488:9 489:21
Filings [2] 428:10 428:12
Filled [1] 462:1
Filter [1] 321:5
Final [7] 318:3 342:10 345:11 345:23 449:21 474:5 474:5
Finally [4] 302:16 305:6 354:18 384:3
Finance [9] 275:16 275:21 275:24 370:5 374:25 378:8 381:3 381:4 395:16
Financial [14] 275:5 275:9 284:14 317:25 369:20 369:22 370:8 378:2 393:15 394:21 397:25 440:8 440:9 449:25
Financier [1] 284:21
Financing [6] 274:10 274:17 326:20 369:21 383:16 395:15
Findings [5] 269:4 486:12 487:9 487:15 488:10
Fine [6] 272:10 402:11 402:16 449:3 482:21 487:18
Fingertips [1] 306:21
Finish [3] 335:8 335:11 386:19
Fired [25] 277:14 283:12 283:19 288:3 288:17 288:18 303:4 303:12 303:25 304:4 304:13 304:19 305:4 309:16 309:17 309:20 310:1 310:2 314:23 315:4 315:18 328:25 355:8 355:9 355:9
Firm [2] 273:4 447:18
Firm's [1] 455:6
Firms [1] 370:9
First [46] 272:15 273:21 280:20 283:1 283:22 284:23 287:9 287:21 288:4 289:4 289:5 291:2 299:22 307:25 308:20 311:18 322:15 326:13 331:19 337:16 346:21 350:23 353:3 353:7 354:2 369:2 371:7 371:17 387:1 388:1 392:9 403:13 404:3 404:9 407:2 414:16 415:19 422:22 430:15 434:10 457:21 471:3 476:5 477:13 484:6 484:18
Five [15] 297:19 303:5 303:9 317:13 333:5 371:7 390:18 390:19 438:20 453:14 460:18 460:19 464:3 488:6 488:11
Fixed [7] 309:23 315:12 315:21 465:8 465:17 465:20 466:9
Flat [1] 292:8
Floor [1] 290:21
Flow [3] 278:20 279:1 320:25
Flows [1] 312:12
Fluctuates [1] 374:24
Focus [3] 296:3 319:6 319:8
Focuses [1] 273:19
Follow [1] 404:12
Following [3] 271:1 287:4 298:1
Follows [6] 272:16 346:22 369:3 407:3 430:16 476:6
Followup [4] 394:1 429:17 450:10 471:15
Foolish [2] 359:24 360:5
Forced [1] 282:1
Forecast [5] 279:17 300:4 314:22 336:4 336:8
Forecasted [1] 332:24
Forecasting [8] 275:3 292:17 292:20 293:7 318:6 432:2 432:7 432:12
Forecasts [6] 273:23 274:1 274:3 274:8 274:18 310:5
Foregoing [2] 491:6 491:10
Foreseeable [2] 292:15 355:2
Forget [1] 397:4
Forgetting [1] 420:2
Forgot [1] 393:10
Forks [1] 408:7
Form [2] 340:18 345:20
Formal [1] 373:5
Former [2] 422:4 450:13
Forth [4] 323:7 392:21 461:23 486:5
Forward [16] 285:8 292:10 293:7 293:8 293:15 310:7 314:5 314:19 315:2 325:2 325:7 341:23 356:9 356:11 361:3 384:3
Four [21] 273:25 291:1 297:19 297:24 303:5 303:9 313:5 313:6 367:9 377:3 377:5 393:3 398:8 404:22 417:3 419:11 419:13 433:16 442:16 453:14 473:11
Four-day [2] 377:3 393:3
Four-page [1] 367:9
Four-state [1] 442:16
Fourth [5] 268:17 289:3 347:3 430:22 476:12
Fox [1] 338:1
Frame [11] 295:21 297:14 297:15 329:20 332:25 335:18 336:7 336:14 342:23 439:10 485:14
Frames [2] 485:16 486:11
Francisco [1] 408:20
Frankly [1] 457:3
Frequency [2] 283:15 308:6
Frequent [1] 284:21
Friday [1] 358:22
Front [2] 273:10 444:8
Fuel [23] 277:18 278:4 279:11 283:6 288:14 315:23 316:6 342:4 350:21 351:3 351:5 351:6 351:8 351:12 351:15 351:18 351:19 351:20 351:22 362:8 362:17 484:9 484:17
Fueled [2] 283:10 303:8
Full [15] 311:17 311:22 353:4 353:8 358:11 377:8 378:14 398:15 398:20 407:20 417:8 418:12 423:9 423:19 451:12
Fully [6] 417:11 417:20 422:18 451:3 451:6 474:20
Function [2] 317:23 407:17
Functions [2] 369:18 370:15
Fund [2] 422:2 426:21
Fundamental [9] 276:25 278:5 279:20 280:21 282:18 286:16 291:9 310:5 314:12
Fundamentals [7] 274:19 289:19 289:23 310:24 310:25 317:21 321:7
Funded [3] 422:13 422:18 426:21
Funding [4] 415:22 421:22 455:8 456:14
Funds [3] 427:4 427:7 435:11
Furnished [1] 296:12
Future [23] 280:25 292:15 304:9 319:3 319:11 324:13 337:18 340:10 341:18 342:15 342:17 349:24 352:9 354:16 355:2 356:7 361:5 366:13 412:16 423:21 431:19 435:24 481:22
Futures [39] 286:5 291:6 291:8 292:22 293:6 293:20 305:11 305:14 324:3 324:5 324:17 324:22 325:11 325:14 341:23 345:19 345:20 345:24 348:22 349:8 349:12 353:10 354:1 354:2 354:12 354:21 356:6 356:12 356:21 356:23 359:11 359:16 359:17 359:20 359:24 360:5 364:22 364:25 366:10

G

Gap [2] 277:11 277:20
Garrison [1] 313:1
Gas [110] 276:22 277:17 278:10 282:24 283:2 283:6 283:11 283:12 283:17 283:19 283:21 285:2 285:6 285:15 285:17 286:6 286:25 287:12 287:25 288:6 288:17 289:1 289:2 289:6 289:11 289:18 290:2 290:4 291:16 292:4 292:8 302:18 302:22 303:1 303:4 303:7 303:8 303:12 303:22 303:25 304:4 304:13 304:19 304:23 305:3 305:4 308:17 308:19 308:23 309:8 309:12 309:16 309:17 309:20 309:21 309:22 310:1 310:2 310:4 310:6 310:9 311:4 313:23 314:8 314:14 314:23 315:1 315:4 315:10 315:13 315:14 315:17 315:18 315:19 315:23 315:25 316:1 317:11 317:12 317:16 318:16 319:20 329:1 333:14 337:22 338:3 340:4 341:21 342:13 342:13 342:14 342:20 342:21 344:17 344:23 347:22 348:3 348:7 348:9 348:12 348:20 348:25 350:7 355:5 355:8 355:9 360:8 421:13 421:19 450:23
Gas-based [4] 288:6 289:1 289:11 289:15
Gas-burning [1] 292:8
Gas-fired [19] 283:12 283:19 288:17 303:4 303:12 303:25 304:4 304:13 304:19 305:4 309:17 309:20 310:1 310:2 314:23 315:4 315:18 355:8 355:9
Gas-type [1] 344:13
Gases [1] 304:21
Gaske [26] 282:22 290:2 367:2 367:12 367:17 371:4 376:1 379:18 385:16 387:3 392:21 392:23 402:7 402:9 402:17 402:20 402:21 402:25 403:4 403:9 403:18 404:12 404:17 404:23 405:9 405:10
Gaske's [3] 385:2 396:3 396:5
Gather [1] 375:13
Gathered [1] 327:18
Gathering [1] 275:4
GCW [1] 343:20
General [19] 302:23 318:17 407:19 411:7 411:18 415:24 426:17 443:24 444:3 444:21 444:23 446:21 447:9 448:8 448:11 449:7 461:24 468:13 470:10
Generally [4] 310:14 411:12 427:4 439:24
Generate [1] 388:13
Generated [1] 312:11
Generating [7] 275:3 277:14 280:24 282:15 283:20 296:5 328:15
Generation [29] 279:12 281:1 288:17 295:13 295:13 297:21 298:9 299:25 300:1

300:8 300:9 303:4 303:11 309:6 309:7 309:12 309:13 309:15 309:17 309:20 309:25 314:22 315:4 315:18 320:12 321:21 341:20 342:14 355:10
Generator [1] 341:3
Generators [10] 278:17 281:15 283:7 283:13 288:3 288:18 299:1 308:23 317:17 355:8
Geographic [1] 322:20
Germany [1] 368:11
Given [14] 278:2 288:14 291:10 293:4 301:1 304:16 319:25 338:21 339:1 339:2 339:11 417:3 434:21 471:1
Givers [1] 337:19
Gloom [1] 366:13
Glut [1] 334:3
Going-forward [1] 285:8
Governing [1] 281:17
Government [2] 413:23 415:22
Governor's [1] 338:6
Graduate [1] 275:23
Graduating [2] 370:6 408:4
Grand [2] 408:7 456:12
Grant [1] 462:7
Granting [1] 431:19
Graph [2] 413:14 419:10
Graphically [1] 299:19
Great [4] 291:8 331:8 384:22 489:16
Greater [12] 286:25 291:23 292:1 299:5 299:14 303:24 305:4 319:16 320:5 320:17 322:1 360:9
Greatest [1] 321:9
Grounds [1] 485:24
Group [27] 273:19 273:22 276:5 347:7 369:12 370:18 371:15 372:4 372:5 372:8 372:9 373:4 373:15 373:17 373:22 382:18 383:2 391:17 403:13 403:14 407:13 408:10 409:14 430:25 448:18 458:3 458:4
Grown [1] 315:17
Growth [4] 279:12 281:9 281:10 300:10
Guarantee [1] 415:13
Guaranteed [1] 415:21
Guess [34] 299:9 300:21 302:22 313:18 314:1 321:23 322:5 322:9 332:22 336:22 337:3 380:9 383:13 393:7 399:11 404:25 442:25 444:7 446:9 449:1 449:2 449:3 449:5 449:25 450:3 451:23 456:22 458:25 464:12 465:14 466:10 472:16 479:25 487:5
Guide [1] 354:8

H

Hagen [1] 473:8
Half [15] 283:22 284:23 286:7 287:21 289:4 289:5 289:17 291:2 333:15 378:10 379:20 388:23 389:2 389:18 404:1
Half-million [1] 379:20
Hand [1] 392:15
Handed [3] 294:23 355:20 355:25
Handing [1] 387:2
Happy [1] 366:8
Hard [1] 437:19
Hardly [2] 276:21 315:21
Hazard [1] 449:2
Head [2] 466:11 486:18
Headed [1] 300:15
Heading [2] 371:9 371:11
Healthcare [3] 419:18 419:21 420:4
Hear [3] 340:6 355:18 406:19
Heard [8] 318:14 318:17 322:6 346:14 368:18 430:8 463:13 475:23
Hearing [12] 267:11 267:23 271:7 271:18 273:11 313:9 360:16 376:18 392:9 457:5 489:8 489:25
Heat [3] 288:16 315:25 316:3
Heavily [1] 274:13
Hedge [2] 285:12 290:13
Hedging [5] 284:12 285:13 285:19 285:21 369:25
Held [4] 328:17 370:7 383:16 408:12
Help [7] 327:2 386:11 393:9 402:18 417:2 468:9 480:15
Helpful [6] 306:23 307:17 404:11 426:15 462:9 486:16
Helps [1] 470:16
Henwood [1] 274:25
HEREBY [2] 491:5 491:9
Herein [1] 271:2
Hereinbefore [1] 491:7
HESI [1] 275:1
High [14] 283:2 285:19 288:2 289:2 289:13 289:21 304:12 306:15 312:3 315:6 348:21 361:4 380:2 395:24
Higher [35] 278:21 286:8 286:25 287:4 297:11 305:3 305:5 316:6 320:17 321:18 352:6 355:1 355:4 376:9 379:12 379:20 379:22 403:16 403:17 411:19 413:4 414:3 417:4 424:24 432:15 435:10 436:6 437:8 437:20 438:4 438:10 455:20 478:12 478:14 482:13
Highly [1] 473:12
Hindsight [1] 432:20
Hire [2] 416:11 472:21
Hired [2] 416:13 416:18
Historic [1] 347:24
Historical [9] 285:19 289:8 290:18 314:9 314:11 315:6 320:1 351:25 352:7
Historically [3] 286:22 303:21 325:14
History [5] 287:10 298:1 308:1 310:12 442:15
Hit [4] 317:15 321:15 332:10 344:19
Hitting [1] 300:18
HOBERG [188] 267:23 271:6 271:21 271:23 271:25 272:4 272:12 273:9 294:19 294:21 295:7 296:8 296:13 296:15 296:19 302:14 305:21 306:24 307:2 307:5 307:8 307:18 308:9 308:12 316:17 318:9 323:14 323:22 323:25 325:25 328:19 335:7 335:10 337:10 339:22 341:10 343:3 345:7 345:10 346:3 346:8 346:13 346:18 357:19 357:21 357:23 358:1 360:13 363:22 364:12 364:15 365:5 365:9 365:13 366:18 366:21 366:24 367:6 367:14 367:16 367:20 367:24 368:7 368:17 368:22 375:20 382:10 384:6 384:23 385:6 385:10 385:14 385:16 386:5 386:7 387:5 391:10 392:3 394:2 394:12 396:7 396:22 400:11 400:15 401:1 401:21 401:24 402:8 402:12 402:17 402:22 405:10 405:13 405:16 405:20 405:25 406:4 406:7 406:13 406:16 406:23 417:15 425:11 426:2 426:6 426:10 427:25 428:22 429:8 429:11 429:14 430:3 430:7 430:12 442:2 444:16 444:20 444:22 446:1 446:11 446:14 449:17 452:18 457:25 460:11 460:14 460:18 460:21 461:13 461:16 461:21 463:21 463:25 464:5 464:9 464:11 464:14 464:18 464:22 466:14 466:24 467:21 467:24 468:2 468:5 468:15 468:21 471:12 473:17 473:24 474:22 474:25 475:2 475:5 475:18 475:22 476:2 477:9 479:3 480:3 480:6 482:24 483:4 483:11 483:14 484:24 485:4 485:7 485:10 485:15 486:2 486:7 486:10 486:23 487:2 487:4 487:8 487:11 488:3 488:6 488:9 488:13 488:15 488:17 488:22 488:24 489:9 489:23
Holders [4] 373:20 388:15 388:22 390:6
Holds [1] 383:8
Holidays [1] 419:25
Home [2] 339:15 381:15
Honor [1] 296:7
Hope [5] 332:1 332:12 416:6 468:10 487:19
Hopefully [3] 449:21 450:1 454:10
Hoping [1] 331:10
Hour [24] 282:11 286:23 286:24 287:2 287:5 287:9 287:11 304:16 304:17 304:19 306:6 306:11 307:15 307:24 308:2 317:7 317:19 319:25 349:13 349:15 350:1 350:2 354:15 358:12
Hourly [2] 364:6 466:6
Hours [11] 306:8 320:13 324:16 352:11 352:13 352:15 352:25 353:18 358:20 364:10 467:15
Hours' [1] 467:18
Hub [5] 291:7 293:21 294:3 354:5 354:5
Huge [3] 297:24 340:25 381:7
Human [7] 407:12 407:17 408:12 408:14 408:15 408:17 416:19
Hydro [7] 290:11 311:11 311:24 312:16 313:3 340:5 341:21
Hydroelectric [1] 312:20
Hydroelectricity [1] 312:10

I

Idea [4] 302:24 309:24 315:3 451:21
Identical [1] 375:6
Identification [1] 271:5
Identified [13] 297:5 299:4 299:21 301:12 301:23 326:19 327:1 327:13 327:15 328:3 328:7 328:10 367:18
Identify [2] 293:2 329:19
II [1] 267:12
Illinois [5] 303:19 303:23 304:6 320:18 334:20
Illona [1] 486:17
Illustrate [2] 300:12 349:7
Illustrated [4] 283:4 285:22 289:11 299:16
Illustrates [1] 287:17
Imagine [3] 320:22 374:21 486:23
Immediately [5] 306:21 372:14 372:19 388:17 390:7
Imminent [1] 334:12
Impact [9] 276:10 284:5 286:16 319:3 340:16 340:23 340:25 341:5 393:19
Impacted [2] 278:23 287:21
Impacts [2] 317:20 340:10
Implement [3] 412:16 412:18 415:2
Implemented [3] 279:25 409:23 410:22
Imply [1] 473:7
Import [1] 336:25
Importance [1] 489:17
Important [6] 278:8 279:5 279:13 279:15 283:25 318:22
Importantly [1] 415:3
Imprisonment [1] 272:10
Improve [4] 290:16 291:22 359:23 360:3
Improved [2] 285:11 289:25
Improvement [1] 439:9
Improvements [1] 316:7
Inactive [1] 421:21
Inc [6] 347:7 369:12 370:18 371:15 391:18 407:13
Incentive [2] 277:22 416:2
Include [19] 298:23 299:25 300:1 326:15 380:14 382:21 383:9 383:12 398:15 399:15 404:5 407:18 419:24 422:1 433:9 434:2 442:17 458:21 473:3
Included [25] 275:2 275:10 295:5 344:5 378:14 394:6 394:9 410:16 414:17 418:2 425:23 428:9 428:11 431:24 433:5 434:17 439:17 454:15 459:12 460:9 468:12 470:5 470:13 484:17 484:21
Includes [9] 273:14 314:22 369:18 405:7 413:17 419:21 423:20 434:23 473:4

Including [9] 274:2 274:5 299:5 299:7 370:15 413:13 427:22 429:21 441:2
Inclusive [1] 472:20
Income [47] 409:6 411:11 411:19 411:20 413:4 413:4 413:15 413:15 413:20 414:1 414:3 414:4 414:5 414:15 414:21 416:1 420:17 424:18 424:19 424:20 424:22 424:22 424:25 425:3 425:7 425:7 425:8 428:6 436:14 442:20 450:16 477:15 477:21 477:25 478:7 478:9 478:12 478:13 478:14 479:24 480:10 480:11 480:12 481:22 482:11 482:14 482:15
Incorporated [2] 272:25 276:5
Incorrect [2] 361:14 399:7
Increase [51] 277:22 282:24 303:9 304:10 308:18 314:9 315:11 315:13 316:8 373:7 373:9 373:24 388:18 389:2 405:5 412:19 412:23 434:9 435:22 436:2 437:9 438:3 438:20 438:23 439:2 439:4 439:8 439:10 439:18 443:22 443:25 445:3 445:6 447:19 447:21 447:24 448:2 448:22 455:17 455:22 456:11 456:18 458:18 459:2 460:4 469:8 469:15 471:20 471:25 474:13 474:19
Increased [17] 283:3 285:2 287:7 290:12 292:5 309:11 313:23 313:24 315:12 344:19 411:6 435:9 436:25 439:6 446:22 447:10 458:7
Increases [8] 435:25 437:2 438:4 445:14 448:3 455:13 462:7 472:6
Increasing [8] 283:15 283:17 303:2 303:8 304:9 314:7 411:17 437:22
Increasingly [2] 283:7 308:24
Incremental [4] 277:21 351:12 351:15 451:6
Incur [1] 373:18
Incurred [8] 371:2 383:24 428:17 431:22 432:16 433:2 438:9 438:13
Incurring [3] 437:8 458:9 458:23
Indeed [1] 279:15
Independent [2] 273:16 330:4
Index [2] 294:8 415:5
Indiana [3] 294:5 303:19 303:23
Indicate [5] 282:19 315:15 411:25 425:15 475:15
Indicated [8] 305:16 314:18 342:2 440:20 454:13 455:13 456:24 491:8
Indicates [6] 300:9 431:17 432:20 438:22 455:17 456:8
Indicating [2] 295:22 334:16
Indirectly [1] 296:18
Individual [3] 322:19 414:11 416:18
Individuals [2] 419:23 423:10
Industrial [1] 320:17
Industries [1] 409:24
Industry [7] 273:4 273:6 273:8 294:11 409:24 410:1 412:21
Inefficiencies [1] 280:14
Infantry [1] 408:6
Inflated [2] 447:1 447:6
Inflation [2] 411:8 411:18
Influence [1] 336:20
Influenced [4] 303:16 303:22 312:16 312:17
Influences [3] 279:9 304:1 336:16
Information [29] 294:15 300:12 302:2 318:15 328:23 328:24 351:21 351:25 352:22 355:14 357:10 357:15 363:2 395:14 433:3 434:21 435:16 435:18 435:19 444:8 456:23 461:11 462:20 463:17 466:12 466:19 469:10 478:2 489:20
Infrastructure [1] 439:8
Initial [3] 353:20 480:22 481:5
Injuries [2] 457:12 457:15
Inputs [1] 279:16
Insert [1] 457:24
Inside [1] 301:7
Insolvent [1] 415:17
Instance [3] 301:14 312:24 388:11
Instead [3] 349:14 383:18 441:3
Institutional [2] 280:14 290:8
Institutions [1] 393:10
Insurance [31] 419:23 426:22 431:10 434:24 436:19 436:21 436:24 436:25 437:3 437:9 437:16 437:25 438:6 438:11 438:11 445:21 457:8 457:9 457:10 457:13 457:14 457:22 458:2 458:13 458:19 461:7 462:21 463:4 463:23 463:25 464:16
Integrated [3] 275:13 329:17 432:9
Integrity [1] 394:21
Intelligence [1] 275:5
Intensive [1] 281:8
Intercontinental [6] 293:9 293:16 305:8 305:12 325:1 356:9
Interest [22] 372:3 372:5 373:13 373:14 373:17 378:12 378:23 380:13 380:22 380:24 381:4 383:3 383:7 388:9 388:12 388:24 401:11 403:19 450:2 450:12 478:8 478:11
Interested [1] 330:5
Interesting [1] 489:13
Interim [1] 459:14
Interject [1] 401:16
Intermediate [2] 283:12 329:22
Intermediate-term [2] 285:10 288:1
Intermediate-type [1] 329:22
Intermingled [1] 386:12
Interpretation [1] 409:15
Interstate [1] 451:9
Intervening [1] 410:1
Investment [2] 275:21 435:23
Investments [2] 281:8 425:5
Investor [2] 281:1 284:15
Investor-owned [2] 281:1 284:15
Investors [4] 281:7 397:14 397:19 397:22
Involved [4] 274:13 285:9 364:9 432:5
Involves [1] 374:21
IOU [2] 298:18 318:1
Iowa [1] 327:5
Irregardless [1] 466:4
Isolation [1] 319:14
Issuance [2] 380:15 403:25
Issue [15] 298:22 313:11 339:19 360:17 374:24 375:5 375:8 389:22 390:24 392:22 393:5 393:5 393:8 404:18 404:24
Issued [5] 373:12 389:9 396:8 396:10 397:12
Issues [15] 291:9 339:19 371:8 371:11 372:1 372:2 372:2 372:21 373:4 373:16 373:22 392:11 408:18 417:22 429:4
Item [13] 439:13 440:18 440:24 441:1 441:4 442:8 442:9 451:20 457:22 470:18 470:21 471:19 472:19
Items [10] 405:3 439:2 439:4 443:1 454:16 455:1 459:4 459:14 459:22 473:5
Itself [7] 296:3 297:7 298:25 336:18 363:19 415:14 449:13

J

January [22] 287:18 288:7 288:11 334:6 352:10 352:12 352:15 353:2 353:6 363:10 376:24 455:21 456:7 458:10 459:8 465:5 471:3 471:4 471:7 471:8 471:20 471:21
Jeopardized [1] 340:18
Jerry [1] 487:25
Job [5] 275:10 424:11 424:15 487:25 489:5
Join [1] 408:11
Joined [1] 370:11
Joining [1] 274:23
Joseph [2] 272:2 272:21
JSG-2 [7] 385:3 385:17 385:18 386:1 400:20 401:11 401:18
JSG-4 [1] 367:10
July [14] 282:11 282:12 306:6 306:11 306:18 306:19 349:10 349:12 349:24 354:15 354:17 432:10 433:17 475:14
Jump [2] 470:18 471:18
June [2] 349:24 433:17
Justifiable [1] 414:23
Justification [1] 452:1

K

Keep [7] 298:8 351:7 374:9 415:3 417:11 487:20 488:3
Keeping [1] 412:20
Keeps [2] 351:3 453:3
Kept [2] 351:18 411:17
Key [26] 273:22 282:22 308:20 410:11 410:15 410:20 411:15 412:11 412:13 414:24 416:5 418:8 418:16 418:17 419:3 419:7 419:16 419:24 420:13 423:23 425:20 442:21 479:15 479:17 479:18 479:20
Kilowatt-hour [2] 288:17 288:18
Kind [25] 298:1 298:4 299:16 320:23 340:11 340:18 342:18 343:25 374:22 390:23 392:10 392:14 392:16 392:21 393:4 395:15 426:16 427:18 449:24 450:6 450:12 452:1 453:1 472:19 472:25
Kinds [1] 341:20
King [6] 376:19 378:25 396:13 399:5 441:1 450:5
King's [3] 394:25 395:23 478:10
Knife [1] 451:8
Knowledge [2] 443:21 462:13
Known [5] 329:12 347:25 352:1 433:14 433:19
Knows [1] 351:12

L

Labeled [7] 299:18 301:6 301:7 336:24 434:23 457:22 478:18
Labor [7] 447:3 447:7 447:15 448:14 448:15 472:7 472:9
Lack [3] 337:1 348:13 413:2
Lagged [1] 280:24
Lagging [2] 291:24 317:5
Lake [2] 312:25 313:1
Landscape [1] 279:9
Language [1] 383:4
Large [3] 281:8 332:5 340:21
Largely [1] 332:12
Larger [2] 335:14 376:15
Largest [1] 273:14
Last [40] 273:25 274:12 282:25 286:7 289:5 291:1 297:19 300:3 300:3 303:9 305:9 306:13 307:6 308:19 311:15 313:20 317:1 317:15 327:25 333:14 353:5 353:22 354:20 355:13 359:14 380:23 384:25 410:2 412:23 414:6 417:19 439:13 458:24 462:21 464:3 468:20 471:4 475:19 475:20 489:13
Late [22] 281:12 283:22 285:17 286:17 287:21 298:11 349:24 384:24 437:4 461:11 461:13 464:15 464:18 466:14 466:23 474:12 474:22 485:12 485:18 486:24 487:12 488:9
Late-filed [8] 384:24

461:13 464:15 466:23 474:22 486:24 487:12 488:9
Latest [3] 355:14 432:6 455:12
Law [5] 268:12 268:17 269:5 272:7 486:13
Lawyer [1] 446:6
Laying [1] 461:24
LBCs [2] 332:2 332:13
Leading [2] 273:7 446:6
Learning [1] 338:5
Least [10] 303:10 311:23 317:14 331:25 344:23 390:9 391:1 396:17 451:5 452:13
Least-cost [1] 396:17
Leave [3] 420:1 436:20 442:23
Led [2] 282:8 298:10
Left [5] 314:2 326:13 326:14 405:18 473:8
Legislature [2] 329:3 338:6
Legitimate [1] 392:19
Lein [2] 360:13 467:14
Length [1] 358:20
LEO [1] 268:4
Less [15] 297:21 316:4 343:24 344:1 344:3 353:15 390:15 411:13 411:20 435:7 453:15 472:3 482:13 482:14 484:13
Letter [3] 397:12 397:15 397:21
Level [29] 276:10 276:18 277:6 284:4 284:18 285:16 287:3 287:14 310:14 313:7 317:14 353:7 411:6 418:23 425:9 434:19 434:19 435:10 436:7 436:22 437:7 438:10 438:12 438:21 438:25 478:14 480:12 481:14 481:15
Levels [55] 277:22 280:7 280:11 281:6 282:17 285:3 287:20 289:7 289:21 290:3 290:19 290:20 291:1 291:14 305:5 306:10 306:16 311:12 312:25 314:9 314:24 339:6 342:4 342:5 342:16 347:24 350:25 350:25 353:21 354:24 360:7 361:9 362:14 403:16 411:19 411:20 413:15 414:3 414:5 415:4 423:8 424:20 425:17 433:4 433:4 434:17 434:17 435:3 436:5 436:8 436:21 447:1 447:11 447:13 458:21
Liability [1] 422:20
Life [7] 416:6 416:8 419:18 419:23 426:22 426:24 427:3
Lifetime [3] 414:11 414:16 427:2
Light [3] 347:25 352:1 454:11
Lignite [2] 315:24 320:3
Likely [9] 291:10 295:20 299:13 300:23 301:22 310:1 313:21 331:21 339:2
Limit [5] 278:24 321:15 410:25 411:5 411:9
Limitations [1] 413:23
Limited [2] 336:25 411:13
Line [34] 290:6 308:17 313:6 338:20 338:25 339:1 340:19 340:22 340:24 355:8 361:15 361:16 361:18 361:21 374:3 382:1 403:1 403:5 403:11 405:4 409:17 411:21 412:25 424:17 450:2 470:18 470:21 471:19 472:19 473:1 483:19 484:10 484:18 484:18
Lines [8] 348:5 350:17 361:23 377:17 377:25 393:11 397:24 398:12
Liquidity [1] 306:9
List [15] 296:4 296:25 299:1 326:4 327:14 343:12 343:19 344:9 345:15 384:17 384:19 419:5 419:5 419:8 419:19
Listed [16] 293:19 295:19 299:12 299:15 299:18 300:8 301:5 301:8 301:16 308:14 326:22 326:25 327:24 328:3 330:12 458:15
Listen [1] 366:15
Listening [1] 343:8
Lists [7] 273:21 290:18 293:15 300:5 300:7 419:11 438:6
Live [2] 427:14 429:22
Load [4] 281:4 332:16 432:7 432:12
Loan [19] 376:20 377:3 377:10 377:19 378:2 393:3 394:18 395:1 395:3 397:4 398:14 400:4 400:7 440:1 440:4 440:6 440:11 441:8 449:22
Loans [1] 404:18
Located [2] 278:18 294:4
Location [1] 294:9
Locations [1] 331:9
Locked [1] 286:3
Long-term [19] 310:12 369:21 371:10 371:20 371:21 372:12 372:17 372:22 372:24 373:4 373:11 373:16 373:25 386:2 387:7 396:10 396:15 403:2 420:1
Long-term-debt [1] 373:22
Look [35] 293:7 293:14 299:9 299:10 301:6 301:11 314:19 315:9 316:5 318:25 319:2 319:13 321:3 322:16 327:8 328:8 337:18 343:19 344:4 356:8 361:11 374:12 377:1 385:10 385:17 385:24 396:3 396:9 400:1 401:10 402:25 405:3 413:7 452:6 484:10
Looked [8] 297:23 312:23 379:3 389:15 434:16 441:1 441:3 459:3
Looking [25] 310:24 318:3 319:9 319:10 325:7 343:8 343:12 360:8 361:4 362:17 362:18 366:10 386:7 387:4 401:21 415:7 457:16 458:12 459:3 465:6 468:20 469:1 470:3 480:23 489:20
Looks [8] 299:24 319:23 322:21 385:21 386:3 400:23 469:16 471:24
Loss [4] 362:9 363:4 373:23 403:24
Louis [5] 279:4 303:20 320:19 321:14 321:19
Low [7] 278:18 310:9 311:12 312:11 340:17 390:23 435:22
Lower [41] 290:24 291:15 291:17 291:18 292:2 292:11 293:18 310:14 312:11 314:14 314:15 320:2 320:3 320:14 321:20 321:21 350:4 352:16 371:20 372:21 372:22 372:24 373:9 373:10 373:16 396:12 404:7 411:20 413:3 413:15 414:5 424:19 425:3 425:7 435:23 437:15 437:20 450:1 478:11 478:12 479:23
Lower-income [1] 425:3
Lowering [1] 355:7
Lowest [2] 412:6 425:21
Lunch [1] 406:10
Luncheon [1] 406:8
Luxembourg [2] 368:10 368:11

M

Madison [2] 275:22 275:25
Magnitude [4] 284:13 284:24 317:10 448:22
Mahowald [22] 269:20 270:2 367:23 368:6 368:17 369:1 369:8 374:2 374:8 375:21 382:11 384:8 387:2 391:13 394:17 396:23 401:22 404:25 405:11 405:17 405:17 440:5
Mahowald's [1] 406:9
MAIN [18] 278:15 278:22 279:3 282:14 290:19 297:8 304:5 334:1 334:20 334:22 334:23 334:25 335:1 335:22 336:12 336:15 336:18 336:21
Maintain [2] 412:19 416:2
Maintained [1] 431:21
Maintaining [1] 369:19
Maintenance [5] 288:24 460:5 465:22 466:3 472:10
Major [2] 376:3 441:12
Manage [1] 273:19
Management [11] 273:3 284:10 369:19 369:24 370:16 408:1 408:16 409:14 412:8 424:10 437:13
Manager [3] 370:13 408:12 476:17
Managers [1] 412:14
Mandate [1] 329:3
Mandated [1] 329:15
Mandating [1] 329:9
MAPP [77] 270:22 276:15 277:15 278:15 278:16 278:21 278:22 278:23 282:12 283:6 283:10 283:13 283:16 287:1 287:10 287:13 287:18 290:19 290:25 295:2 295:14 295:20 296:3 296:6 297:1 297:2 297:6 298:2 298:25 299:12 299:17 299:20 300:5 300:17 301:9 302:7 302:10 302:19 302:23 303:2 303:5 303:14 304:3 304:22 308:23 309:6 309:13 315:16 315:18 317:22 320:1 320:11 320:15 321:1 321:13 321:20 326:3 326:23 326:25 330:16 331:17 332:2 332:4 333:21 336:7 336:12 336:13 343:11 354:6 358:25 359:3 359:8 364:5 365:22 431:9 431:13 431:17
MAPP's [1] 314:7
March [17] 274:24 286:3 324:3 324:10 324:14 324:15 324:19 324:21 324:23 324:25 325:6 348:18 349:11 354:12 354:20 358:8 491:14
Margin [25] 277:7 277:18 277:20 277:24 285:24 286:8 287:22 288:13 288:20 290:19 292:17 298:3 345:17 351:16 352:12 352:14 352:15 353:9 353:14 353:16 356:12 360:4 432:25 484:11 484:13
Marginal [7] 283:14 287:13 304:14 304:14 304:21 314:23 315:19
Margins [31] 276:18 277:5 278:3 288:3 289:13 290:16 291:13 291:16 292:3 292:6 292:10 293:23 313:7 313:11 339:5 347:23 348:4 348:8 348:11 348:16 349:6 350:16 352:6 352:8 353:5 355:16 356:6 360:18 362:4 363:1 431:21
Marginwise [1] 361:5
Mark [2] 307:2 361:2
Marked [4] 271:4 293:1 323:21 366:25
Market [121] 273:20 273:23 274:1 274:20 274:21 275:2 275:3 275:4 276:7 276:14 277:13 277:15 278:19 279:6 279:10 279:18 279:20 280:4 280:13 280:15 280:16 281:1 282:18 282:23 283:3 283:8 284:10 284:11 284:20 285:1 285:3 285:5 286:6 286:10 286:11 286:14 286:17 286:17 287:1 287:17 288:16 289:19 289:23 290:8 290:9 290:20 291:5 291:11 291:19 292:12 292:20 292:23 292:24 295:20 297:1 297:2 299:2 300:24 302:19 303:5 303:12 308:15 308:21 308:25 310:3 310:20 310:20 310:24 311:9 314:21 314:25 315:16 317:24 318:2 318:6 319:2 320:9 322:17 322:22 323:4 324:5 325:2 325:16 326:8 326:18 328:2 328:5 332:6 332:8 332:17 332:25 333:3 333:17 334:13 334:15 335:6 338:7 339:3 341:25 348:1 352:2 352:4 354:6 354:8 355:3 359:12 359:20 359:23 360:3 366:10 373:13 374:24 375:3 381:9 390:4 397:18 404:24 437:14 437:17 437:19 437:19
Market-type [1] 322:17
Marketers [1] 366:11
Marketing [1] 347:5
Markets [68] 273:18 274:2 276:23 276:25 278:6 278:12 278:15 278:22 278:23 279:8 279:14 279:21 279:23 280:6 280:12 280:21 280:25 282:16 283:24 284:1 284:6 285:7 285:15 285:17 289:25 290:5 290:15 291:8 293:13 294:6 297:20 299:13 302:23 303:18 303:18 303:25 304:1 311:2 317:24 319:7 319:8 319:11 319:14 319:19 319:20 319:21 320:2 321:2 321:5 321:8 321:17 321:19 321:19 321:20 333:24 334:2 334:11 334:21 335:15 335:20 336:1 336:1 336:2 336:17 340:10 340:17 341:22 375:2
Marriage [1] 408:1
Master's [1] 408:2
Match [1] 413:18
Material [5] 302:7 339:19 339:19 341:5 489:12
Materially [1] 312:16
Mathematical [2] 367:13 463:7
Matter [9] 271:8 374:9 415:23 442:14 453:25 457:6

463:1 465:24 474:13
Matters [3] 271:16 271:19 473:5
Matured [1] 376:24
Matures [1] 384:4
Maturity [4] 384:14 384:16 384:18 392:24
Maximum [2] 272:8 272:9
MDU [59] 276:4 318:23 319:3 319:7 319:9 319:15 321:24 330:21 334:17 340:10 347:6 358:25 359:3 359:7 359:11 359:22 359:24 360:2 360:5 362:5 365:22 369:12 370:18 371:15 376:4 376:16 377:6 380:6 380:9 385:13 385:15 386:25 387:10 395:2 397:11 399:5 401:7 407:13 407:15 408:9 408:11 409:13 412:14 419:15 430:25 441:11 447:20 449:24 451:7 463:10 469:4 473:8 479:9 483:10 483:21 483:25 486:14 489:4 489:18
MDU's [14] 271:14 319:12 322:4 340:7 362:1 362:3 362:23 392:18 395:23 418:7 419:3 450:8 467:16 479:15
Meal [1] 453:21
Mean [27] 295:7 309:23 309:24 318:14 319:6 319:15 319:19 320:21 322:14 323:4 323:5 325:13 332:8 333:12 333:19 335:14 340:20 342:18 342:21 344:6 345:19 374:5 407:19 442:13 442:14 444:2 473:7
Means [6] 304:15 355:12 415:12 439:14 443:13 453:19
Meant [3] 280:15 294:2 408:23
Meantime [1] 332:14
Measure [1] 288:19
Measures [2] 285:9 289:8
Medical [3] 419:22 434:24 454:17
Meet [6] 298:2 323:6 432:3 432:13 434:4 455:9
Meeting [5] 320:10 328:17 328:22 328:23 453:9
Megawatt [29] 282:11 286:23 286:24 287:2 287:5 287:9 287:11 306:6 306:11 307:15 307:24 308:2 317:7 317:18 324:15 344:1 349:13 349:14 349:14 350:1 350:2 352:11 352:13 352:15 352:25 353:18 354:15 364:10 433:22
Megawatt-hour [17] 282:11 282:12 286:23 286:24 287:2 287:5 287:9 287:11 306:6 306:11 307:15 307:24 308:2 317:7 349:13 350:1 350:2
Megawatt-hours [4] 352:11 352:13 352:15 352:25
Megawatts [31] 282:5 282:6 295:23 299:12 299:23 299:24 300:2 321:13 327:4 327:10 327:25 329:4 329:10 329:22 329:23 331:14 331:22 343:15 343:16 343:21 344:4 344:10 350:24 351:4 358:9 358:13 358:14 363:12 432:18 433:25 434:1
Member [1] 408:15
Mention [1] 322:10
Mentioned [9] 306:5 325:21 327:20 381:14 382:17 393:9 432:17 454:17 471:20
Mentions [1] 409:18
Merchant [4] 274:10 298:16 332:7 334:9
Method [2] 392:18 450:7
Methods [1] 357:6
Michigan [1] 279:2
Mid [3] 280:23 410:25 431:9
Mid-Continent [2] 274:3 431:9
Midwest [19] 278:15 278:19 280:18 280:21 280:25 281:13 281:22 282:4 282:6 282:15 282:16 284:3 290:15 291:11 331:10 333:10 334:14 339:4 416:12
Might [14] 292:1 307:17 322:7 362:11 375:6 388:23 395:16 395:16 404:24 405:1 415:24 453:14 472:13 473:22
Mike [6] 273:10 276:17 347:16 409:4 428:1 431:8
Million [55] 371:6 376:22 377:8 378:14 379:1 379:2 379:20 380:8 380:17 380:19 381:2 381:4 381:5 381:12 387:23 387:24 388:24 388:25 389:3 390:5 390:10 393:22 394:6 394:7 394:19 394:25 395:4 395:7 398:8 398:16 398:23 398:25 399:6 399:8 399:15 399:25 404:15 404:21 420:24 421:19 422:5 422:7 423:5 441:2 441:10 442:12 442:14 442:18 469:17 470:2 478:4 478:5 481:9 481:12 481:13
Million-84 [1] 470:12
Mind [6] 322:11 322:15 341:17 374:9 402:9 462:6
Mine [2] 315:24 323:21
Mine-mouth [1] 315:24
Minimum [1] 434:2
Minneapolis [1] 370:9
Minnesota [6] 301:20 329:2 329:16 331:13 370:6 370:10
Minor [2] 454:25 457:21
Minot [1] 370:9
Minus [4] 277:8 362:18 381:21 381:22
Minute [4] 346:6 464:14 468:21 485:16
Minutes [7] 454:10 460:17 460:19 460:19 464:4 473:22 473:25
Miscellaneous [2] 457:11 461:24
Misheard [2] 374:4 408:21
Mismatch [1] 433:7
Missing [1] 469:18
Missouri [3] 312:21 313:4 313:4
Mistakes [1] 338:5
Mitigate [1] 285:7
Mitigation [1] 285:9
Mix [3] 279:12 315:14 340:7
MMBtu [1] 317:15
Model [1] 392:20
Models [2] 273:24 279:16
Moment [2] 305:7 374:2
Monday [2] 358:24 487:1
Mondays [1] 358:22
Money [13] 375:15 377:18 378:12 380:11 380:14 380:25 382:22 383:9 388:9 403:16 403:19 404:2 415:17
Money's [1] 422:24
Moneys [3] 415:19 422:16 422:17
Monitor [1] 374:9
Montana [40] 268:19 271:9 276:11 277:4 277:5 277:13 278:17 285:24 303:15 320:4 339:4 351:12 354:5 354:25 370:21 372:12 386:2 387:11 391:17 410:5 410:11 410:13 413:13 414:17 415:4 416:19 432:1 432:11 433:14 434:4 434:8 435:17 436:25 437:11 438:11 451:11 465:6 465:7 477:24 478:18
Montana-Dakota [112] 267:5 268:16 268:19 271:9 276:4 276:14 277:16 277:19 278:1 278:3 278:7 278:12 278:14 286:2 286:7 286:13 287:23 288:21 289:14 291:12 291:22 292:1 292:6 292:7 303:15 320:8 320:20 331:5 339:4 347:5 348:17 349:1 349:5 349:19 349:23 350:9 350:11 350:19 351:3 351:7 351:12 352:9 354:10 354:14 354:19 355:15 370:11 386:2 386:12 386:13 386:16 387:7 387:9 387:11 387:14 387:15 387:18 388:5 391:2 401:6 409:9 409:19 410:17 410:23 411:22 411:25 412:3 412:7 412:14 412:22 413:13 414:25 415:15 420:18 421:6 421:12 421:18 422:4 423:7 430:24 432:1 432:21 432:24 433:14 433:20 434:15 435:11 435:17 436:8 436:24 437:11 443:2 443:20 449:9 449:11 451:11 451:17 465:2 465:6 465:11 465:13 465:15 465:25 466:8 466:17 467:2 467:5 476:14 476:16 478:21 479:11 479:12
Montana-Dakota's [23] 276:11 277:4 277:5 277:13 278:17 285:24 289:21 354:5 354:25 372:12 410:5 410:11 410:13 414:17 415:4 432:11 434:4 434:8 436:25 438:11 465:7 477:24 478:18
Month [15] 306:18 306:19 307:17 324:14 324:16 349:21 349:21 351:7 353:4 353:8 359:12 359:14 364:8 433:23 470:25
Month-to-month [1] 349:21
Monthly [4] 288:9 288:10 307:10 364:7
Months [20] 282:9 288:4 289:6 292:25 305:1 305:2 311:2 311:18 311:22 312:6 317:1 353:9 358:16 358:21 372:13 372:18 405:2 433:16 434:1 455:23
Moody's [1] 393:14
Morning [4] 276:2 340:3 355:19 440:2
Mortgage [5] 371:7 371:18 387:1 388:1 404:4
Most [20] 273:14 273:15 297:14 298:14 300:4 304:18 309:7 309:15 309:17 323:5 326:16 335:19 339:19 340:5 340:8 373:22 403:21 436:25 454:3 472:1
Mostly [1] 367:19
Mother [1] 338:17
Motion [4] 269:3 269:4 485:23 486:5
Mountains [2] 340:13 341:2
Mouth [1] 315:24
Move [7] 273:10 321:13 323:1 378:1 406:11 413:19 424:21
Moved [3] 398:13 398:20 459:15
Moving [1] 487:20
Mulkern [13] 270:16 475:21 475:23 476:4 476:11 479:4 483:1 483:5 483:6 483:16 484:25 485:1 485:2
Municipal [1] 273:17
Must [6] 277:20 367:8 368:16 375:2 401:13 471:21
Mutual [1] 426:24

N

Name [15] 272:19 272:21 330:14 346:25 347:2 369:6 369:8 407:6 407:8 430:19 430:21 455:7 462:17 476:9 476:11
Nameplate [1] 344:6
Narrower [1] 355:10
National [2] 273:3 408:19
Nationwide [1] 437:10
Native [1] 281:4
Natural [60] 276:22 277:17 278:10 282:24 283:2 283:6 283:11 283:17 283:21 285:2 285:6 285:15 285:17 286:6 286:25 287:12 287:25 288:6 289:1 289:2 289:6 289:11 289:15 289:18 290:2 290:4 291:15 292:4 292:8 302:18 302:22 303:7 303:8 303:22 304:23 305:3 308:17 308:19 308:23 309:7 309:12 309:21 309:22 310:4 310:6 310:9 311:4 314:8 314:14 315:1 315:10 317:11 317:16 329:1 337:21 338:2 340:4 342:20 348:7 348:9
Nature [2] 424:16 456:25
Navigant [1] 272:25
NCI [4] 273:17 273:19 274:23 275:2
NCI's [3] 273:1 273:3 274:13
Near [7] 289:24 317:9 317:25 336:25 339:15 342:15 342:17
Near-term [1] 289:24
Nearest [1] 354:5
Nearly [3] 341:5 357:7 375:6
Nebraska [1] 343:20
Necessarily [3] 374:15 424:13 433:13
Necessary [7] 318:21 318:21 410:7 410:14 416:4 418:25 455:18
Need [28] 271:16 322:22 327:2 329:19 331:3 331:14 335:8 343:15 345:3 377:15 386:11 393:8 401:3 402:23 412:1 427:13 427:25 455:18 456:1 456:8 456:19 462:1 462:16 462:20 463:17 470:

19 480:14 488:24
Needed [8] 325:16 331:17 332:11 343:13 343:17 395:16 398:3 472:21
Needs [5] 375:8 434:4 436:23 461:20 481:22
Negative [7] 362:19 456:13 456:14 456:17 456:17 480:19 480:20
Negatively [1] 393:18
Negotiate [2] 325:3 366:15
Neighborhood [1] 442:11
NERC [6] 294:25 299:7 299:15 332:14 336:23 337:3
Net [9] 282:2 288:22 362:9 381:4 438:21 450:16 452:9 456:20 482:17
Network [1] 439:10
Never [3] 395:19 418:1 459:8
New [41] 270:22 274:10 274:17 280:24 281:8 283:10 283:11 290:6 295:19 296:5 296:25 297:12 297:21 298:7 298:14 298:22 299:5 299:7 299:12 299:20 300:7 300:19 300:22 303:11 309:13 309:14 336:1 336:17 356:12 363:11 372:2 374:25 374:25 409:24 412:18 415:2 453:9 455:16 458:8 458:9 458:17
Next [20] 271:25 320:21 328:8 331:4 332:22 333:17 336:2 336:10 336:10 342:25 346:9 359:23 360:4 364:24 367:21 402:5 477:20 482:20 487:1 487:3
Next-door [1] 320:21
Nine [6] 306:4 308:15 308:17 308:22 378:9 378:10
Nine-and-a [1] 378:9
Nobody [1] 338:3
Non [2] 415:11 422:14
Non-qualified [2] 415:11 422:14
None [4] 365:11 401:11 462:11 483:2
Nonfuel [1] 288:23
Noon [1] 406:6
Normal [15] 276:21 282:17 289:8 290:3 290:11 302:7 310:11 310:13 311:10 311:19 311:20 311:23 313:8 432:15 438:25
Normal-type [1] 311:23
Normally [3] 287:10 301:10 342:20
North [50] 267:2 267:18 268:8 268:14 268:17 268:18 268:23 271:8 273:17 274:1 274:19 279:21 295:25 313:1 319:7 321:4 331:6 347:3 347:4 369:10 370:9 375:4 375:7 407:10 408:7 408:8 417:12 417:12 421:9 430:22 430:22 443:3 443:19 443:20 451:23 456:4 457:19 463:3 469:9 470:9 470:14 476:12 476:13 476:25 477:3 477:7 477:18 477:19 481:11 491:13
Northeast [1] 333:25
Northern [14] 278:16 278:21 303:19 303:19 304:6 312:3 312:7 312:8 312:18 320:15 320:18 329:1 331:13 396:14
Northwest [3] 311:16 312:4 312:15
Northwestern [1] 426:23
Notably [2] 340:8 373:23
Note [10] 367:24 413:14 431:25 432:17 435:14 436:13 454:23 456:10 458:1 475:6
Noted [1] 414:7
Notes [3] 388:3 411:22 491:11
Nothing [13] 271:20 271:22 357:22 357:23 417:13 441:25 451:15 460:13 467:23 467:24 468:2 479:2 485:10
Noticed [2] 446:21 471:19
November [4] 297:4 370:13 437:1 458:10
Nox [2] 317:17 317:19
NSP [8] 301:17 320:22 321:6 330:3 330:7 330:15 340:8 376:8
NSP's [3] 320:23 329:12 344:25
Nuclear [15] 281:12 281:15 281:17 281:22 282:1 282:5 282:7 282:13 314:3 340:7 340:11 340:14 340:16 340:17 341:20
Number [58] 273:16 274:8 280:1 301:16 301:21 302:20 307:3 312:23 323:20 327:25 337:6 355:8 382:2 382:21 387:25 400:24 403:8 406:3 412:8 412:9 422:10 423:19 432:5 440:16 443:5 443:6 448:13 450:20 454:16 456:13 456:19 463:12 467:14 469:1 469:2 469:4 469:16 470:14 470:15 472:23 480:10 480:11 480:17 480:19 480:20 480:22 481:1 481:2 481:3 481:4 481:6 481:23 482:15 483:22 483:25 484:4 484:15 484:21
Numbered [1] 444:19
Numbers [24] 330:12 331:1 331:1 331:16 344:22 401:4 401:10 402:4 403:5 403:10 403:15 403:22 415:2 440:18 444:14 456:3 468:8 470:8 470:9 470:11 470:11 470:23 480:15 489:14
Numerous [1] 279:9
Nutshell [1] 450:9
NYMEX [12] 291:6 293:5 293:20 305:8 305:14 324:2 353:23 354:1 354:2 356:7 356:21 356:23

O

O'clock [4] 405:21 406:5 406:5 489:24
Obfuscate [1] 363:19
Object [1] 363:18
Objected [1] 380:6
Objection [5] 294:19 294:20 302:13 357:19 483:11
Objective [2] 371:19 371:22
Obligated [2] 349:2 395:8
Obligation [6] 395:7 432:4 432:13 432:14 455:9 455:10
Obligations [3] 365:23 375:11 395:10
Observed [1] 286:19
Obtain [5] 274:16 277:8 278:4 354:19 394:18
Obtained [1] 353:13
Obtaining [2] 383:15 396:16
Obvious [1] 433:7
Obviously [2] 424:25 486:4
Occasion [1] 362:11
Occasions [1] 408:19
Occupy [1] 283:13
Occur [4] 303:18 342:1 471:2 471:4
Occurred [8] 282:19 284:22 316:25 350:3 351:1 474:21 475:11 475:15
Occurring [1] 378:5
Occurs [2] 283:9 297:14
October [1] 458:3
Odd [1] 301:1
Oddities [1] 333:23
Off-line [4] 340:19 340:22 340:24 340:25
Off-peak [26] 287:7 287:10 287:13 287:14 304:20 308:1 315:21 347:23 350:16 350:19 350:23 350:25 351:2 351:4 351:9 351:10 351:18 351:20 353:12 353:13 362:5 362:6 362:18 363:25 364:9 364:9
Off-system [22] 276:11 276:18 277:4 277:6 277:10 277:25 285:25 287:22 288:22 289:13 289:22 291:13 291:17 291:23 292:2 292:10 292:17 293:23 303:15 313:7 339:5 362:3
Off-take [1] 332:12
Offer [10] 293:12 294:18 302:11 354:13 357:18 366:7 417:3 456:22 474:20 483:7
Offered [4] 324:9 324:19 367:3 450:7
Office [14] 338:6 431:10 438:15 438:19 445:21 458:24 459:2 460:1 460:3 461:9 462:21 463:21 464:1 464:15
Officer [2] 267:23 408:5
Officers [1] 412:13
Offset [1] 277:20
Offsets [1] 426:25
Often [1] 375:10
Ohio [2] 294:4 303:23
On-line [8] 290:6 309:6 309:15 309:18 327:17 332:15 342:5 460:6
On-peak [12] 287:2 291:6 304:20 307:15 315:21 324:14 325:5 344:12 344:16 353:11 354:11 362:5
Once [3] 333:1 334:2 404:5
One [94] 273:21 294:5 299:10 308:4 308:5 308:10 318:1 320:24 322:9 326:6 326:14 333:23 333:23 336:23 339:18 339:24 341:13 342:10 343:20 345:11 365:15 371:9 371:12 371:13 371:25 372:7 376:3 380:17 380:23 384:12 384:13 384:20 384:20 384:20 385:2 385:17 385:20 385:20 386:14 388:4 389:18 392:12 392:15 392:21 394:1 401:18 402:2 402:4 403:1 404:21 405:24 405:25 406:5 406:5 411:4 417:1 417:6 417:23 423:11 423:23 437:24 439:3 442:21 443:18 446:15 448:7 452:6 452:21 453:9 457:3 457:20 459:5 462:8 462:20 462:21 462:22 462:23 463:22 464:1 464:15 464:16 467:13 471:21 471:25 472:23 474:5 478:17 479:15 479:20 479:23 480:24 480:24 483:19 487:4
One's [1] 473:15
One-and-a-half [2] 389:18 389:21
One-third [3] 411:4 420:11 450:25
One-time [2] 439:3 459:5
Ones [5] 301:16 376:3 425:23 427:23 463:7
Ongoing [4] 374:12 422:2 460:4 460:9
Ontario [2] 282:2 282:7
Oops [1] 396:4
Open [2] 280:3 325:16
Opening [1] 269:3
Operate [3] 279:8 283:11 284:3
Operates [1] 277:16
Operating [4] 277:21 438:25 455:16 484:19
Operation [3] 281:18 288:14 472:10
Operations [10] 267:6 271:11 279:19 280:16 288:23 415:1 443:3 456:5 457:19 469:10
Opinion [3] 353:25 416:23 460:8
Opportunities [6] 277:12 278:25 286:12 303:16 335:17 352:5
Opportunity [1] 277:10
Opposed [1] 366:3
Option [1] 378:8
Order [11] 269:5 373:10 373:20 387:15 388:14 390:3 391:6 410:14 486:13 489:1 489:3
Oregon [1] 312:18
Organization [4] 412:5 412:18 416:3 418:23
Organizations [2] 280:15 301:2
Original [2] 389:12 483:9
Originally [1] 409:8
Orlando [1] 408:20
Otherwise [3] 392:25 393:15 433:13
Otter [10] 328:23 331:6 376:8 376:10 376:11 376:14 395:12 395:15 395:19 396:12
Outage [1] 282:2
Outages [5] 281:14 281:21 282:8 314:3 344:18
Outline [2] 370:1 407:23
Outlined [1] 437:3
Outlook [7] 276:9 277:2 290:3 303:10 310:20 310:20 311:3
Outpaced [1] 281:10
Output [1] 304:16
Outset [1] 431:25

Outside [3] 399:19 416:11 485:18
Outstanding [7] 359:19 395:7 395:10 397:17 398:10 403:4 441:5
Outstrip [1] 300:10
Overall [24] 371:21 373:10 373:17 373:24 377:7 378:15 379:6 388:18 398:24 399:6 399:15 399:25 404:6 405:6 407:16 434:12 442:9 447:3 448:2 449:4 456:16 472:5 472:7 472:13
Overcome [1] 388:20
Overemphasize [1] 361:2
Overestimate [2] 313:21 314:6
Overhead [1] 465:19
Overnight [2] 325:12 453:21
Overstate [1] 352:8
Overstated [2] 380:7 399:7
Own [5] 277:13 322:16 330:3 336:13 462:6
Owned [5] 281:1 284:15 426:22 426:22 465:5

P

P.O. [1] 268:13
Pace [2] 411:7 411:17
Pacific [3] 311:16 312:4 312:15
Package [1] 418:15
Page [78] 269:2 295:1 296:24 299:10 306:4 307:6 307:14 307:24 308:15 308:17 308:22 310:19 311:7 313:5 318:5 326:13 336:23 338:18 338:23 338:24 343:20 348:5 350:17 358:6 361:7 361:21 363:13 367:9 371:9 371:12 371:25 372:7 372:11 372:16 374:3 380:17 380:23 382:1 382:4 382:15 382:25 382:25 384:12 385:3 385:19 385:20 385:23 386:1 386:4 386:4 387:3 396:4 396:5 400:24 401:18 402:1 402:3 402:4 402:5 403:1 403:6 403:8 403:11 403:23 404:1 404:8 404:9 409:17 411:21 412:25 424:17 446:19 469:11 478:1 478:17 480:24 482:20 483:19
Pages [4] 431:15 438:17 444:19 491:10
Paid [7] 397:20 398:13 418:19 423:5 423:6 424:12 427:6
Paper [14] 377:12 377:23 393:17 394:20 397:10 397:11 397:14 397:16 397:19 397:22 400:8 404:15 404:17 404:23
Paragraph [6] 338:19 339:13 446:20 447:4 448:16 469:24
Parallel [1] 356:15
Parenthesis [1] 480:18
Part [26] 298:10 308:10 309:7 309:15 331:19 340:7 345:20 352:20 367:1 377:7 379:4 380:23 385:4 385:8 389:10 418:14 452:6 452:12 466:24 467:21 469:19 470:2 472:11 477:5 477:9 479:22
Partial [1] 423:8
Partially [3] 329:15 329:15 447:23
Participants [16] 284:11 285:1 285:5 294:6 354:7 354:9 411:22 411:23 411:24 412:2 412:10 412:12 421:20 421:21 422:4 467:3
Particular [16] 280:16 302:24 304:19 351:13 391:6 441:4 447:15 448:7 448:21 454:11 454:18 472:4 472:14 474:21 482:9 489:19
Particularly [14] 278:25 283:24 291:2 303:18 303:22 311:16 312:6 314:1 320:6 320:7 320:15 342:17 410:2 432:22
Parties [3] 319:17 364:8 486:14
Partly [1] 317:10
Partner [1] 376:11
Parts [1] 366:12
Party [2] 363:21 364:7
Past [9] 276:8 313:12 325:10 337:18 355:5 360:18 435:18 457:7 459:23
Pat [2] 486:20 486:21
PATRICK [1] 268:21
Pattern [5] 283:4 283:9 288:5 289:9 320:1
Patterns [2] 278:19 320:13
Paul [1] 370:6
Pay [21] 301:12 301:15 324:25 348:22 349:2 375:2 383:8 388:16 388:21 390:6 394:20 415:17 418:11 423:8 423:10 440:9 448:3 450:3 452:9 452:12 482:14
Payable [2] 414:9 414:9
Paying [3] 390:9 423:20 451:14
Payroll [1] 452:13
Pays [1] 428:16
Peak [46] 282:10 286:21 287:2 287:7 287:10 287:13 287:14 304:20 304:20 306:5 306:7 306:12 306:17 307:15 308:4 315:21 315:21 324:14 325:5 332:11 344:12 344:16 347:23 350:23 350:25 351:4 351:8 351:18 351:19 358:17 358:21 358:21 358:22 358:23 362:5 362:5 362:16 362:18 363:4 363:5 363:25 364:3 364:9 364:9 432:12 432:16
Peak-time [1] 308:4
Peaked [1] 355:1
Peaking [3] 283:12 329:23 335:23
Peaking-type [1] 329:23
Peaks [1] 287:5
Pearce [141] 268:11 268:12 269:3 269:11 269:14 269:15 269:17 269:19 269:21 269:25 270:5 270:10 270:12 270:15 270:17 271:23 271:24 272:2 272:12 272:18 294:18 294:22 295:9 295:11 296:11 296:14 296:17 296:20 296:21 302:11 302:16 305:19 305:21 306:25 307:1 307:4 307:6 307:20 341:12 341:13 341:15 343:1 343:3 345:10 345:11 345:13 346:1 346:3 346:9 346:11 346:18 346:24 357:18 357:22 357:24 357:25 363:17 363:22 365:14 365:15 365:18 366:16 366:22 366:23 367:8 367:17 367:20 367:22 368:6 368:22 369:5 375:18 375:20 384:23 385:1 385:8 385:12 385:17 385:21 385:25 387:2 394:13 394:14 394:16 396:21 396:22 398:22 401:16 402:8 402:11 402:14 405:18 405:19 406:2 406:12 406:14 406:23 407:5 417:13 417:15 429:8 429:10 430:6 430:12 430:18 441:25 442:2 445:23 452:19 452:21 452:24 460:11 460:13 464:20 464:21 473:21 474:2 474:5 474:8 474:24 475:1 475:19 475:20 476:2 476:8 477:12 479:2 479:3 483:7 485:3 485:5 485:6 485:14 485:19 485:20 486:2 487:1 487:3 487:18 488:22 488:23
Penalize [1] 374:1
Penalizing [1] 392:25
Penalties [6] 300:18 431:19 431:22 431:23 432:16 432:23
Penalty [8] 272:8 431:10 431:13 431:17 432:17 432:25 433:2 433:14
Pension [43] 410:22 411:2 411:3 413:18 414:2 414:12 414:14 415:12 415:20 419:13 421:25 421:25 422:18 422:23 429:4 431:10 434:7 434:9 434:23 435:1 435:7 435:12 436:9 436:10 447:8 447:10 447:12 447:16 447:21 447:24 448:2 454:12 454:14 454:22 454:24 455:9 456:11 456:12 461:6 462:10 469:9 469:15 470:6
Pensions [7] 445:22 447:16 455:5 456:1 456:23 468:11 469:17
People [13] 301:11 304:15 310:5 314:25 333:13 338:4 341:6 341:25 342:3 386:15 417:10 423:19 452:11
Per [28] 282:11 282:11 286:22 286:24 287:2 287:5 287:9 287:11 288:16 288:18 306:6 306:11 307:24 308:2 317:6 317:15 317:18 319:15 349:12 349:25 350:2 354:15 381:11 388:25 413:3 422:7 423:12 433:22
Percent [84] 298:3 311:19 315:20 320:11 332:10 350:20 352:16 362:7 363:6 363:25 372:4 372:6 372:8 372:10 372:13 372:17 372:23 378:10 378:11 380:19 381:15 381:16 381:16 381:20 381:22 382:2 382:7 382:19 386:14 386:15 386:21 386:23 387:13 389:18 389:21 389:23 390:20 396:11 396:12 396:15 401:5 401:14 404:3 404:4 405:7 411:11 411:13 413:16 414:4 414:5 415:5 417:8 422:20 424:21 425:9 425:9 438:4 438:10 438:20 445:5 445:9 445:16 445:17 446:22 446:25 447:10 447:19 448:4 448:6 467:6 467:7 467:10 467:11 471:20 471:23 471:25 472:7 472:13 474:16 474:19 478:19 478:20 478:22 481:10
Percentage [11] 413:4 413:20 424:22 443:22 443:25 445:2 465:10 465:10 466:2 467:2 472:5
Percentagewise [1] 472:2
Perfect [1] 412:21
Performed [1] 435:14
Perhaps [11] 284:23 290:11 307:2 311:10 311:21 322:1 365:15 367:11 401:16 441:22 452:21
Period [36] 278:2 280:5 280:23 281:10 282:4 283:1 287:3 287:18 287:23 288:7 288:10 288:11 289:2 289:12 289:24 295:24 299:14 307:10 307:11 307:16 308:4 310:8 311:14 321:18 324:10 339:12 342:3 342:6 342:8 342:19 344:16 351:5 353:1 376:4 415:6 455:15
Periodic [2] 328:22 455:7
Periodically [2] 440:6 441:22
Periods [9] 284:22 287:14 304:10 304:20 304:21 306:15 351:9 351:11 432:22
Perjury [6] 272:8 346:15 368:18 406:20 430:9 475:24
Permeate [1] 334:16
Permitting [2] 299:3 326:20
Perrin [5] 435:14 455:7 455:12 462:16 462:17
Persisted [1] 311:13
Person [3] 402:13 416:13 426:5
Personal [1] 460:5
Personally [1] 300:16
Personnel [2] 408:1 437:13
Perspective [3] 284:10 413:10 451:13
Pessimistic [1] 337:5
Phone [2] 439:8 439:9
Physical [1] 281:19
Pick [1] 314:1
Picture [2] 322:4 458:14
Pipeline [1] 451:9
Piqued [1] 450:12
Place [12] 286:5 291:8 293:10 330:6 350:10 350:12 366:6 369:7 420:5 450:19 473:25 491:7
Placed [1] 459:16
Places [2] 294:5 440:16
Plains [1] 331:8
Plan [36] 341:6 409:6 409:12 409:14 409:15 409:23 410:22 411:2 411:8 412:1 412:15 413:18 413:19 413:22 413:24 414:2 414:14 415:11 415:20 418:1 419:12 420:17 420:21 421:12 421:25 422:14 422:19 422:23 422:24 422:25 424:5 432:9 436:14 442:20 442:23 456:13
Plane [3] 453:10 465:13 466:4
Planned [1] 433:21
Planning [12] 273:7 274:5 275:13 296:4 297:20 299:4 299:6 301:9 329:17 331:12 432:1 433:18
Plans [9] 369:24 410:3 410:7 410:20 413:21 414:22 415:9 418:24 424:23
Plant [27] 281:17 288:15

298:2 328:15 329:1 329:10 330:20 330:22 330:24 331:6 331:7 331:9 332:7 333:6 333:16 334:9 337:21 343:25 374:25 376:5 376:6 376:11 376:12 376:16 389:13 395:13 416:11
Plants [14] 270:22 274:11 281:9 281:13 282:1 296:25 297:6 298:16 299:20 304:2 315:24 332:15 344:17 389:6
Play [3] 279:13 293:6 310:25
Played [1] 283:25
Playing [2] 283:7 308:24
Plots [2] 288:8 288:10
Plotted [1] 288:7
Plus [1] 353:2
PLW-1 [1] 283:5
PM [1] 490:2
Point [16] 301:3 308:22 315:17 323:8 329:11 335:14 348:6 349:7 360:11 362:25 371:13 399:4 440:23 446:7 472:18 485:22
Points [1] 290:23
Policies [7] 279:25 426:23 437:1 438:7 458:2 458:4 458:11
Policy [4] 275:11 275:17 437:23 438:8
Pollution [2] 388:2 388:3
Pool [13] 274:3 278:16 431:9 480:25 481:1 481:3 481:4 481:14 481:17 481:23 484:7 484:9 484:11
Pop [1] 404:13
Portfolio [2] 274:5 274:15
Portfolios [1] 425:4
Portion [12] 271:18 283:10 283:20 285:8 303:4 303:7 303:24 318:5 321:9 330:7 340:22 451:17
Position [16] 272:20 286:9 320:23 347:1 354:23 359:7 407:11 408:13 424:1 425:3 430:20 433:3 439:19 450:8 477:23 481:15
Positions [2] 370:8 412:8
Positive [3] 403:20 456:19 480:18
Possibility [1] 374:10
Possible [3] 362:21 363:1 475:10
Possibly [2] 408:22 425:22
Post [14] 371:11 372:4 372:9 380:21 381:3 381:3 382:6 383:18 429:4 434:24 454:24 455:10 456:18 470:6
Post-cost [1] 383:18
Post-refinancing [4] 371:11 372:9 380:21 382:6
Post-retirement [16] 420:3 429:4 434:24 435:7 435:12 436:9 436:11 454:13 454:15 455:5 455:10 456:2 456:18 461:6 462:11 470:6
Posted [1] 354:16
Potential [3] 336:11 410:11 419:4
Powder [1] 320:4
Power [87] 270:22 273:16 274:3 274:10 274:15 275:12 276:7 278:16 278:23 279:6 279:8 279:14 279:17 279:21 279:23 280:13 280:21 281:9 282:10 283:23 284:2 284:6 285:17 286:10 286:21 287:1 288:15 289:25 290:15 291:6 291:11 293:12 296:25 298:16 299:20 302:23 303:1 304:1 306:5 306:12 306:18 317:24 319:20 323:1 329:1 330:4 330:20 330:22 330:24 330:25 331:4 331:6 331:7 331:9 331:11 332:1 332:16 336:25 339:3 340:16 340:17 340:18 343:25 345:3 345:4 347:5 349:19 349:20 349:24 350:7 350:12 354:11 359:12 376:5 376:6 376:8 376:10 376:11 376:14 376:15 389:5 396:13 416:10 416:11 431:9 484:9 484:18
Power's [1] 396:14
Powering [1] 277:13
Practice [5] 272:25 273:5 351:14 410:5 442:17
Practices [2] 410:9 419:2
Pre [5] 371:8 372:3 372:7 381:3 382:5
Pre-finance [1] 381:3
Pre-refinancing [5] 372:3 382:5 382:18 383:2 383:3
Precipitation [2] 311:20 312:2
Precise [1] 433:19
Preclude [1] 323:11
Predict [1] 316:13
Predicting [4] 310:6 317:4 317:6 317:9
Prefiled [1] 295:5
Prefinancing [2] 380:16 383:19
Prefunding [1] 422:15
Preliminary [2] 271:16 271:19
Premium [7] 286:14 437:25 438:1 438:2 458:15 458:16 458:17
Premiums [9] 285:18 287:15 287:25 291:19 313:24 438:5 462:25 463:1 463:6
Preparation [4] 274:17 297:3 353:19 459:13
Prepare [4] 294:13 301:25 384:20 489:16
Prepared [9] 273:25 295:16 349:7 352:21 356:1 357:10 357:15 413:11 487:7
Preparing [2] 402:6 434:15
Preponderance [1] 486:1
Present [8] 268:2 313:9 313:14 337:18 360:15 376:18 388:8 390:4
Present-value [1] 390:4
Presentation [4] 271:12 337:17 485:5 489:15
Presented [1] 489:12
Presenting [2] 293:22 489:5
Presently [1] 419:6
President [3] 407:12 408:14 416:19
Pressure [2] 309:21 342:13
Presumably [1] 327:15
Pretty [7] 300:17 338:7 338:9 339:14 342:22 344:14 481:8
Prevail [1] 292:25
Prevailing [3] 373:13 373:14 378:23
Previous [5] 287:4 313:25 324:19 435:24 477:2
Previously [7] 370:19 383:16 383:25 409:20 422:13 431:1 476:18
Price [91] 273:23 275:3 277:11 277:17 280:8 280:18 280:20 280:22 282:8 282:16 282:24 283:25 284:5 285:2 285:6 285:12 285:13 286:19 287:20 287:24 289:20 290:4 290:9 290:14 290:17 290:25 291:4 291:18 292:5 294:7 304:14 304:14 306:6 306:7 306:10 306:12 306:17 310:5 311:4 311:9 313:22 314:19 315:14 319:25 321:4 321:9 321:21 321:25 322:1 322:4 322:11 322:18 323:8 324:4 324:8 324:15 324:24 325:2 325:15 333:14 336:20 342:4 342:9 345:20 345:24 345:25 347:22 347:24 348:12 348:22 348:25 349:3 349:3 349:12 349:25 350:1 350:5 350:7 352:17 354:2 354:3 354:16 355:9 360:8 360:10 362:8 362:18 364:9 366:8 388:20 415:5
Priced [5] 287:15 288:1 291:19 350:21 351:2
Prices [130] 274:1 277:15 278:10 279:11 280:6 282:10 282:16 283:2 283:3 283:9 283:17 283:22 284:5 284:13 286:4 286:4 286:6 286:14 286:17 286:21 286:25 287:1 287:14 287:16 287:17 287:25 289:2 289:6 290:2 290:24 291:5 291:16 292:9 292:21 292:22 292:24 293:7 293:8 293:12 293:16 293:17 294:8 302:19 302:22 302:22 303:1 303:1 303:13 304:22 305:2 305:3 305:8 305:10 305:12 306:14 307:10 308:25 309:21 310:6 310:9 310:13 312:15 313:23 314:8 314:11 314:14 314:15 315:1 315:3 315:6 315:7 315:9 315:11 317:4 317:6 317:12 317:12 317:16 318:6 321:18 321:20 325:9 325:11 325:15 341:18 341:21 341:23 341:24 342:14 342:20 342:21 345:19 347:22 348:3 348:7 348:9 348:20 348:24 349:9 349:16 349:17 349:22 350:4 350:7 350:16 353:10 353:12 353:12 353:19 353:21 353:23 354:1 354:8 354:10 354:12 354:21 355:1 355:4 355:5 355:7 355:13 356:7 356:9 356:11 357:3 364:22 364:25 437:16 437:20 482:21
Pricing [7] 279:17 287:7 287:10 308:1 308:17 308:19 318:16
Primarily [15] 277:14 278:14 280:9 301:1 304:20 312:14 315:16 332:9 336:14 440:16 447:7 455:21 457:10 459:13 459:20
Primary [6] 277:3 277:25 302:24 371:19 407:18 435:5
Prime [2] 320:24 378:9
Principal [2] 272:24 389:20
Principle [1] 447:3
Printed [1] 302:7
Printing [2] 459:14 459:14
Prize [1] 286:10
Problem [2] 316:16 316:17
Problems [2] 316:13 316:22
PROCEDURAL [1] 267:23
Procedurally [1] 485:20
Proceeded [1] 326:21
Proceeding [12] 313:13 329:14 329:17 339:16 347:9 355:12 360:20 431:2 440:13 440:25 441:7 476:20
Proceedings [4] 271:1 338:16 370:20 491:6
Proceeds [1] 427:7
Process [10] 301:19 301:19 330:2 330:6 330:10 376:4 432:6 432:7 434:11 465:19
Procure [5] 298:7 301:18 328:13 329:25 341:7
Procurement [2] 274:6 329:13
Producers [2] 273:16 330:4
Product [1] 325:5
Production [4] 277:22 316:9 320:17 416:10
Professional [5] 274:23 370:2 407:24 491:4 491:18
Profit [11] 277:7 277:20 277:24 286:8 288:3 289:21 291:13 291:16 292:3 335:17 339:5
Profitability [1] 276:11
Profitable [1] 277:19
Program [16] 329:13 369:19 369:22 369:25 370:16 377:23 397:10 397:11 400:9 409:11 416:1 416:24 420:1 420:1 427:6 479:22
Programs [11] 290:7 407:21 413:7 413:8 413:9 413:12 413:16 417:23 419:14 424:19 424:21
Project [6] 274:10 314:4 326:7 331:12 362:17 472:22
Projected [10] 290:19 290:22 300:6 300:7 300:10 311:24 325:21 335:19 353:5 445:6
Projecting [2] 285:24 483:25
Projection [6] 305:11 322:17 362:23 364:20 364:24 447:4
Projections [6] 274:9 310:21 312:9 343:10 343:14 414:15
Projects [17] 275:6 296:5 296:5 298:15 300:20 300:22 328:2 328:8 330:4 330:5 330:8 330:8 331:25 332:24 337:6 343:19 472:11
Prominent [2] 283:8 308:24
Promoted [2] 370:12 370:16

Promptly [1] 406:5
Pronounce [1] 368:4
Proof [1] 436:23
Property [5] 437:25 445:21 457:10 457:13 457:14
Proportion [1] 315:12
Proportional [1] 316:8
Proposal [6] 313:10 313:16 313:19 328:25 360:17 360:23
Proposals [1] 275:13
Proposed [9] 269:4 328:25 438:11 445:20 478:10 479:13 486:12 487:9 487:15
Proposes [4] 276:17 313:7 436:20 447:5
Proposing [1] 484:4
Proven [1] 485:25
Provide [22] 277:21 306:24 307:22 373:11 410:14 410:23 412:6 419:5 419:15 419:17 424:7 426:20 440:14 444:16 455:7 461:5 461:11 462:23 466:12 466:18 466:20 466:22
Provided [13] 273:22 295:17 379:18 399:5 399:5 411:3 411:19 414:20 434:10 435:16 440:15 456:3 464:10
Provider [1] 273:7
Provides [4] 273:5 288:20 416:24 420:8
Providing [1] 451:4
Provision [3] 363:20 417:7 422:15
Provisions [1] 350:9
Proxy [2] 433:9 433:23
Prudency [1] 392:14
Prudent [3] 392:17 392:19 396:16
PSC [2] 271:13 305:24
PU-399-01-186 [1] 267:6
Public [12] 267:3 267:17 268:7 268:22 271:8 275:9 275:16 370:22 370:22 408:3 435:17 441:14
Publish [1] 345:2
Published [1] 296:3
Punishable [1] 272:9
Purchase [5] 298:17 329:10 349:10 354:14 484:9
Purchased [7] 319:9 329:4 433:10 433:13 433:16 433:24 484:18
Purchases [3] 277:12 306:18 433:21
Purchasing [2] 324:21 364:1
Pure [1] 317:21
Purpose [15] 276:6 347:12 347:14 370:24 371:1 377:10 409:1 409:3 409:7 431:4 431:6 476:22 476:24 479:8 479:19
Purposes [12] 274:5 294:1 313:12 360:19 375:1 377:13 377:14 377:15 377:15 377:22 406:8 441:6
Put [14] 293:14 298:5 300:11 309:20 326:15 330:6 344:8 377:18 389:12 392:21 413:10 463:1 474:11 475:10
Putting [2] 298:2 298:13

Q

Qualified [2] 415:11 422:14
Quality [1] 424:9
Quantify [4] 443:15 476:24 477:6 479:9
Quantitative [1] 279:16
Quantity [2] 277:7 277:25
Quarter [7] 282:25 289:3 308:19 308:20 354:17 377:24 378:11
Quarters [3] 283:1 400:7 440:12
Questioning [1] 376:1
Questions [58] 293:5 302:21 305:25 318:8 318:10 318:18 323:15 337:12 338:15 341:11 341:12 345:6 346:4 358:2 364:11 364:13 364:16 365:8 365:13 365:14 366:18 374:22 375:18 375:21 382:9 382:11 384:7 392:6 392:13 393:25 394:13 396:21 400:10 405:15 405:16 406:3 417:16 425:10 425:12 426:4 426:9 442:3 446:2 446:10 446:12 449:16 452:16 460:12 460:15 460:23 464:25 468:3 479:4 480:2 480:4 480:6 482:25 483:5
Quick [3] 405:24 406:1 450:10
Quite [10] 285:19 296:24 300:24 306:10 311:13 311:15 312:3 340:3 447:1 457:3
Quoted [2] 360:10 472:6
Quotes [1] 293:20

R

Rabbi [1] 422:17
RAE-1 [3] 413:11 419:11 425:17
Rainfall [1] 312:5
Raise [1] 452:10
Raised [2] 293:5 302:21
Raising [1] 376:2
RAM-3 [4] 477:6 477:13 477:24 480:23
RAM-4 [5] 477:6 477:20 477:21 478:17 483:20
Rancho [1] 272:23
Range [3] 445:13 448:4 455:3
Rapidly [1] 280:9
Rarely [1] 304:21
Rate [34] 275:14 316:1 316:3 338:2 339:16 372:3 372:5 373:9 373:17 378:9 378:12 380:12 380:13 381:17 383:3 383:6 383:9 388:10 388:12 388:19 388:24 389:19 389:21 390:12 409:20 412:23 428:9 428:11 431:19 435:24 442:15 477:22 477:25 478:2
Ratepayer [3] 415:3 428:8 428:13
Ratepayers [8] 330:9 416:25 418:5 418:6 418:10 418:11 418:19 489:18
Rates [21] 276:19 288:16 313:13 360:19 373:13 373:14 378:23 381:9 388:10 390:11 401:12 403:20 410:17 412:20 414:18 415:4 418:2 420:6 424:6 424:14 450:2
Rather [5] 318:24 349:3 350:1 425:9 478:4
Rating [14] 377:14 377:15 377:16 377:22 389:24 394:21 397:9 397:22 398:1 398:2 398:5 398:11 440:8 449:25
Ratings [4] 393:13 393:17 393:18 393:19
Rational [1] 285:14
Rationale [2] 452:2 452:5
Ratios [3] 377:24 377:24 442:19
Reach [5] 278:7 315:6 342:15 342:15 357:7
Reached [10] 282:10 284:18 286:23 287:2 287:5 290:21 305:14 307:25 308:3 356:20
Reaching [1] 287:8
Reacquire [4] 373:19 389:1 390:3 390:10
Reacquired [2] 373:23 380:14
Reacquirement [1] 403:24
Reacquiring [1] 393:2
Reacquisition [5] 373:21 384:2 388:14 396:19 404:6
Reaction [2] 313:16 313:17
Read [5] 338:21 361:20 361:25 380:3 444:15
Reading [2] 309:4 362:19
Ready [2] 346:9 487:14
Real [10] 279:18 301:22 405:24 416:6 416:8 416:24 435:25 438:4 458:14 462:22
Real-life [2] 416:6 416:8
Real-time [1] 279:18
Reality [1] 321:4
Realize [2] 479:18 487:21
Realized [1] 428:6
Realizes [1] 443:16
Really [11] 287:12 300:11 301:12 312:16 340:23 341:13 397:13 416:21 442:25 455:14 458:13
Reason [13] 301:14 303:3 319:22 348:15 393:21 397:15 412:2 412:3 435:5 435:22 445:10 472:3 472:21
Reasonable [8] 292:18 292:20 292:23 322:17 414:23 436:6 438:13 471:24
Reasoning [1] 449:23
Reasons [4] 377:11 417:6 431:16 434:9
Rebound [1] 290:22
Rebounding [1] 353:21
Rebuttal [18] 347:15 347:20 350:18 361:7 396:4 396:5 396:13 409:4 413:1 431:7 431:15 438:17 446:19 477:1 478:5 482:2 485:7 485:10
Receive [1] 413:3
Received [11] 349:1 370:3 378:12 407:25 408:2 408:22 433:20 447:19 469:10 481:18 484:7
Receives [1] 479:20
Receiving [1] 427:12
Recent [16] 279:21 279:24 283:18 287:9 298:20 300:5 304:7 304:8 307:25 308:16 311:21 314:17 315:6 354:13 416:9 447:2
Recently [3] 286:19 314:10 416:18
Recess [11] 346:6 346:7 405:20 406:4 406:6 406:8 460:20 460:22 473:24 474:1 474:3
Recession [1] 296:18
Reclassification [4] 439:12 439:15 459:11 459:19
Recognize [1] 434:3
Recognized [1] 348:13
Recognizes [1] 414:24
Recognizing [1] 423:21
Recommend [1] 375:14
Recommended [1] 462:15
Reconcile [1] 297:9
Reconciliation [1] 298:24
Record [13] 271:2 305:22 346:8 351:8 363:17 385:2 406:9 439:25 475:6 483:13 483:15 489:6 491:7
Recorded [2] 457:12 491:5
Recording [3] 436:8 455:20 488:4
Records [7] 293:11 351:4 351:17 378:18 399:18 440:22 441:13
Recover [1] 393:1
Recovered [3] 424:6 451:3 451:6
Recovery [3] 409:20 431:19 436:3
Recross-examination [8] 269:15 269:25 270:8 270:12 343:6 397:1 429:15 461:1
Recurring [1] 439:16
Redeemed [3] 372:1 372:2 372:21
Redemption [1] 403:24
Redirect [13] 269:14 269:15 269:19 269:25 270:12 270:15 341:14 345:12 365:17 394:15 446:2 452:23 474:7
Reduce [5] 412:4 412:8 412:9 412:17 415:1
Reduced [12] 290:6 291:4 291:18 292:1 379:1 379:6 379:25 410:25 420:6 439:14 442:8 444:13
Reduced-price [1] 291:4
Reduces [3] 456:15 480:20 480:21
Reducing [2] 411:2 482:14
Reduction [3] 381:14 411:25 459:17
Reevaluate [1] 284:12
Refer [3] 406:17 412:11 457:17
Reference [3] 294:10 307:15 361:23
Referenced [1] 371:3

Referred [7] 307:13 326:3 363:13 376:5 401:11 402:5 484:13
Referring [10] 312:13 358:6 361:11 362:15 362:16 376:10 448:16 448:18 450:17 469:14
Refers [2] 403:2 484:12
Refinance [12] 371:5 371:17 373:6 373:20 381:12 381:15 387:17 387:20 388:8 389:3 391:7 396:20
Refinanced [9] 371:6 373:2 383:20 383:22 383:24 386:22 387:15 389:11 391:5
Refinancing [29] 371:2 371:9 371:11 371:20 371:23 372:3 372:5 372:8 372:9 372:15 372:19 372:23 373:1 373:4 373:8 373:15 373:24 374:10 375:14 380:21 382:5 382:6 383:9 383:10 383:12 386:20 389:10 389:15 396:9
Reflect [13] 344:11 344:22 352:20 353:4 353:12 437:17 438:24 439:15 440:18 440:22 456:5 478:10 478:13
Reflected [7] 276:19 291:5 310:3 310:4 441:5 442:10 450:16
Reflecting [1] 423:18
Reflective [5] 314:20 352:16 433:4 437:14 437:19
Reflects [7] 315:1 413:11 436:16 438:12 438:20 439:17 480:11
Reforms [2] 280:4 290:8
Regard [6] 346:14 368:18 430:8 457:8 475:24 485:18
Regarding [7] 269:4 271:9 348:3 406:20 434:7 440:1 445:20
Regardless [2] 333:2 424:11
Regards [1] 417:2
Region [42] 276:15 277:15 278:17 278:21 280:4 280:8 280:16 280:18 281:13 282:12 283:6 287:13 287:18 290:25 291:12 294:5 295:14 296:6 297:6 298:25 300:17 302:23 304:5 304:6 308:23 313:4 317:7 320:16 321:1 321:22 321:24 331:17 332:3 332:4 332:9 333:21 334:1 336:21 339:4 340:8 354:6 416:13
Regional [6] 274:2 280:12 318:17 318:24 319:22 319:23
Regions [11] 274:20 278:16 281:11 282:14 284:11 290:20 303:21 303:23 320:18 336:4 337:7
Registered [2] 491:3 491:18
Regular [3] 301:18 302:6 374:9
Regularly [1] 329:24
Regulate [1] 280:15
Regulation [1] 419:1
Regulations [5] 281:17 281:20 410:8 410:19 411:9
Regulators [1] 338:10
Regulatory [14] 274:21 275:17 280:2 281:16 370:20 377:11 377:13 377:13 377:14 430:23 450:4 473:1 473:6 476:17
Reimburse [1] 451:12
Reimbursement [1] 451:19
Reinbold [26] 268:4 269:13 269:23 271:20 296:16 316:14 316:18 316:21 337:11 337:12 337:15 339:20 339:23 365:6 365:7 367:15 368:8 368:12 368:15 391:11 391:12 391:15 392:1 392:4 426:7 426:8
Reissued [1] 389:10
Relate [5] 295:12 389:5 402:24 459:12 460:3
Related [13] 410:6 433:1 447:7 447:11 447:12 453:19 457:11 459:21 460:4 464:25 469:20 473:5 475:14
Relates [9] 347:17 347:21 386:16 386:23 387:8 391:2 402:4 446:18 455:14
Relation [1] 367:13
Relations [1] 407:22
Relationship [2] 302:21 472:12
Relationships [1] 369:20
Relative [4] 292:8 309:23 314:4 409:11
Relatively [5] 278:18 292:7 310:9 348:21 457:6
Relay [2] 362:22 439:10
Relays [1] 460:8
Relevance [1] 285:23
Relevant [4] 292:25 341:19 345:16 345:19
Reliability [8] 284:13 296:1 297:17 297:18 298:5 298:20 298:23 299:8
Reliance [6] 305:4 314:7 315:10 347:24 351:25 352:7
Relicensing [1] 341:2
Reluctant [1] 281:7
Rely [1] 354:1
Remained [2] 348:16 454:8
Remaining [2] 353:9 414:10
Remind [1] 294:2
Reminder [1] 485:11
Removed [1] 398:24
Renew [1] 485:23
Renewed [1] 458:6
Reoccur [1] 355:2
Repair [1] 281:14
Repairs [1] 281:19
Repay [2] 374:25 397:21
Repeat [1] 379:15
Repeated [1] 289:20
Repeating [1] 382:14
Replace [2] 372:2 413:25
Replaced [5] 371:10 413:20 414:1 414:4 424:22
Replacement [8] 341:3 341:7 413:15 414:21 424:18 424:20 425:8 427:5
Report [37] 267:6 271:11 294:25 295:1 295:2 295:25 296:2 296:6 297:3 297:7 299:6 299:12 299:15 299:17 300:5 301:10 302:9 326:3 326:22 326:23 326:25 327:19 328:10 336:23 337:3 344:9 361:11 379:17 379:17 379:25 395:8 399:4 440:17 459:13 459:14 459:14 462:19
Reported [1] 282:10
Reporter [5] 269:7 487:10 491:1 491:4 491:18
Reports [7] 297:23 298:6 298:7 298:24 300:24 395:9 440:21
Represent [7] 283:14 283:19 350:24 353:6 465:7 472:6 473:10
Representation [1] 288:20
Representative [3] 292:13 349:16 433:11
Represented [1] 371:7
Represents [3] 288:13 354:2 484:7
Request [2] 443:10 485:23
Required [6] 272:7 284:11 284:19 433:6 443:8 478:21
Requirement [4] 320:11 332:10 477:8 478:16
Requirements [5] 330:15 398:6 413:23 455:9 477:4
Requires [1] 274:18
Resale [14] 313:10 319:4 319:10 319:12 322:5 345:17 348:4 348:8 348:11 348:16 360:17 360:18 483:19 483:23
Reserve [11] 290:19 290:20 298:3 300:18 332:10 365:22 431:21 432:4 432:12 432:14 432:25
Reserves [3] 358:25 359:3 359:8
Reservoir [2] 311:12 313:1
Reside [1] 420:7
Resign [1] 424:1
Resist [1] 486:4
Resistance [1] 269:4
Resource [8] 275:13 283:15 315:20 329:17 337:1 408:16 408:17 432:9
Resources [35] 274:14 276:5 283:11 283:12 283:19 287:12 298:2 298:5 298:8 298:13 303:7 304:13 304:19 305:5 323:6 347:6 369:12 370:18 371:15 387:1 391:17 407:12 407:13 407:15 407:17 408:10 408:12 408:12 408:14 409:14 412:14 416:19 430:25 451:7 451:18
Resources' [2] 386:13 387:14
Respect [4] 276:21 355:19 440:21 458:14
Respectively [1] 287:6
Respond [2] 445:18 454:6
Responding [1] 474:10
Response [12] 278:11 279:25 280:1 284:12 285:2 285:3 285:14 295:17 313:15 360:22 427:16 486:3
Responsibilities [5] 273:2 275:10 407:14 409:10 439:21
Responsibility [3] 297:21 407:16 409:13
Responsible [5] 281:4 298:19 330:17 369:17 370:14
Restate [3] 357:12 359:2 360:1
Restated [2] 478:9 478:13
Restructured [1] 273:6
Result [13] 282:3 291:18 305:13 313:21 314:6 319:24 341:19 357:7 412:7 438:21 438:22 441:19 450:1
Resulted [5] 280:9 281:20 283:2 288:2 372:10
Resulting [4] 351:16 353:14 432:12 477:25
Results [11] 352:7 352:17 362:9 431:24 433:5 433:7 454:21 455:25 457:16 478:12 478:24
Retail [2] 432:4 434:5
Retain [3] 349:6 410:14 416:5
Retained [1] 292:7
Retention [1] 417:24
Retire [2] 427:8 429:25
Retired [4] 421:23 422:2 429:21 450:13
Retiree [1] 420:4
Retiree's [1] 414:16
Retirees [2] 427:23 429:20
Retirement [32] 408:18 410:3 410:12 410:20 413:9 413:10 413:12 413:16 413:21 413:22 414:7 414:8 414:22 415:9 416:1 419:4 419:6 419:8 419:12 419:14 424:18 424:20 425:5 426:20 427:4 427:9 429:4 434:24 454:25 455:10 456:18 470:6
Return [10] 275:14 282:13 290:10 311:10 477:22 477:25 478:19 478:20 478:22 479:13
Returned [4] 282:17 289:6 289:8 290:2
Returns [1] 435:23
Reveal [1] 363:20
Revenue [14] 274:9 277:8 286:4 477:4 477:8 478:1 478:3 478:16 478:21 479:10 479:10 482:13 484:7 484:13
Revenues [2] 277:4 348:25
Reverse [2] 488:25 489:3
Review [5] 281:16 392:15 435:19 441:22 457:1
Reviewed [3] 313:3 378:25 434:20
Reviewing [1] 455:25
RFP [1] 301:19
RFPs [5] 301:16 329:24 330:14 344:25 345:3
Richard [4] 270:4 406:14 407:1 407:8
Right-hand [3] 380:25 403:22 404:7
Rigorous [1] 281:16
Risk [14] 277:23 284:10 285:6 285:8 285:9 285:18 287:15 287:25 291:18 313:24 369:24 416:1 437:12 437:24
Risks [1] 281:5
Rita [5] 270:16 475:20 476:4 476:11 480:14
River [3] 313:4 320:4 451:8
RJS [1] 307:3
RJS-10 [1] 299:18

RJS-12 [1] 307:19
RJS-2 [1] 287:16
RJS-3 [1] 288:5
RJS-4 [2] 288:8 288:24
RJS-5 [3] 288:10 288:25 289:12
RJS-6 [1] 290:18
RJS-7 [1] 323:22
RJS-8 [3] 325:24 326:13 327:24
RJS-9 [3] 301:7 328:9 330:13
Robinson [2] 391:22 391:25
Rockies [3] 312:7 312:8 312:12
Roger [4] 269:10 272:2 272:14 272:21
Role [7] 273:2 280:25 283:8 283:25 284:20 293:6 308:24
Roles [1] 279:13
Rolled [1] 345:23
Rolling [1] 317:1
Room [3] 313:9 360:16 376:18
Rose [1] 415:5
Roughly [4] 293:18 297:13 305:15 422:6
Rounded [1] 381:3
Rules [1] 280:15
Run [3] 283:21 287:25 337:21
Run-up [2] 283:21 287:25
Runs [1] 287:10

S

S&P [1] 393:13
Safe [1] 340:10
Safety [3] 281:17 281:20 281:25
Sakakawea [1] 312:25
Salaries [10] 418:14 446:18 446:21 447:9 448:9 452:10 470:18 470:21 474:17 474:19
Salary [15] 410:24 411:1 411:12 425:17 425:22 447:11 447:12 447:18 447:19 448:11 471:1 471:2 471:18 472:19 475:13
Sale [10] 277:9 277:19 347:23 349:22 350:12 350:23 350:25 351:14 355:16 362:3
Sales [68] 276:11 276:18 277:4 277:6 277:7 277:10 277:12 278:1 285:25 286:2 286:4 287:22 288:22 289:13 289:22 291:13 291:17 291:23 291:24 292:2 292:3 292:10 292:18 293:23 303:15 313:7 313:11 319:4 319:10 319:12 320:22 322:4 339:5 347:17 348:4 348:8 348:11 348:15 350:19 350:20 351:2 351:4 352:6 352:11 352:13 352:25 353:18 354:24 355:1 361:9 362:4 362:6 362:6 362:8 362:14 362:23 363:8 433:4 480:25 481:1 481:14 481:17 481:23 483:19 483:22 484:8 484:9 484:11
San [1] 408:20
Satisfactory [2] 464:20 488:25
Saturdays [1] 358:22
Save [5] 375:15 381:16 388:9 388:23 389:18
Saving [1] 390:8
Savings [9] 372:10 381:4 381:7 381:10 381:11 388:13 388:19 425:4 443:16
Saw [5] 317:17 340:20 355:13 454:21 459:1
Scale [2] 413:20 424:22
Scandinavian [1] 368:9
Scenario [1] 363:2
Schedule [25] 300:3 329:19 330:1 330:16 330:18 358:18 361:9 362:13 367:10 380:17 380:23 380:24 385:3 385:18 385:25 386:1 401:18 402:2 402:2 402:4 403:1 403:6 461:3 461:24 464:2
Scheduled [1] 301:18
Schedules [3] 295:4 301:5 385:3
Schiffman [21] 269:10 272:3 272:5 272:14 272:21 273:9 293:2 294:13 294:22 301:25 302:17 305:6 305:25 306:4 318:10 337:13 345:14 346:4 346:5 356:8 356:17
Schiffman's [3] 305:22 355:18 357:1
SCHULZ [1] 268:16
Se [1] 319:15
Season [4] 305:1 348:19 350:13 354:20
Seasoned [1] 416:15
Seasons [1] 432:14
Seated [1] 475:22
Second [10] 271:7 271:14 289:17 300:5 351:2 354:4 386:4 403:14 405:4 434:11
Secretary [4] 369:14 370:17 391:17 391:23
Section [1] 432:8
Sector [1] 273:14
Secured [1] 415:12
Security [14] 409:6 410:9 411:14 411:16 413:17 414:1 414:13 414:13 415:7 419:1 419:12 420:17 436:14 442:20
See [50] 293:17 299:11 299:23 301:15 311:1 312:17 312:18 316:6 321:16 321:18 321:20 331:15 332:23 336:15 336:16 342:20 343:19 349:19 366:5 368:15 377:23 380:20 384:21 384:24 389:9 393:14 397:23 399:11 402:18 403:5 403:7 403:9 403:20 404:10 412:17 447:14 447:20 448:22 455:22 458:7 459:17 462:16 463:6 469:2 472:8 472:12 482:16 484:10 484:11 487:17
Seeing [2] 360:7 469:4
Seek [1] 412:23
Seem [5] 300:24 318:16 471:23 472:2 473:12
Sees [1] 412:1
Segment [1] 283:13
Segments [1] 273:6
Select [1] 330:7
Sell [15] 278:12 304:16 318:2 320:12 331:10 332:1 332:8 332:9 349:20 351:14 354:11 359:12 360:11 397:13 397:19
Sellers [2] 291:7 354:4
Selling [9] 286:10 318:24 319:15 320:20 334:17 334:20 354:9 363:4 365:25
Sells [4] 276:14 278:14 320:8 321:24
Send [2] 453:9 453:14
Senior [3] 274:25 411:12 412:14
Sense [3] 313:17 402:14 462:24
Separate [3] 392:10 393:5 429:5
Separated [1] 415:21
Separately [1] 331:18
Separation [1] 321:17
September [3] 397:18 433:17 437:20
Series [2] 314:19 371:8
Serious [1] 284:19
SERK [1] 336:2
SERPs [2] 410:4 410:13
Serves [1] 442:17
Service [23] 267:3 267:17 268:7 268:22 271:8 275:9 282:5 282:7 282:13 354:5 370:15 370:22 370:23 420:8 429:22 434:18 439:7 439:13 450:24 451:4 451:20 459:20 480:13
Services [6] 273:5 273:8 273:22 275:1 369:17 370:13
Serving [2] 281:4 432:4
Set [5] 330:2 422:20 422:22 466:1 486:5
Setting [3] 304:13 304:14 422:16
Settle [3] 313:10 360:17 486:22
Seven [3] 333:5 358:19 389:23
Several [13] 274:4 276:8 280:21 281:12 282:1 295:4 308:14 310:2 317:1 331:9 370:8 376:3 454:16
Severely [1] 336:25
Shaking [1] 486:18
Share [10] 331:14 376:15 395:13 395:17 421:9 465:7 465:9 466:8 481:11 487:23
Shareholder [2] 428:8 428:13
Shareholders [3] 418:7 418:20 424:6
Shareholders' [1] 424:7
Sharing [1] 419:22
Shed [1] 454:10
Sheet [5] 440:17 440:24 473:2 477:13 477:20
Short [9] 285:9 323:3 369:21 377:25 393:16 432:13 440:12 460:21 474:3
Short-term [16] 285:9 285:10 288:1 377:12 377:17 378:1 393:11 393:16 397:7 398:1 398:10 398:14 398:19 404:18 440:7 440:10
Shortage [2] 316:25 317:17
Shortages [3] 282:3 336:11 343:10
Shorthand [2] 491:6 491:11
Show [17] 295:15 297:24 325:12 325:18 325:23 331:2 331:16 397:6 444:10 449:24 454:7 458:13 461:7 467:2 477:20 478:3 481:21
Showed [3] 379:11 399:6 400:20
Showing [9] 293:1 298:8 305:8 324:3 326:9 356:8 399:24 402:1 477:21
Shown [26] 288:24 289:14 290:20 297:10 297:12 330:25 345:14 351:5 351:16 352:23 353:5 353:16 353:22 355:17 371:8 371:11 371:12 371:24 372:3 372:7 382:6 398:25 402:2 438:8 447:25 478:17
Shows [24] 293:3 299:19 325:23 332:15 349:8 355:23 356:4 356:5 356:15 356:16 372:11 372:16 372:20 379:19 380:24 382:7 384:12 384:13 401:4 401:18 408:25 436:6 478:1 483:21
Shut [1] 360:14
Sick [1] 420:1
Side [8] 299:11 300:7 300:7 336:3 420:19 428:8 428:13 482:4
Side-by-side [1] 300:7
Sides [3] 319:18 489:4 489:16
Significant [18] 276:23 279:24 280:20 281:5 282:8 283:9 284:8 285:5 287:15 303:4 312:5 340:23 373:19 381:9 388:16 415:15 417:3 437:2
Significantly [11] 283:2 289:1 292:13 297:11 352:8 411:19 413:22 415:10 424:23 435:2 437:8
Signing [1] 332:12
Similar [6] 275:1 281:25 304:18 325:4 352:17 353:18
Similarly [5] 303:13 304:3 306:14 323:2 350:2
Simple [3] 277:5 316:2 463:1
Simple-cycle [1] 316:2
Simply [8] 348:15 439:14 448:10 450:24 453:25 456:6 456:15 459:15
Simulation [1] 273:24
Simultaneous [1] 375:8
Simultaneously [1] 279:1
Single [2] 390:1 390:2
SISP [40] 409:6 409:7 409:11 409:18 409:22 410:5 410:13 410:15 410:21 411:23 412:2 412:10 412:12 413:2 413:13 413:24 414:6 414:9 414:17 414:19 414:23 415:8 415:11 415:18 416:4 416:20 416:24 417:5 417:6 417:7 419:13 422:4 422:16 426:18 426:19 429:5 469:20 470:7 479:20 479:22
SISP's [1] 416:16
Site [4] 301:12 302:10 326:19 328:15
Sited [5] 270:22 301:9 326:23 327:14 331:24
Sites [1] 299:4
Siting [1] 299:4

Sitting [1] 320:23
Situation [5] 340:13 375:14 435:8 437:18 437:22
Situations [1] 322:2
Six [2] 358:16 364:8
Six-and-a-half [1] 390:17
Six-month [1] 364:8
Size [1] 278:4
Slide [7] 444:9 444:18 445:4 445:8 445:11 445:15 454:7
Slides [1] 444:14
Slight [4] 336:19 336:20 435:5 454:22
Slightly [3] 287:8 293:18 316:4
Slowly [1] 411:5
Small [10] 306:10 322:20 432:18 444:14 456:21 462:5 468:18 468:19 469:8 469:15
Smaller [3] 286:15 316:9 456:17
Smith [2] 491:3 491:17
Snowpack [2] 318:18 318:19
Snowpacks [1] 312:4
So-called [1] 278:8
Social [9] 410:9 411:14 411:16 413:17 414:1 414:13 414:13 419:1 419:12
Society [1] 408:16
Soft [1] 437:14
Sold [9] 349:24 351:10 351:11 352:14 353:1 359:19 363:12 364:6 364:7
Sole [1] 383:6
Someone [8] 328:12 331:11 366:7 383:8 390:18 416:12 427:8 465:5
Sometimes [3] 278:23 280:9 320:6
Somewhat [3] 300:25 302:17 354:16
Somewhere [1] 367:9
Sorry [10] 295:9 296:11 307:9 338:23 357:13 382:14 426:7 428:2 457:14 463:22
Sort [5] 294:7 333:23 403:21 428:7 453:2
Sought [1] 409:20
Sound [3] 329:7 395:4 405:21
Sounds [5] 376:25 377:2 392:12 398:22 450:14
Source [1] 301:8
Sources [3] 293:8 419:11 481:18
South [1] 331:7
Southeast [1] 304:2
Southerly [1] 279:3
Southwest [1] 278:16
Spark [12] 278:9 288:6 288:9 288:11 288:13 288:15 288:19 288:25 289:1 289:7 289:11 289:15
Specialized [1] 275:15
Specializing [1] 273:4
Specific [11] 316:23 322:10 322:10 322:13 328:7 351:3 351:8 351:11 351:17 451:18 451:23
Specifically [8] 276:9 319:11 376:6 376:10 413:9 422:15 461:16 461:19
Specifics [2] 426:17 428:18
Specifying [1] 450:21
Spent [3] 340:3 340:5 408:4
Spike [3] 317:7 317:15 342:20
Spikes [3] 286:19 289:20 333:14
Spiking [2] 317:4 317:13
Spiky [1] 306:14
Spite [1] 456:10
Spoken [1] 408:17
Sponsoring [1] 477:4
Spot [17] 277:12 277:15 283:3 283:8 284:20 285:6 286:5 286:10 286:14 287:17 292:24 308:25 319:1 319:1 319:6 322:17 332:8
Spouse [1] 427:4
SPP [2] 278:22 290:20
Spread [10] 278:9 288:9 288:11 288:13 288:15 288:19 288:25 289:2 289:7 322:25
Spreads [3] 288:7 289:11 289:16
Spreadsheet [1] 472:2
Spring [1] 342:22
St [8] 279:4 303:20 320:19 321:14 321:19 370:5 370:6 370:7
Stability [8] 287:24 289:25 290:4 290:9 290:10 290:17 311:4 311:9
Stable [5] 290:24 291:15 292:9 342:22 412:20
Staff [23] 268:9 271:9 276:17 313:6 347:16 362:10 392:15 401:4 409:5 431:8 433:3 439:18 440:25 442:8 446:20 447:2 447:5 450:11 477:22 478:3 482:2 486:14 489:5
Staff's [3] 271:13 477:1 477:23
Stage [2] 300:22 301:24
Stages [1] 326:21
Stand [2] 402:18 406:4
Standard [1] 465:18
Standards [1] 285:20
Standby [3] 397:12 397:15 397:21
Standpoint [2] 450:4 452:2
Start [4] 333:1 427:12 454:12 455:23
Started [2] 334:10 335:22
Starting [5] 339:1 339:11 345:15 361:25 489:1
Starts [1] 338:20
State [21] 267:2 267:17 268:7 268:22 272:8 272:19 284:19 311:7 313:6 346:25 357:13 369:6 407:6 408:7 418:24 424:19 430:19 432:6 442:16 476:9 480:12
State's [1] 271:13
Statement [8] 318:4 318:5 350:21 361:6 477:15 477:22 477:25 478:2
States [8] 273:15 276:13 280:1 283:4 304:2 350:18 396:14 473:11
Stating [1] 401:7
Statistician [1] 370:12
Status [2] 423:8 423:10
Stay [3] 355:6 417:10 453:20
Stayed [1] 417:9
Steam [2] 281:14 341:3
Step [2] 284:20 284:21
Stephanie [2] 491:3 491:17
Steps [2] 285:1 298:6
Stick [1] 356:10
Still [19] 313:21 314:5 315:15 317:5 329:8 329:9 329:18 330:12 348:21 362:15 362:24 382:15 396:18 420:5 421:24 424:6 429:25 456:12 468:15
Stipulate [1] 367:4
Stock [2] 425:4 459:21
Stockholders [1] 418:10
Stop [1] 333:2
Stopped [1] 298:13
Story [2] 311:17 311:22
Stranded [1] 281:5
Strategies [2] 284:12 412:16
Streamline [3] 412:5 412:17 415:1
Street [4] 268:17 347:3 430:22 476:12
Strength [4] 378:3 393:15 394:21 449:25
Strengthen [1] 283:19
Strictly [1] 460:19
Strike [1] 457:23
Strikes [1] 338:20
Stringent [2] 281:20 300:18
Strip [1] 324:3
Structure [16] 274:15 275:15 292:8 378:20 379:8 379:11 379:14 379:21 401:19 439:22 440:15 441:3 441:6 441:9 442:10 442:19
Struggling [1] 298:22
Studies [4] 275:16 275:24 435:25 455:8
Study [15] 322:13 325:11 325:18 332:15 435:13 435:15 443:15 455:12 455:14 455:16 455:17 456:1 456:8 456:24 456:25
Stuff [2] 327:15 383:11
Subcontract [2] 439:11 439:12
Subject [2] 329:18 338:17
Submission [1] 457:4
Submitted [2] 330:16 353:17
Subregion [1] 279:3
Subsequent [1] 289:24
Subsequently [1] 408:2
Substantial [2] 458:18 459:2
Substantially [4] 277:17 286:15 350:4 417:4
Substituting [1] 482:20
Subtotal [1] 457:24
Subtracting [1] 482:10
Successful [1] 348:17
Suffice [1] 467:19
Sufficient [3] 277:20 394:19 486:5
Suggest [1] 289:24
Suggested [1] 360:25
Suggesting [2] 418:7 441:19
Suggests [2] 287:14 411:24
Suite [1] 272:22
Summarize [1] 354:23
Summarized [1] 419:10
Summarizes [1] 477:14
Summary [6] 292:12 350:6 400:23 400:25 403:5 477:21
Summer [16] 280:19 281:22 282:9 286:3 287:4 305:1 317:3 342:22 344:10 344:16 348:19 349:22 350:13 354:20 432:14 433:11
Sunday [2] 358:24 362:7
Sundays [1] 358:23
Supervision [1] 446:24
Supplemental [8] 409:6 410:3 413:24 415:25 420:17 426:20 436:14 442:20
Supplied [1] 347:8
Suppliers [2] 280:14 317:25
Supplies [11] 431:11 438:15 438:19 445:21 458:24 460:1 460:3 461:10 462:21 463:22 464:16
Supply [54] 274:5 274:16 274:19 275:13 276:25 278:6 278:7 278:11 279:12 280:10 280:21 280:24 281:10 281:24 282:3 282:15 283:14 283:20 283:23 284:18 285:4 290:6 290:15 290:16 291:9 291:21 291:21 298:7 298:10 300:15 303:16 303:20 314:12 314:13 314:20 315:18 315:18 317:5 319:23 321:7 322:2 322:21 329:13 332:2 332:5 332:19 333:20 341:7 342:6 345:1 355:4 439:7 459:2 464:1
Supply-and-demand [1] 322:2
Support [2] 274:9 461:4
Supported [2] 355:11 477:16
Suppose [2] 453:8 454:1
Surfaced [1] 281:14
Surpluses [3] 297:25 336:6 336:16
Surprise [1] 357:6
Surrebuttal [25] 285:23 295:7 295:10 305:22 309:4 347:12 347:14 358:7 363:13 367:1 368:1 368:4 371:1 371:4 406:18 431:6 436:15 454:14 457:4 457:18 459:1 475:7 477:10 483:10 483:21
Surviving [1] 427:3
SUSAN [1] 268:3
Sustained [3] 284:4 284:22 306:15
Sworn [13] 272:11 272:15 346:17 346:21 368:21 369:2

402:9 406:22 407:2 430:11 430:15 476:1 476:5
Symmetry [1] 413:2
System [6] 289:22 292:2 312:22 322:20 323:2 362:3
Systems [2] 279:3 284:2

T

Table [8] 270:22 296:23 299:10 305:7 323:23 327:25 328:8 331:19
Tail [9] 328:23 331:7 376:8 376:10 376:11 376:14 395:15 395:19 396:12
Tail's [1] 395:13
Talents [1] 418:23
Talks [1] 469:15
Target [3] 290:7 298:3 414:3
Targeted [2] 274:16 297:8
Targets [1] 300:19
Tariff [1] 450:20
Tax [7] 390:21 390:22 452:7 478:13 480:10 480:11 482:15
Taxable [1] 390:24
Taxes [8] 452:12 478:7 478:9 478:12 478:14 480:12 482:11 482:14
Techniques [1] 432:7
Technologies [4] 304:18 316:6 412:18 415:2
Technology [2] 316:1 344:21
Telephone [1] 460:7
Temperature [1] 344:19
Temperatures [1] 432:15
Temporal [1] 280:13
Temporary [1] 472:22
Ten [4] 317:13 361:7 464:3 467:5
Tend [3] 304:17 344:12 405:5
Tender [1] 390:7
Tends [1] 278:20
Term [27] 285:9 289:24 337:1 358:11 358:11 363:5 371:14 373:22 376:19 377:19 378:1 378:2 387:7 393:16 394:18 395:1 395:3 398:14 398:16 398:17 400:7 440:1 440:4 440:6 440:11 441:8 449:22
Terms [24] 277:5 310:12 311:19 311:19 315:17 319:6 319:17 323:8 324:13 324:17 325:5 325:13 332:19 335:2 336:9 336:19 337:5 339:16 340:14 340:15 342:24 344:14 345:2 383:4
Territory [1] 429:23
Terrorist [1] 437:21
Terry [4] 269:16 346:11 346:20 347:2
Test [2] 480:23 481:21
Testified [19] 272:16 341:18 342:12 345:16 346:22 356:17 356:24 365:19 367:12 369:3 370:19 370:21 392:19 407:3 430:16 440:1 441:11 461:4 476:6
Testify [2] 295:3 401:17
Testifying [3] 272:6 276:1 276:3
Testimony [102] 276:6 285:23 286:1 295:6 305:23 306:5 307:13 307:14 308:13 309:5 310:19 311:8 313:5 313:25 314:18 318:4 318:14 325:22 335:11 337:19 338:18 338:19 347:9 347:13 347:14 347:16 347:19 347:20 349:14 350:18 352:4 352:20 353:17 354:19 355:19 358:7 361:7 361:23 363:14 367:2 367:25 370:24 371:1 371:4 374:4 375:13 376:7 379:4 380:3 382:1 382:16 385:13 396:3 396:4 396:6 396:13 406:9 406:17 406:18 408:25 409:1 409:3 409:4 409:9 409:17 411:21 413:1 417:25 425:16 431:2 431:4 431:6 431:8 431:16 434:16 435:4 435:21 436:15 436:17 437:4 438:18 438:22 440:5 446:19 454:14 456:24 457:4 457:18 469:12 471:19 475:6 476:19 476:22 476:24 477:1 478:6 478:25 479:8 481:5 483:9 483:10 483:21
Texas [3] 334:4 334:7 334:17
That'll [2] 315:14 487:19
Thayer [1] 268:13
Themselves [2] 297:17 345:19
Theory [1] 416:6
Therefore [7] 360:10 375:9 410:16 411:2 437:2 437:5 447:5
Thermal [1] 316:7
They've [9] 296:4 316:3 320:5 320:10 320:11 344:10 462:15 463:15 463:16
Thinking [7] 321:23 322:7 331:5 331:7 331:8 333:9 336:9
Third [6] 271:15 327:22 411:4 427:20 428:5 457:22
Thomas [2] 370:6 370:7
Threatened [1] 340:19
Three [33] 297:24 299:10 299:19 311:18 313:12 313:20 326:6 326:14 334:10 336:3 341:4 360:18 360:24 361:1 372:16 380:23 382:4 382:16 384:12 384:12 396:5 403:10 405:18 413:21 420:24 448:3 454:8 484:5 487:10 487:11 487:14 488:10 489:24
Three-and-a-half [2] 448:4 471:22
Three-page [1] 367:10
Three-year [2] 360:24 484:5
Throughout [11] 276:24 283:3 284:9 284:24 288:3 289:16 309:14 348:7 364:5 377:12 407:17
Timing [2] 340:24 374:21
Title [1] 403:21
Titled [1] 444:20
Titles [1] 462:1
TLB-3 [3] 351:17 352:19 353:16
TLB-4 [1] 349:8
TLB-5 [4] 352:23 355:17 356:16 363:11
TLB-6 [1] 353:24
Today [24] 272:6 324:21 347:13 360:6 366:6 370:25 390:18 390:19 397:17 406:20 409:2 431:5 437:8 438:5 438:10 438:13 442:12 458:20 460:6 476:23 486:8 487:13 488:7 488:11
Today's [1] 414:20
Together [5] 344:9 401:19 414:22 474:12 488:4
TONY [1] 268:4
Took [11] 285:7 293:7 302:6 356:7 398:19 406:9 441:1 456:7 458:17 481:5 481:10
Tools [1] 432:6
Top [3] 403:1 444:20 466:10
Total [42] 321:13 344:1 350:20 351:16 352:12 353:14 362:4 362:7 372:12 372:16 372:22 373:7 373:9 382:3 382:7 388:18 389:2 404:4 407:19 418:14 418:18 420:21 420:22 421:11 421:11 421:18 422:3 422:10 446:23 446:25 447:17 453:15 456:12 463:2 470:8 470:11 470:14 470:23 477:17 481:1 481:11 481:13
Totally [1] 422:22
Touched [1] 359:10
Toward [6] 278:21 279:2 279:4 280:5 292:12 311:8
Towards [1] 320:16
Towers [5] 435:14 455:7 455:12 462:15 462:17
Track [4] 289:16 392:12 392:12 453:3
Tracked [1] 289:9
Trade [3] 278:19 320:13 359:16
Traded [2] 292:22 306:9
Trading [1] 294:2
Traditional [1] 298:1
Training [1] 407:21
Transaction [2] 277:24 323:1
Transactions [10] 288:2 291:20 293:11 294:7 319:18 323:7 323:12 350:3 354:3 459:22
Transcript [6] 267:10 487:6 487:13 487:16 488:10 491:11
Transfer [1] 459:21
Transition [1] 280:5
Translates [1] 433:24
Transmission [10] 278:24 280:3 296:4 299:6 301:9 320:24 321:11 321:15 323:11 446:23
Travel [3] 443:8 443:11 443:13
Treasurer [4] 369:13 370:17 391:16 391:23
Treasury [3] 369:17 370:13 370:14
Treated [1] 424:12
Treatment [1] 431:13
Trends [1] 279:13
Tricky [1] 304:11
Tried [1] 297:8
Trip [3] 443:9 453:6 453:7
Triple [2] 390:15 390:19
Trouble [2] 273:11 335:10
True [17] 294:16 300:16 300:17 302:3 309:14 309:19 309:24 311:11 321:10 343:25 357:11 357:15 359:25 376:22 424:4 453:17 454:4
Trust [4] 415:21 415:23 422:17 426:22
Trust-owned [1] 426:22
Try [4] 323:5 329:25 330:6 386:19
Trying [8] 329:2 329:11 330:3 335:14 362:25 363:18 389:3 420:2
Tuesday [3] 271:3 487:3 490:2
Turbines [1] 360:9
Turn [2] 304:1 338:18
Turned [1] 435:8
Turning [1] 305:6
Twice [2] 297:13 317:14
Two [56] 283:1 289:6 289:7 293:11 295:1 298:24 299:22 300:24 305:10 307:13 313:25 314:19 322:24 328:22 336:2 340:5 341:4 341:13 357:6 358:6 359:23 360:4 360:8 363:13 365:16 372:11 382:4 382:25 385:3 385:3 385:19 385:19 385:23 385:23 386:1 386:1 389:15 392:10 401:18 402:3 402:3 402:4 403:6 403:11 434:9 447:15 452:22 455:23 464:15 468:20 473:21 478:1 483:8 483:20 487:14 487:15
Two-and-a-half [1] 420:24
Two-page [1] 295:1
Type [13] 285:13 301:10 311:23 319:2 321:17 322:17 329:22 329:23 332:6 414:20 424:10 457:22 473:2
Types [5] 342:5 410:7 418:24 454:19 472:20
Typewritten [1] 491:10
Typically [11] 333:2 342:21 351:11 354:7 404:18 440:11 440:12 440:20 455:3 457:7 471:2

U

U.S. [10] 279:23 283:23 284:1 284:3 290:9 290:12 309:18 311:9 312:14 408:5
Ultimately [1] 321:8
Unaware [2] 361:8 362:13
Uncertain [1] 281:2
Uncertainties [3] 285:3 285:14 333:20
Uncertainty [8] 281:3 287:1 300:13 300:21 332:17 332:19 332:23 342:23
Unconvinced [1] 454:9
UND [2] 408:1 408:3
Under [36] 286:11 296:5 297:1 298:9 298:14 299:1 324:13 324:16 326:5 327:16 328:3 329:25 330:17 333:1 334:3 335:20 337:6 356:1 364:7 365:22 371:8 371:11 398:12 401:4 414:9 415:18 449:9 455:3 455:16 468:11 469:1 478:17 483:18 483:19 483:20 484:18
Undergone [1] 279:24
Underlying [4] 274:9 282:22 285:18 308:21

Understood [3] 315:5 363:3 398:21
Underwriters' [2] 403:23 404:5
Unfortunately [1] 396:17
Uniformly [1] 419:24
Unit [5] 316:3 344:2 351:11 351:13 351:15
United [4] 273:15 276:13 283:4 304:2
Units [8] 277:14 277:18 316:4 335:23 335:23 344:13 344:23 362:5
University [4] 275:22 275:24 370:5 370:7
Unless [4] 298:13 374:4 405:23 417:9
Unprecedented [3] 281:21 282:24 308:18
Unreasonably [1] 395:24
Unsited [7] 299:22 299:25 300:1 301:5 326:25 328:11 331:24
Up [48] 283:21 287:25 297:9 310:6 312:19 314:1 315:20 317:4 319:25 320:16 321:5 327:3 327:23 328:1 330:2 331:13 331:21 345:18 348:16 367:25 393:20 398:12 401:19 402:10 403:20 404:12 405:6 406:16 410:24 413:19 424:8 424:21 425:3 428:20 444:10 446:24 447:9 447:16 450:11 455:2 455:4 459:4 462:6 463:2 463:7 481:2 482:6 487:22
Upcoming [1] 350:13
Update [3] 305:17 433:2 436:16
Updated [5] 293:23 352:19 352:22 384:17 384:19
Upper [9] 278:14 278:19 279:2 281:13 282:3 331:10 333:9 334:14 403:22
Upside [1] 285:12
Upward [5] 290:13 309:20 342:12 364:25 470:14
Usable [1] 343:17
Uses [8] 292:19 361:9 362:13 362:21 455:6 466:7 466:18 467:10
Utilities [44] 267:5 268:16 268:19 273:15 273:17 276:4 281:1 284:16 297:25 298:12 300:19 331:5 347:6 374:16 374:16 375:4 375:7 375:11 386:2 386:16 387:7 387:9 391:2 401:6 410:6 415:15 421:6 421:12 430:24 443:3 443:20 447:20 449:9 449:11 465:3 465:12 465:13 465:15 465:25 466:18 467:3 467:5 476:15 476:16
Utilities' [7] 386:12 387:11 387:16 388:6 466:8 479:11 479:12
Utility [22] 271:10 275:16 281:6 322:19 330:7 338:8 386:24 409:24 410:1 420:6 420:8 420:9 420:12 420:18 427:20 429:25 450:14 450:17 451:19 451:24 454:18 456:4
Utilize [1] 467:5

V

Vacations [1] 419:25
Valuation [2] 274:6 275:4
Value [3] 390:4 417:24 426:24
Variable [1] 473:13
Varied [3] 280:4 280:8 286:22
Varies [1] 304:25
Variety [1] 275:5
Various [15] 301:16 330:14 349:9 364:5 369:23 370:7 374:17 380:15 397:12 410:8 410:18 418:25 423:8 462:7 465:18
Vary [2] 277:16 278:10
Version [2] 468:19 488:13
Versions [1] 488:12
Versus [5] 382:5 383:2 414:16 434:17 472:10
Vested [4] 417:8 417:11 417:20 421:21
Vesting [1] 417:7
Viable [3] 375:16 378:8 416:3
Vice [3] 407:12 408:13 416:19
View [6] 293:23 300:25 318:17 322:16 336:13 337:5
Viewed [1] 326:16
Vigorously [1] 486:19
Vintage [1] 375:10
Visible [1] 437:5
Vision [2] 412:15 414:25
Visionary [1] 409:23
Volatility [18] 280:7 280:8 280:12 280:18 280:20 280:22 282:9 282:16 285:13 285:16 290:14 291:1 291:4 291:18 292:5 313:22 314:2 314:16
VOLUME [1] 267:12
Volumes [6] 292:2 306:9 353:1 353:3 362:24 363:8

W

Wage [3] 411:7 411:16 411:18
Wages [1] 417:4
Wait [1] 327:2
Waiting [1] 446:9
Walking [1] 406:16
Wants [1] 462:7
WAPA [1] 312:16
WAPA's [1] 312:9
Warren [2] 391:22 391:25
Washington [2] 312:19 453:9
Water [5] 272:24 273:5 273:8 274:14 312:25
Ways [1] 276:23
Weather [2] 279:11 341:21
Web [1] 302:10
Week [8] 358:20 364:24 457:3 487:1 487:2 487:4 487:13 488:10
Weeks [8] 328:22 487:10 487:11 487:14 487:15 488:6 488:10 488:11
Wefald [101] 268:3 269:13 269:18 269:22 269:24 270:3 270:7 270:11 270:13 270:18 300:14 323:15 323:16 323:18 323:23 324:1 326:1 328:21 335:7 335:9 335:12 337:8 337:11 364:16 364:19 365:3 365:6 384:7 384:10 384:22 385:7 385:15 385:20 385:23 386:6 386:9 386:10 387:6 391:9 391:11 394:1 394:3 394:5 394:10 394:13 400:14 400:15 400:17 401:2 401:25 402:23 403:3 403:7 403:12 404:10 404:14 404:20 405:8 405:12 426:3 426:4 428:23 428:24 429:2 429:7 446:5 446:14 446:15 446:17 449:15 449:18 463:9 463:18 468:4 468:5 468:7 468:17 468:25 471:10 471:13 471:15 475:9 475:13 475:17 480:7 480:9 481:16 482:23 482:25 483:15 483:17 483:18 484:22 484:25 486:15 486:20 487:19 487:24 489:10 489:11 489:24
Weight [1] 291:8
Welcome [1] 457:2
Well-coordinated [1] 337:17
Well-known [1] 310:2
West [3] 311:13 311:25 312:1
Western [10] 278:21 283:23 284:4 290:9 290:12 311:9 311:11 312:14 320:15 321:1
Wet [2] 290:11 311:10
Wet-year [1] 290:11
What'll [1] 393:15
Whereas [2] 415:20 472:1
Whole [8] 299:14 316:24 338:7 340:13 358:20 391:3 458:3 489:21
Wholesale [39] 273:23 276:7 276:23 278:9 278:15 279:6 279:8 279:14 279:23 280:6 282:10 286:21 287:1 287:16 289:25 290:5 290:24 291:11 291:19 303:13 306:5 306:12 308:15 339:3 347:17 347:22 348:1 350:7 352:2 352:4 352:6 352:10 352:13 354:24 355:1 355:16 359:12 359:22 360:2
Widely [1] 294:10
Widespread [1] 338:9
Wild [1] 340:11
Wilkinson [3] 282:21 290:1 310:16
Wilkinson's [1] 283:5
WILLIAM [2] 268:6 268:11
Willing [5] 318:2 354:3 354:4 367:4 474:11
Williston [1] 451:9
Wind [6] 343:20 343:22 343:23 344:5 344:10 344:11
Winning [1] 301:23
Winter [10] 286:20 286:21 286:24 287:8 292:6 305:1 308:1 311:17 342:19 342:25
Winterset [2] 327:4 327:5
Wisconsin [7] 275:10 275:14 275:22 275:25 279:2 303:20 320:19
Wisconsin-Madison [2] 275:22 275:25
Wished [1] 417:10
Wishing [1] 366:7
Witness [56] 271:14 271:15 272:1 272:11 273:13 276:17 307:9 307:21 308:11 313:6 316:22 323:24 346:10 346:16 346:17 347:16 361:15 361:17 365:8 366:20 367:21 368:10 368:14 368:20 368:21 392:16 396:8 401:17 401:23 406:21 406:22 428:2 430:5 430:10 430:11 431:8 440:25 442:8 444:25 446:8 452:17 452:20 458:1 462:3 462:18 464:7 467:18 473:20 475:12 475:16 475:19 475:20 475:25 476:1 477:11 481:9
Witnessed [2] 280:12 282:25
Witnesses [7] 269:9 272:5 355:12 405:18 477:2 477:16 483:10
Witnesses' [1] 337:17
Wonderful [1] 418:17
Wondering [3] 318:20 367:3 471:24
Word [5] 338:19 339:11 362:22 399:10 457:24
Words [8] 356:14 360:3 361:3 393:11 428:12 452:8 456:13 488:6
Works [4] 323:4 401:19 488:8 488:16
World [2] 284:9 440:8
Worry [1] 338:2
Worth [1] 459:10
Wrapped [1] 345:18
Written [2] 374:4 408:25
Wyoming [2] 320:4 370:22

X

Xcel [11] 301:17 325:22 325:24 327:21 328:17 329:4 329:5 329:9 329:12 330:14 331:11

Y

Year [58] 271:7 271:10 274:12 276:21 276:24 279:7 279:7 282:20 284:24 286:7 290:11 311:15 311:15 312:5 317:15 333:14 333:15 342:25 343:16 353:22 359:23 360:4 360:24 361:2 365:23 377:12 377:24 381:11 389:1 389:3 389:19 390:9 390:10 395:8 400:5 413:3 422:7 422:9 423:2 423:5 423:12 437:2 437:13 440:21 441:13 443:23 458:5 458:8 470:22 471:3 471:25 472:4 472:8 472:8 478:23 480:23 481:21 484:5
Year-and-a-half [1] 333:15
Year-end [1] 377:24
Years [56] 272:9 273:25 276:8 279:22 279:24 283:18 289:24 291:1 293:11 297:19 297:24 298:21 303:5 303:9 304:7 304:8 310:2 313:12 313:21 313:25 314:17 331:4 332:22 333:5 333:18 334:10 336:3 336:10 336:11 341:4 355:14 360:19 361:1 389:1 408:5 408:6 408:7 408:8 408:9 410:2 410:3 411:17 412:24 414:9 414:12 414:16 417:3 427:5 427:9 427:9 427:11 427:14 435:24 437:16 447:2 450:20
Yesterday [11] 271:12

300:14 310:18 325:9 360:16 367:3 367:18 375:25 386:13 400:22 454:7

Yield [1] 392:24

York [1] 453:10

Young [1] 416:10

Yourself [1] 463:20

Yucca [2] 340:12 341:1

Z

Zinfandel [1] 272:22

STATE OF NORTH DAKOTA

PUBLIC SERVICE COMMISSION

Montana-Dakota Utilities Co.	:	Case No.
2000 Electric Operations	:	PU-399-01-186
Annual Report	:	

TRANSCRIPT OF

HEARING

VOLUME I

Taken At
State Capitol
Public Service Commission
Bismarck, North Dakota
February 25, 2002

BEFORE ALLEN C. HOBERG
-- PROCEDURAL HEARING OFFICER --

MAR 13 2002
PSC NORTH DAKOTA
RECEIVED
DOCUMENT CONTROL

CONTENTS

	Page No.
Opening discussion	6
Opening statements by the Commissioners	9
Summary of the application by Mr. Hoberg	10
Opening statement by Mr. Binek	15
Commission staff rests	138
Opening statement by Mr. Pearce	139
WITNESSES:	
Mike Diller	
Direct examination by Mr. Binek	17
Cross-examination by Mr. Pearce	50
Examination by Commissioner Wefald	61
Examination by Commissioner Reinbold	73
Examination by Commissioner Clark	75
Further examination by Commissioner Wefald	78
Further examination by Commissioner Clark	80
Redirect examination by Mr. Binek	81
Examination by Mr. Fahn	83
Recross-examination by Mr. Pearce	84
Further examination by Commissioner Clark	85
Redirect examination by Mr. Binek	87
Charles W. King	
Direct examination by Mr. Binek	89
Cross-examination by Mr. Pearce	119
Examination by Commissioner Wefald	129
Examination by Commissioner Reinbold	135
Redirect examination by Mr. Binek	136
Examination by Mr. Fahn	138
C. Wayne Fox	
Direct examination by Mr. Pearce	141
Examination by Mr. Fahn	146
Examination by Commissioner Reinbold	149

APPEARANCES

COMMISSIONERS PRESENT:

COMMISSIONER SUSAN E. WEFALD
COMMISSIONER LEO M. REINBOLD
COMMISSIONER TONY CLARK

MR. WILLIAM W. BINEK
Public Service Commission
State Capitol
600 East Boulevard Avenue
Bismarck, North Dakota 58505-0480

FOR THE COMMISSION STAFF.

MR. WILLIAM P. PEARCE of
Pearce & Durick
Attorneys at Law
314 East Thayer Avenue
P.O. Box 400
Bismarck, North Dakota 58502-0400

-- and --

MR. DOUGLAS W. SCHULZ of
Montana-Dakota Utilities Co.
Attorney at Law
400 North Fourth Street
Bismarck, North Dakota 58502-4092

FOR MONTANA-DAKOTA UTILITIES CO.

MR. PATRICK FAHN
Public Service Commission
State Capitol
600 East Boulevard Avenue
Bismarck, North Dakota 58505-0480

COMMISSION ADVISOR.

CONTENTS (Continued)

J. Stephen Gaske	
Direct examination by Mr. Pearce	151
Cross-examination by Mr. Binek	196
Examination by Commissioner Wefald	225
Examination by Commissioner Clark	234
Redirect examination by Mr. Pearce	237
Recross-examination by Mr. Binek	239
Paul L. Wilkinson	
Direct examination by Mr. Pearce	241
Cross-examination by Mr. Binek	256
Examination by Mr. Fahn	260
Examination by Commissioner Wefald	261
Examination by Commissioner Reinbold	264

EXHIBITS:

No.	Description	M	O	R
1	Direct testimony of Mike Diller	6	19	19
2	Rebuttal testimony of Mike Diller	6	19	19
3	PSC staff Power Point presentation	6	19	19
4	Direct testimony of Charles W. King	6	91	91
5	Rebuttal testimony of Charles W. King	6	91	91
6	MDU's witnesses' direct testimony	6	153	153
7	MDU's witnesses' surrebuttal testimony	6	153	153
8	MDU's Request No. 5 for information from Charles King	6	153	153

C O N T E N T S (Continued)

EXHIBITS:

No.	Description	M	O	R
9	Table 1, Prices and Intercontinental Exchange	6	294	294
10	MDU's Pool Sales Calculation	6	357	357
11	Reliability Assessment, 2001-2010	64	72	73
12	Selected gas utilities companies data for most recent calendar year	106	107	107
13	MAPP 2001 update to the 2000 regional plan	195	302	302
14	Public Utilities Reports, Advance Sheets	218	219	220

(The following proceedings were had and made of record herein, commencing at 9:02 a.m., Monday, the 25th day of February, 2002:)

(Exhibits 1 through 10 were marked for identification.)

MR. HOBERG: Okay. Let the record show it's approximately nine a.m. on the 25th day of February in the year 2002. This is the time and place scheduled in the Public Service Commission hearing room in the State Capitol in Bismarck, North Dakota, for the hearing in the matter of the North Dakota Public Service Commission staff complaint regarding Montana-Dakota Utilities Company in its year 2000 electric operations annual report.

In November of last year the Office of Administrative Hearings received a request from the Public Service Commission to provide an administrative law judge to preside in this matter. My name is Allen Hoberg. I've been duly designated by the Commission to serve as procedural hearing officer today.

We'll start with the parties giving their appearances for the record, beginning with the complainant, PSC, and followed by the respondent.

Mr. Binek, please, if you'd tell us -- if you'd make your appearance and tell us who you have with you, please.

THE WITNESS: My name is William Binek. I'm chief counsel for the Public Service Commission, and I am appearing today as advocacy -- as counsel for the advocacy staff in this proceeding. With me is Mike Diller, who is the Commission's chief accountant or director of accounting, and Mr. Charles King right in the table behind me, who is the Commission's cost-of-capital expert witness.

MR. HOBERG: Thank you. Will Mr. Fahn be participating?

MR. BINEK: Oh, Jerry Lein is also on the staff side. Mr. Fahn is a Commission advisor.

MR. HOBERG: Okay. Thank you, Mr. Binek. Mr. Pearce, are you handling the matter this morning?

MR. PEARCE: Yes, I am. William Pearce of Pearce & Durick in Bismarck appearing on behalf of Montana-Dakota Utilities Company. Also appearing -- well, at the counsel table with me is Mr. Donald Ball, MDU's director of regulatory affairs. Mr. Douglas Schulz is also appearing with

me, MDU's legal staff, and with him is Rita Mulkern of MDU, and also at the table with Mr. Ball and myself is Mr. Terry Blinsky, one of our witnesses, and we have four, five other of our witnesses who are in the room. I believe all of our witnesses are here.

MR. HOBERG: Okay. And you've indicated that you have about nine witnesses?

MR. PEARCE: I think we have nine altogether. That's right.

MR. HOBERG: Thank you, Mr. Pearce. I don't believe there are any intervenors in this matter today. Are you aware of any intervenors, Mr. Binek?

MR. BINEK: No.

MR. HOBERG: Mr. Pearce?

MR. PEARCE: No.

MR. HOBERG: Is there anyone else who wishes to participate in this hearing today in any capacity? Anyone else present?

All right. And, of course, we have today also members of the Public Service Commission, to my left Commissioner Leo Reinbold, Commission President Susan Wefald, and Commissioner Tony Clark; and beginning with Commissioner Wefald, who

9

has the electric portfolio, I'll now ask the commissioners for their opening comments. Commissioner Wefald, please.

COMMISSIONER WEFALD: Good morning. I know that this is a very important case to everyone in this room. A lot of work has gone into it by all of the parties as evidenced by the testimony that has been presented to the Commission ahead of time for us to read and to go over. I know that this -- there's important issues involved in this case, for example, the wholesale power sales that are involved in it, and I'm looking forward to a good hearing. Thank you.

MR. HOBERG: Thank you, Commissioner Wefald. Commissioner Reinbold, please.

COMMISSIONER REINBOLD: Good to see everyone here. It's a hearing and I'm here to hear what you have to say. Not many people are interested in what I have to say, so let's move on and get started.

MR. HOBERG: Thank you, Commissioner. Commissioner Clark, please.

COMMISSIONER CLARK: Certainly very interesting and important case. Enjoyed reading through the submitted written testimony and look

10

forward to a good hearing today. On a personal note I would add it seems like all we've been doing lately are telephone hearings, which is my portfolio, which means I usually get to ask questions first, but I get to ask questions last so I get to depend on the other Commissioners now to do all the heavy lifting for me, so that feels good.

MR. HOBERG: Thank you, Commissioner Clark. And our court reporter is Stephanie Smith today.

Just a brief summary of the application before we get going. On September 7th the North Dakota Public Service Commission received a complaint from its staff alleging that Montana-Dakota Utilities is recovering more revenue than necessary to earn a reasonable return on its investment in North Dakota to provide electric utility service.

On September 19th of 2001 the Commission found that the staff complaint stated a prima facie case and that the complaint should be served on MDU. The staff complaint was served on MDU on September 20th.

On October 9th MDU filed an answer

11

admitting some of the allegations of the complaint, denying others, and asking that the complaint be dismissed.

On November 21st the Commission served its notice of hearing, notice of public input sessions and notice of intervention deadline. Public input sessions were scheduled for December 11th and held. The public or formal hearing was scheduled for today.

The issues for this matter as stated in the notice of hearing are as follows: What is the value of MDU's property, useful -- used and useful, for the service and convenience of the public in North Dakota?

What is MDU's rate of return on its property, used and useful, for the service and convenience in North Dakota?

What is a just and reasonable rate of return on MDU's property, used and useful, for the service and convenience of the public in North Dakota?

What rates and charges are necessary to provide a just and reasonable rate of return on MDU's property, used and useful, for the service and convenience of the public in North Dakota?

12

Are MDU's rate schedules designed in such a manner that they result in a basis of charge to its customers that is just and reasonable without discrimination?

And, finally, any other relevant information or proposals concerning the proceeding.

The burden of proof today is on the complainant, the PSC staff, to show by the preponderance or the greater weight of the evidence that in the public interest MDU's electric service rate should be changed to reduce annual revenue by 9.155 million, or to show that other administrative action as a result of the staff complaint is appropriate.

The parties have agreed to a procedural schedule for this hearing and have prefiled direct, rebuttal and surrebuttal testimony. Here is the hearing procedure that'll be followed today in light of that procedural schedule.

We'll start with the complainant, the PSC staff, who indicates that they will present two witnesses in this matter, Mr. Mike Diller and Mr. Charles King. Both of them have already filed direct and rebuttal testimony. So the staff will call them to respond to MDU's -- primarily to

13

respond to MDU's prefiled surrebuttal testimony.
Following the questions by Mr. Binek of each of those witnesses, they will be subject to cross-examination by MDU, if it desires; and thereafter the members of the Public Service Commission may ask questions. Following Commission questions I will allow such further questions of the witnesses as are necessary.
Then following the complainant's presentation of its two witnesses, I'll call on MDU to present its case and further answer to the complaint. MDU has already filed the direct testimony of six witnesses, Mr. Fox, Mr. Gaske, Mr. Blinsky, Mr. Gress, Mr. Ball and Ms. Mulkern. It has also prefiled in response to Mr. Diller's rebuttal testimony the surrebuttal testimony of eight witnesses, Mr. Gaske, Mr. Mahowald, Mr. Wilkinson, Mr. Schiffman, Mr. Blinsky, Mr. Espeland, Mr. Ball and Ms. Mulkern.
Mr. Pearce has indicated that he will call nine witnesses today to provide further testimony, and it will be essentially the same procedure there. Mr. Pearce will have some questions for them on direct, Mr. Binek may have some questions for them on cross-examination, then the Commission

14

may have some questions, then I'll allow such further questions as are necessary of the witnesses.
As I've indicated, there's been a lot of prefiled testimony. If there's documentation that's introduced today besides that that's already marked and distributed, we'll need seven copies for the record.
No decision is being reached on this matter today. The proceedings are being transcribed and tape-recorded and will be reviewed by the Commission later. The Commission will then issue its findings of fact, conclusions of law and order in regard to the complaint, and anyone who doesn't agree with the final -- I should say any party who doesn't agree with the final decision of the Commission may have appeal rights or other rights under Chapter 28-32, the Administrative Agencies Practices Act or under the practices and procedural rules of the Commission, Article 69-02 of the North Dakota Administrative Code.
Expense of transcribing these proceedings, if necessary, will be borne by the party appealing the decision.
Are there any questions about the

15

procedures today? Mr. Binek?
MR. BINEK: No.
MR. HOBERG: Mr. Pearce?
MR. PEARCE: No.
MR. HOBERG: Commission members, any questions?
COMMISSIONER WEFALD: No.
MR. HOBERG: Okay. Mr. Binek, did you wish to begin with an opening statement?
MR. BINEK: I don't believe it would be necessary to have an opening statement. The way we intend to proceed is a little bit different in this case because this case is a little bit different.
A great deal of the testimony -- the basis for the cases are -- on both sides are laid out in the rebuttal and from the MDU standpoint the surrebuttal testimony that was just filed a few days ago and was filed in accordance with the procedure that was set up, but the staff witnesses need to respond to that surrebuttal testimony.
So instead of just having the witnesses present a summary, they will get into some depth in their opening testimony and there will be question and answer rather than just a summary, but I intend to start out with Mr. Diller, who is going to have

16

a Power Point presentation, and I think that that will lay a good overall -- or a good overview of the case.
So I don't think that there's any need for me to spend time with a preliminary statement. It will be covered basically in Mr. Diller's opening testimony.
MR. HOBERG: Thank you, Mr. Binek. I do hope, though, that the parties -- even though it's been docketed in the record, that all of the exhibits that will be evidence in this matter, even the direct and rebuttal and surrebuttal, will be referred to so it's on the record of the hearing today.
MR. BINEK: Yes.
MR. HOBERG: Okay. Okay. Please call your first witness then, Mr. Binek.
MR. BINEK: I will call Mr. Mike Diller, and I would ask that Mr. Diller be allowed to testify back at the desk behind me where he has the Power Point presentation set up, and there is a microphone there.
MR. HOBERG: Okay. And that's good, but we do need to swear him in, nevertheless, and I need to tell you, Mr. Diller, and really all of the

witnesses here today, as I'm required to do by law, that the maximum penalty for perjury in this state is a Class C felony, punishable by a maximum 5 years imprisonment, $5,000 fine or both.

(Witness sworn.)

MR. HOBERG: Thank you. Mr. Binek, please.

MR. BINEK: Thank you.

MIKE DILLER,

having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. BINEK:

Q. Please state your name for the record.

A. Mike Diller.

Q. And what is your occupation?

A. I serve the Commission as its director of accounting.

Q. And how long have you been employed by the -- when you refer to the Commission, you're talking about the Public Service Commission?

A. That's correct.

Q. How long have you been employed by the Commission?

A. About 14 years.

Q. And where -- were you employed anywhere prior to coming to work for the Commission?

A. I worked for the Oklahoma Corporation Commission for about four years and a couple other places before that.

Q. What is your educational background?

A. I have an accounting degree and I'm a certified public accountant.

Q. Okay. And where did you get your degree?

A. Oklahoma Christian College.

Q. Have you testified previously in rate case proceedings?

A. I have.

Q. Mr. Diller, I've handed you what have been marked as Exhibits 1, 2 and 3, and can you identify those exhibits, please?

A. Exhibit 1 is my direct testimony, Exhibit 2, rebuttal testimony, and Exhibit 3 is the Power Point slides that I'll be presenting.

Q. Was the testimony in Exhibits 1 and 2 prepared by you or under your direction?

A. They were prepared by me.

Q. Are there any corrections that need to be made to either Exhibits 1 or 2?

A. I don't believe so.

Q. If I asked you the questions today that are contained in those exhibits, would your answers be the same?

A. Yes.

Q. And do you adopt Exhibits 1 and 2 as your sworn testimony in this case?

A. I do.

Q. And you said Exhibit 3 is -- are basically the slides of the Power Point presentation that you'll be making?

A. That is correct.

MR. BINEK: Okay. Thank you. And at this time I would offer Exhibits 1, 2 and 3.

MR. PEARCE: No objection.

MR. HOBERG: Exhibits 1, 2 and 3 are admitted.

MR. HOBERG: Commissioners, do you have the exhibits?

COMMISSIONER WEFALD: Yes.

Q. (MR. BINEK CONTINUING) Mr. Diller, would you please provide a brief summary of MDU's reported earnings to the Commission?

A. Yes. As you can see here on this slide, MDU's last electric rate case was filed in 1986 and resulted in a 6.37 percent rate increase. Since then earnings have fluctuated from year to year, and that's basically what that chart on the right shows.

The Commission has basically used a 12-percent return on equity as kind of a benchmark in settlements and even after full-blown rate cases has ordered returns around 12 percent.

As you can see then, earnings have been above 12 percent most of the time since the last rate case, and in particular the last three or four years earnings have been significantly higher than 12 percent. If -- and just to give you something to think about, I guess, each return on equity is worth about 1.1 million dollars. So if you wanted to lower MDU's electric earnings by one percentage point, you'd have to reduce rates by 1.1 million.

So just so you understand a little further, I guess, so if we had perfect vision in 1998 and we knew exactly what the future would hold in 1999, we would have lowered rates by around four-and-a-half-million dollars, and even then 2000 and 2001 earnings would have been above that 12 percent again.

So we -- staff just believes that the recent earnings are too high for a regulated

21

monopoly service provider and need to be adjusted.
Q. What test year are you using in this proceeding?
A. Well, it's been kind of an evolutionary process. We started out with a 2000 test year. We filed a complaint against MDU alleging that MDU was overearning by 9.155 million dollars, but then in -- a few weeks ago 2001 results were received and yielded basically the same return that the year-end 2000 did.
So in staff's rebuttal testimony we give consideration to the new 2001 test-year information and MDU's testimony effectively moving the test year to 2002 and beyond. Staff reduced its original position to a finding of excess earnings of 7.3 million instead of the 9.2 million.
Q. What should the Commission consider in determining if rates are too high?
A. Well, the Commission's been employing profit regulation for a long, long time, and we should stick with that. Profit regulation is comprised of three basic components, rate base or investment in North Dakota electric plant; and then rate of return, which is adjusted a weighted cost of capital. It's a percentage that's based on the

22

cost of debt on term -- I'm sorry, cost of debt, common equity and preferred stock. If you take rate of return times rate base, you get return required, and then you compare that to net regulated income, and the difference is excess earnings. You've got to apply a tax factor to that, but essentially that's it.
Q. Would you describe what has happened to the rate base level since the last test year?
A. Yes. We -- the Commission authorized 140 -- approximately 140-million dollars of rate base in the last test year, and rate base did climb the first two or three years after that and since then has been kind of on a downward spiral. There was a little bit of an increase there in the later years, but overall the trend has been deteriorating rate base, and basically what that means is that accumulated depreciation and accumulated deferred income taxes are outstripping plant and service additions.
Q. What do you mean by rate base? What is rate base?
A. What is rate base?
Q. Yeah.
A. Okay. I think that's -- well, rate --

23

Q. Just a general description.
A. Yeah. I think we're going to see it on the next slide, that's why I'm hesitating, but rate base is just an investment necessary and plant in service, materials and supplies, those kinds of things to provide electric service.
Q. Okay. Thank you. Is there any agreement between staff and MDU as to the appropriate rate base level for this proceeding?
A. Yes, basically there is. We don't have an issue with rate base any longer. In rebuttal testimony staff updated rate base for 2001 financial information which does reflect, like I indicated, a lower rate base than originally filed for the year-end 2000, but we also accepted MDU's adjustments to rate base for what it termed as extraordinary capital costs in its rebuttal testimony. So in surrebuttal testimony MDU accepted staff's rate base, and there really is no issue with rate base.
Q. Please provide the Commission with a detailed summary of rate base as agreed to by the parties in this case.
A. This slide basically shows what I just talked about, the different components of rate

24

base. The beginning -- though this slide does not indicate, the beginning balance there is the beginning balance as of 2002, and then the adjustments reflect MDU's extraordinary capital costs, and so we have a higher ending balance, and just average the beginning and ending and that's what we've agreed to as far as rate base, the $128,902,000.
Q. Okay. Moving on to the next component of profit regulation, and that's the required return on investment. Please summarize the reported cost of capital since the last rate proceeding.
A. I presented this at the public information session. It's included here just to refresh the Commissioners' minds, but essentially we started -- when we -- when the Commission authorized the last rate of return, it was set at 10.88 percent. That just indicates what MDU has reported to us over the years as far as its actual cost of capital, weighted cost of capital, to give you some idea of where it's been, and the components of cost of capital are listed on the left side there.
Q. Has the North Dakota Public Service Commission had any rate cases or earnings review proceedings in the years 2000 and 2001?

25

A. Yes, it has.
Q. What are those cases and when were they decided?
A. Well, we had a couple PBR cases with Otter Tail and NSP, and in those cases we used a 12 percent return on equity as a benchmark. I'm --
MR. HOBERG: For the record, Mr. Diller, PBR is what?
THE WITNESS: Performance based regulation.
MR. HOBERG: Thank you.
THE WITNESS: The order date for NSP was December 29th -- and Otter Tail was December 29th, 2000, and -- I hope I'm not getting ahead of you, Bill, but --
Q. (MR. BINEK CONTINUING) Go ahead.
A. -- we also had a gas case with Northern States Power Company where the Commission authorized or ordered an 11.5 percent return on equity.
Q. Okay.
A. And that one was decided October 9th -- I'm sorry. That's application date. It was ordered June 27th, 2001.
Q. And the -- that NSP gas case, was that a

26

regular rate proceeding rate case?
A. Yes, it was.
Q. And what -- what did you say the return on equity was set at in that case?
A. 11.5.
Q. Was there expert testimony on cost of capital and return on equity in that case?
A. There was.
Q. Who was the staff's cost-of-capital witness in that case?
A. Mr. King.
Q. Pardon me?
A. Mr. King.
Q. Okay. The same witness that is here --
A. Same witness.
Q. -- today. Would you please provide the Commission with a comparison of MDU's cost of debt with the other two investor-owned utilities operating within the State of North Dakota?
A. Bill, could we go back one?
Q. Oh, I'm sorry. Did I move ahead of you here? Okay. The cost of capital comparison?
A. Right.
Q. Would you please provide a cost of capital comparison for the Commission to identify the

27

differences between the company's recommendation and that of staff?
A. Yes. On this slide you can see that the capital ratio is the same for both staff and MDU. We are not taking issue with the capital ratio. We are taking issue with the cost of long-term debt and the cost of equity, and I've highlighted those with original boxes there. That's -- those are the issues with regard to cost of capital.
Q. Now would you please provide the Commission with a comparison of MDU's cost of debt with the other two investor-owned utilities operating within North Dakota?
A. Yes. What we have here basically is a chart of long-term debt cost reported to the Commission since MDU's last test year. In the last test year the Commission authorized a long-term debt cost of just a little over ten percent. That's signified by the solid red line there, and then you have the comparison of MDU, Otter Tail and NSP as far as the cost of debt. NSP is around seven, Otter Tail's is around eight, and MDU's is around nine.
Q. Who from the staff will be testifying to the appropriate cost of long-term debt?

28

A. Mr. King.
Q. Moving on to the last component of profit regulation, please summarize net regulated income results reported since the last rate case.
A. Well, net regulated income is simply revenues less expenses. Again, the red line indicates what was authorized in the last rate case back in 1986. You can see that net regulated income has fluctuated some. It appears like there's a number of years here that they've under-earned, but that's not really the case. If you recall the rate base summary, rate base has been declining, and so when net income declined there in that dip, it really wasn't a problem. MDU still managed to return -- earn a reasonable return on its investment, and you can see in the last few years that net regulated income has gone up quite a bit.
Q. Okay. I think you've already answered this, but did MDU underearn every time its return dipped below the red line?
A. No.
Q. Would you please break down revenues by major categories for the Commission?
A. Well, I've broken them down into three

29

categories, retail sales, sales for resale, and then anything else, other revenue.

Q. Did staff make any adjustments to the 2001 retail revenues?

A. We did not. MDU does not calculate the impact of weather on retail sales. Both Otter Tail and NSP provides us with weather normalized information, but MDU does not have that capability, and so in order for us to make an adjustment to retail sales we would have had to develop our own econometric model, and we just simply don't have the resources to do that. I will make note here that North Dakota net margins, if you take revenues less production expense and include the off-system sales, which has fluctuated in the last few years, if you take those out, the net margins are down 1.1 million dollars in 2001 compared to 2000, but we've not made an adjustment.

Q. If this case used a 2000 test year, would North Dakota net margins be higher?

A. Yes. 1.1 million dollars higher.

Q. Why didn't staff develop its own economic -- econometric model for forecasting sales and make a weather normalized adjustment?

A. Well, like I said, we don't have the

30

internal resources necessary to develop something like that. It has also to do with the way the Commission is funded. We were provided dollars to hire expert witnesses for rate increase applications, but the legislature appropriates very little money for cases like this. In fact, we had to stretch this thing over two bienniums in order to put the funds together to hire our one expert.

Q. Now moving on to sales for resale margins. First, would you please explain what you mean by the term "sales for resale"?

A. Explain the -- I'm sorry. What did you say?

Q. What do you mean by the term "sales for resale"?

A. Sales for resale is kind of what it sounds like. It's sales that MDU makes to another company for resale to the end customers.

Q. And how important is the resale issue in this case?

A. Very important. It's most of the case. You can see the numbers on the left-hand side there. I mean, this is some serious -- serious money here. Those are five-million-dollar increments on a total company basis.

31

Q. Would you please summarize how margins have changed in recent years?

A. Well, this slide shows that, and basically -- is that first year '96? 1996 MDU reported 1.9 million dollars of net margins on sales for resale, in 1997 it reported 2.5 million dollars, in 1998 it reported 4.8 million dollars of margins, in 1999 MDU reported margins of 9.9 million, in the year 2000 MDU reported margins of 15.9 million dollars. In staff's case it's -- in staff's case it has included total company margins of 15.1 million, just slightly down from 2001, and then MDU has -- is currently -- as far as I'm aware, currently at 6.4 million dollars for net margins in 2002.

Q. What has caused the growth in margins?

A. Well, the number of customers have grown, volumes are up, and revenues per megawatt-hours have increased, as well. If you take change in volumes and change in price, that affects the net margins.

Q. Why should the Commission place more reliance on actual results than MDU projections using the futures market as a proxy for test year sales for resale margins?

32

A. I'm sorry, Bill. You're going to have to read that again. I didn't hear it.

Q. Okay. Why should the Commission place more reliance -- well, first of all, why don't you explain this difference. What is the difference between staff and MDU?

A. Well, this slide capsulizes the difference, I guess. We are relying on actual results, and MDU -- MDU's case relies on future projections.

Q. And why should the Commission place more reliance on actual results than MDU's projections, which use future markets as a proxy for test-year sales for resale margins?

A. Well, it sounds kind of coy, but actual results have actually occurred, and there's some confidence in that, I guess. It's not based on a theoretical application. In MDU's case the future projections are based on a lot of variables, and, you know, it gets -- it gets down to what we've testified in our -- each party's testified in its case, and that's the general market condition is -- it's kind of hard to predict what's going to happen in the near term and thereafter. I --

Q. Go ahead.

33

A. Okay. I guess predicting off-system sales margins for any length of time to me is more of an art than a science, and I just think that there's room to consider both parties' presentations.

Q. After reading MDU's testimony, can you identify factors it claims affect the future price of electricity?

A. Well, what I did -- the time frame -- the turnaround in rebuttal and surrebuttal was so close that I can't address all the issues that MDU has brought up. They've added quite a few new witnesses and new information in the surrebuttal round. So what I did is just tried to identify factors that affect resale margins in their testimony, and I thought they were pretty good. Future contracts, natural gas prices, droughts, national economy, manufacturing industry, new generation capacity, natural gas supplies. These things all affect future resale margins. Weather, natural gas transportation rates, incremental operating costs, transactional risks, fuel cost differentials, transmission constraints, generation mix, transmission access, market power of supplier, institutional inefficiencies, regulation uncertainties, stranded costs exposure, plant

34

outages, incomplete market information, and finally, nuclear safety regulations, hedging activities, spark-spreads, conservation programs, gas exploration levels, gas in storage, and a general market uncertainty.

Q. What do you recommend with regard to sales for resale margins?

A. Well, I think the uncertainties of the future warrants the consideration of actual results as a proxy for future rates.

The resulting rates in this proceeding may be in effect for 15 years. Using an average of recent results will smooth out recent market fluctuations and provide for a normalized level going forward.

And I might be called the big easy, I guess, for suggesting this, but I am going to suggest an alternative here for the Commission's consideration, and basically that is to use an average of the sales margins for the past three years for purposes of this proceeding.

Q. Please show the Commission how you have calculated this proposal.

A. It's rather straightforward. The next slide shows how it's calculated. Basically add '99

35

margins, 2000, and 2001 margins. You need to add back demand penalties, which I'm not sure why they were included in the first place in the margins, but that's also in our testimony, that demand penalties should not be included as a cost of service. So you add that back in and you get total margins then of 35 million over the last three years. You get a three-year average, compare it to 2001 resale margins. The difference is 4.2 and you jurisdictionalize that, and staff is willing to step down once again and reduce net margins by 2.8 million dollars on North Dakota basis.

Q. Why are you recommending this proposal?

A. Well, I think that staff needs to remain considerate of what the company's trying to do and considerate of the testimony that it has provided. We're not operating with blinders on. We see that there has been a hiccup in the general economy, market conditions, and so this is just a proposal, I think, to keep our testimony relevant and in the ballgame.

Q. Okay. Next moving on to expenses, please summarize any remaining differences between MDU and staff.

A. Okay. The remaining issues, demand

36

penalty and A&G costs. As far as the demand penalty goes, staff argued that it should be excluded. Company in its surrebuttal testimony argued that, well, if you're going to exclude the demand penalty, then you should at least give us the cost of procuring additional capacity to avoid the demand penalty, and that made sense to me, and so the demand penalty is excluded. The additional capacity costs that MDU suggests in its surrebuttal testimony is now included in the staff's position.

As far as the A&G costs, I think it requires a closer look.

Q. Please provide a summary of the administrative and general expenses so the Commission understands what is included in the costs.

A. Okay. In the administrative and general expense category we have, I don't know, ten or so different accounts, salaries, office supplies, outside services, property insurance, injuries and damages, employee pension and benefit costs, regulatory commission expenses, general advertising, miscellaneous, rents and maintenance of the general plant.

Q. In recent years A&G costs in total have

37

been decreasing. Please identify what caused A&G expenses in 2001 to increase by 12.4 percent.

A. Well, it's pretty easy to identify what's caused the increase, and I guess that's the purpose of this slide. You can see in 2001 that A&G costs in total went up about 12 percent, and then MDU's position is another 12 percent above that for 2002 and beyond. As far as 2001 is concerned, salaries -- A&G salaries are up a little more than $800,000, office supplies is up about 37 percent or $800,000. I guess the rest are pretty much the same.

Q. Please identify the A&G expenses that remain unresolved in this case.

A. Office supplies, insurance expense, and pensions and benefits, and under pensions and benefits we have pension expense, FAS 106, or post-retirement benefits, and SISP, which stands for supplemental income security plan.

Q. In the last chart it showed that office supply -- office supplies expense increased from 2.122 million to 2.906 million when comparing 2001 to 2000, or 37 percent in office supplies. Please explain what would cause this.

A. Well, within the office supplies expense

38

account we have a number of items that are included in there, automobile service, bank charges, books and subscriptions, building service, communications, office equipment, computer infrastructure, membership fees, office supplies, legal department expenses, postage and printing, meals, travel, incidental expenses, and corporate aircraft. The ones in red there are the particular items addressed by Mr. Ball in his testimony as to the reason that office supplies expense is up 37 percent and will stay there.

Q. What do you recommend the Commission should approve of a reasonable and ongoing expense level?

A. Well, staff's position is that -- is that we -- office supplies expense is somewhat controllable. The Commission has an office supplies expense account, just like I suppose any other business, and there are years when we spend a lot of money on software upgrades or equipment upgrades, and then there's years that we don't spend hardly anything.

It -- if you go back and look at those items that I've provided you a list of, there's some controllable costs in there, and I guess

39

staff's approach has been kind of like the legislature's approach to us when we request appropriations, and that is we're going to give you so much money and that's -- and that's what you're going to -- that's how you're going to conduct your business, and so we've added five percent on top of 2000 and suggested that that's the level we should use in this proceeding. And then I guess -- can I go ahead, Bill?

Q. Sure. Go ahead.

A. I guess to finish up the slide here, MDU's surrebuttal testimony does not provide an analytical approach to quantifying future estimated costs. In Don's -- Mr. Ball's testimony there are some words that explain why costs are going up, but it's not -- it's not adequately quantified in my mind to convince staff to change its position, and I might also say, for instance -- I guess if I'm going to say it's not adequate, I should give you at least one example of why I think that, and as far as I know, there hasn't been any effort to quantify the amount of savings on corporate airfares that MDU expects because of owning this corporate aircraft now and -- or at least having it at their disposal beginning in 2001.

40

So I just think a lot more work needs to be done before I can suggest a 37 percent increase in office supplies expenses is reasonable.

Q. Moving to insurance expense, what accounts within the A&G expenses are used to record insurance expense?

A. I think it's account 924 and 925. I think those are the FERC account numbers, but in any event, property insurance is the cost of insurance or reserve accrual to protect against losses to property; and injury and damages account is the cost of insurance or reserve accruals to protect against damage claims of employees or others not covered by insurance, and those are basically FERC descriptions of those accounts. The Federal Energy -- FERC stands for the Federal Energy Regulatory Commission.

Q. Have you reviewed Mr. Ball's surrebuttal schedule DRB-2, calculating MDU's increased insurance expense?

A. I have. I have the same concerns with their analysis of insurance expense. As I recall -- I don't remember -- did you reference his schedule, Bill?

Q. DRB-2.

41

A. I don't have it in front of me, but it's -- I can recall it well enough. In that schedule Mr. Ball lists premiums by all the different insurance carriers, comes up with a total company amount, and then jurisdictionalizes it and compares that to what MDU or Mr. Ball calls, I think, North Dakota expense of 420,000, is what I recall, and the difference is an adjustment. I don't know what that $420,000 represents.

If I look at both -- if you go back -- if you go back here and you add up property insurance and injuries and damages for 2001, the 344 and 474, you'll have over $800,000 worth of insurance costs. Now there might be other insurance costs in other accounts somewhere, but when you -- when you consider that there's $800,000 worth of expenses here and their list comes up with $800,000 worth of expenses, I don't know if that's an increase or not. I just can't tell from that schedule.

MR. HOBERG: I'm sorry. Mr. Diller, you said "when you said you go back here." The record won't reflect where you went back to unless you tell us.

THE WITNESS: To DRB-2.

MR. HOBERG: Thank you.

42

THE WITNESS: Okay. So our position remains unchanged.

Q. (MR. BINEK CONTINUING) Okay. And that includes insurance expense?

A. Right, right.

Q. Okay. Moving to pension and post-retirement expense, what have you concluded after reading Mr. Ball's testimony?

A. I sound like a broken record, but I guess I have the same -- same concerns with it, and I did provide Mr. Ball with a courtesy call, I think it was Saturday or Sunday, this weekend, left a message on his machine, and I understand that he's going to have some more information, but, you know, MDU chooses to update some costs for pension costs and post-retirement benefits.

There's a lot more money in that 926 than pensions costs and post-retirement benefits. I don't know what else is in there, but it's -- it would be kind of like me -- it would be kind of like me going -- Susan's -- Commissioner Wefald is looking at me. It would be kind of like going into Commissioner Wefald's bank account and looking to see that a particular item changed from one year to the next and concluding that she needs more money

43

to live her life without considering all the costs associated with a particular category or classification of expenses.

Some of it may be just I don't -- I'm not seeing it. So we'll give Mr. Ball an opportunity later to clear this all up, but for -- I guess so the company knows exactly where I'm coming from, if you take 2001 pension expense, which is a negative 1.7 million dollars because fund assets are taking care of current costs, and then you add to that post-retirement benefits in 2001 of 1 million dollars, that means you've included an analysis of a negative $600,000 worth of pension and benefit costs, and if you go way back there again and -- I never can go the right direction -- you can look down there and see that the employee pension benefit costs for 2001 is 2.4 million dollars positive.

MR. HOBERG: And again, Mr. Diller, where are we looking right now for the verbal record, please?

THE WITNESS: In the administrative and general expenses slide.

MR. HOBERG: Thank you.

THE WITNESS: And so, again, Mr. Ball may

44

very well have some answers for these things, but at this point staff is unable to concede to anything.

Q. (MR. BINEK CONTINUING) And now we come to the last expense issue, which is supplemental income security plan. In your rebuttal testimony you speak about a number of other benefits MDU employees receive and that only 27 employees are considered key employees and that there is a lack of symmetry in the plan. Can you give the Commission any other reasons why it should not allow SISP as a ratemaking expense?

A. Well, I know this is a hot issue and very important to the people in this room, but I have a lot of concerns with it. Basically, just so we're clear, SISP represents a double pension for key employees. That's essentially what it is.

It was a few weeks ago, but I had trouble sleeping one night so I was up from two to four o'clock in the morning, and, of course, nothing's going except reruns of Congressional hearings and things like that, and so I was watching the Congressional hearings on Enron, and, I mean, I don't know -- it was weird, but they were talking about key employees, and the ex-CEO was being

45

questioned about the 100 million dollars that Enron paid to its key employees to keep them on board -- on board as far as the sinking ship was concerned, and it was 100 million dollars. In this case MDU's only asking for 100 million dollars for --

Q. 100 million dollar or 1 million?

A. I mean 1 million. Yeah, I wish -- they wish, they wish. 1 million dollars for 2001, but it's still a significant amount of money, and one of my employees when I'm -- when I'm struggling with an issue trying to decide what the right thing to do is, he said, Mike, if you can justify it on the front page of the paper, then you can do it, and that's -- I guess that's a principle that I'm living by here when I talk about supplemental income security plan.

I can't justify spending on average $40,000 per employee. If you take the million dollars, divide it by 27 employees, have $40,000 per employee for 2001 and forevermore -- or until rates change again, I just can't justify that, and I'm uncomfortable with it.

I think that people in -- Enron has been an interesting case, and I think it has a warning to all of us, especially managers of companies.

46

And then the next one is beneficiaries. Who is SISP benefiting? Again going back to Enron, I remember the -- I remember one of the Congressmen asking the question, well -- or not even asking, basically stating that, you know, it looks to me like -- it looks to me like that what you've done is management's taken care of itself. That's what it looks like to me.

And so who are the beneficiaries? Are the ratepayers the beneficiaries of this or are the stockholders the beneficiaries? You decide, I guess.

And then mergers and acquisitions I think are also in the mix here. Every time NSP merges or thinks about merging, the people I work with, the people I talk to, they're scared to death. We don't know if we're going to have a job when this thing's over, and they're key employees, and when we get down to the five bell operating electric companies as this continues to -- it's just a manner of speaking -- continues to play out, there's going to be a lot of employees looking for work, and there already are some. So we remain unchanged in this position.

Q. Please summarize staff's adjustments to

47

net regulated income.

A. This is just a schedule of everything that we've talked about. Some of these numbers come from direct testimony, rebuttal testimony, surrebuttal testimony, but it capsulizes staff's adjustments to 2001. We reduce sales for resale margins by 2.8 million dollars, and these are North Dakota numbers, by the way. We amortize the AVS maintenance over three years, eliminate demand penalties, add additional capacities for purposes of not incurring any more penalties, eliminate Schedule F revenues, include -- and we include Energy Share and Lignite Council dues in ratemaking expense, normalize office supplies expense. We add depreciation for the plant additions that we made in agreement with MDU, and in the last number there, income tax expense is just -- it's adjusted to reflect all the other adjustments above that.

Q. Would you please provide a summary of net regulated income?

A. Next slide does that. It shows 1999, 2000, 2001 reported earnings and then our adjustments are in there, and you have a test-year net regulated income of 15.7766 million dollars.

Q. After giving consideration to MDU's

48

surrebuttal testimonies, please show the Commission how you've calculated what you believe to be MDU's excess earnings position.

A. All the way over on the right side, the rate base that we've essentially agreed to is the first item, 128 million dollars. The rate of return required -- it does reflect staff's position, using 11.7 percent ROE and its cost of date. So the rate of return is 9.92 percent. Multiply the first two, get the third line, compare that to the return earned that I just summarized in the previous slide, get a return excess of 3 million dollars, you apply the tax factor to that, and we are arguing at this point that MDU should use its revenues by 5 million dollars or thereabouts.

Q. Now you've -- staff has reduced it position from basically 9 million dollars to 5 million dollars; is that correct?

A. Yeah, I know. Staff's calling me the big easy, but I'm just trying to be as responsible and forthright and fair as I can.

Q. Has MDU changed its position in any way that you're aware of?

A. No. Not that I'm aware of.

Q. Do you have anything else that you would like to present to the Commission prior to cross-examination?

A. Well, I -- I thought it would be helpful to the Commission, depending on what it decides -- it may or may not need these last couple of slides, but I'm just providing the Commission with a worksheet. There's really only four issues in this case, and once you've decided those four issues, you plug in the numbers, and whatever the revenue excess calculates on the bottom, that's what you should order.

Cost of capital -- you've got to decide what the long-term debt cost should be and you need to decide what the common equity return should be, percentage return. You plug that in and you apply it to the average rate base to get a return required, and then all you need -- all you need is net regulated income, what you think that'll be in the near future or thereafter, and you need to make an adjustment for administrative and general expenses and sales for resale. Plug those in and have your staff run through the income tax calculation on the bottom and you'll have your answer. So it's just provided mostly for your

staff, I guess, to use if they so choose.

MR. BINEK: At this time I tender the witness for cross-examination.

MR. HOBERG: Thank you, Mr. Binek.

THE WITNESS: Should I -- should I go up there now?

MR. HOBERG: Mr. Pearce --

MR. PEARCE: That would be more --

MR. HOBERG: -- would it be preferable to have him up there.

MR. PEARCE: That would be more convenient for me rather than having to turn around --

MR. HOBERG: Okay. Please, Mr. Diller.

MR. PEARCE: -- if that's possible.

MR. HOBERG: Mr. Pearce, please. Yeah. It might work best if you could put the mike on that side.

MR. PEARCE: Over here perhaps.

MR. HOBERG: Yeah, right there. Thank you.

CROSS-EXAMINATION

BY MR. PEARCE:

Q. Okay. I have a few questions. Mike -- may I call you Mike? We've known each other for years.

A. Please.

Q. Mike, you indicate in your testimony, and it appears in your Exhibit 3, the Power Point presentation printout here, that you effectively moved the test year to 2000 and beyond; is that right?

A. 2002.

Q. 2002, I mean.

A. That's correct.

Q. 2002 and beyond.

A. That's correct.

Q. Does that reflect your opinion that for rates that are going to be forward going to the future it's most appropriate to use the most recent information available?

A. Yes.

Q. Now in your discussion of sales for resale margin you indicated that there are lots of variables and many factors. In fact, I believe you listed a series of four pages of factors here that you think are pretty good ones, if I may quote you; is that correct?

A. I agree with the company that those factors do in fact affect the price of electricity.

Q. And you're recommending now, as I

understand your testimony, a three-year average of sales for resale margins as the appropriate benchmark?

A. That's true.

Q. What was the purpose for three? I mean, why not five to get a longer range analysis?

A. I guess you could -- you could go back ten years when there wasn't any resale margins, I guess, ten years ago, or none to speak of. To answer your question directly, it's just arbitrary. I don't think it would have made any difference to add another year because -- let's see, 1998 resale margins were still quite high, but if you went back five years, it would change it a little bit.

Q. And again, if I may quote you, I think you referred to 2001 as a hiccup in effect in the national economy, recognizing that the year 2001 is going to have some very unusual features about it.

A. Is that the word I used, hiccup?

Q. You did use hiccup, I think.

A. Okay. Yes, I guess I did.

Q. I'm not sure how to spell it, so I have it in my notes here probably misspelled. And you testified that trying to estimate prices in the future is based on a lot of variables and it's more

53

of an art than a science, but you would agree, however, would you not, that insofar as there are reasonable techniques to try to project these prices, it would be appropriate to use them?

A. Yes.

Q. I don't think I understood in your testimony on the office supplies and expenses account why you chose five percent as an allowance. Was that a --

A. That was just an arbitrary number. Could be ten. I thought five was reasonable.

Q. But you wouldn't think ten was unreasonable?

A. I wouldn't argue strenuously against ten.

Q. And just to set the record straight, I assume -- I hope you're not suggesting that Montana-Dakota Utilities is run in some fashion similar to the way Enron was run.

A. I have no reason to believe that.

Q. Your -- let me find the right page. The page of your exhibit showing the resale margins -- here it is. I guess the pages aren't numbered, but somewhere about a third of the way through the sheet labeled resale margins it reflects a very substantial decrease, does it not, from 2001 to

54

2002 in the net margins?

A. I think you're referring to MDU's projections, the decrease from 2001 to 2002. That represents MDU's projections.

Q. Right. Down to the figure you show for MDU 2002, right at the far right, that's the projections?

A. Right.

COMMISSIONER WEFALD: Excuse me. Where is he referring to?

MR. HOBERG: He's referring to the resale margin, I believe, the chart. This one.

MR. PEARCE: About a third of the way -- or half the way into his --

THE WITNESS: I couldn't figure out how to number those slides. I'm sure there's a way, but I was in a hurry.

Q. (MR. BINEK CONTINUING) Given that you are in effect, as you say, moving the test year forward to 2002 and I believe your agreement that the most recent actual results provide the best benchmark, if the evidence to date shows a continuing decline in sales for resale margins, would it not be most reasonable to give the most weight to the most current figures? In other words, we're looking at

55

the -- we're always trying to base ongoing rates with the future on conditions that will exist in the future, are we not?

A. There was a lot in that question.

Q. I'm sorry. Let me --

A. I can -- I can ramble a little bit, but if you want to narrow that down --

Q. Yes. Let me redo that. I realized halfway through it was getting rather convoluted. The point of the question was: In your opinion, is it most -- would it be most reasonable, if we're looking at rates that are going to be going forward into the future, to base our projections on the most recent available information and trends?

A. That is true. I feel like I have to say something else here. That's true, but we have to keep in mind that we're not necessarily setting rates just for the next six months. It's our hope that we can develop rates that'll be in effect for the next 15 years, and we may not achieve that and that may not be achievable, but this is -- you know, ratemaking is theoretical, and we need to -- in the end we need to come up with rates that are going to make sense over a period of time, and I would not -- I would not conclude that this is just

56

for 2002.

Q. Do you have any basis for believing that the hiccup, as we've characterized it, in 2001 will return in 2003 or 2004 or 2005?

A. That's the whole quandary in this -- I mean, that's the problem with this whole case, is nobody's sure what's going to occur. The general market is unsure where it's headed. You know, you listen -- I listen to the news like everyone else. One guy says we've had a recession, another guy says we haven't had one yet. I don't know. I don't have a crystal ball.

Q. I assume you have seen -- looked at Mr. Ball's surrebuttal testimony, which hasn't gone into the record orally yet, but to the effect that at least the first month-and-a-half of 2002 are continuing to show a fairly dramatic decrease in resale margins?

A. I believe that's what his testimony shows.

MR. HOBERG: I think, Mr. Pearce, we've marked your surrebuttal as Exhibit 7; is that right?

MR. PEARCE: That's right. That's right.

Q. (MR. PEARCE CONTINUING) And turning back to your -- I believe this is your prefiled direct

57

testimony, which would be Exhibit 1, on page 8, line 21, you say it's difficult to determine to what degree --

A. You're on my direct?

Q. Yes, yes.

A. The direct?

Q. I think my reference is to your direct, I think, page 8, line 21.

MR. HOBERG: Exhibit 1.

MR. PEARCE: It would be Exhibit 1.

COMMISSIONER CLARK: Line 21?

MR. HOBERG: I think you said page 8, line 21; is that right?

MR. PEARCE: Yes.

THE WITNESS: "In this case staff has determined not to pursue"; is that where we're at?

MR. PEARCE: I think I'm on the wrong -- I'm on the wrong -- I may be wanting to refer to the Exhibit 2. Yes. I'm sorry. Exhibit 2, your rebuttal testimony. It's at the bottom of page 8, and you're saying --

THE WITNESS: Just a second. Exhibit -- okay. Rebuttal testimony.

Q. (MR. PEARCE CONTINUING) Exhibit 2, I'm sorry. It's your rebuttal testimony.

58

A. Okay. I'll be right with you. Okay.

Q. And I'm not saying it's inconsistent -- it's consistent with what you've testified to this morning, but you're saying a fair bit of judgment by the Commission will be required to decide the issue of how these economic factors will affect prices. You're not saying, though, are you, that the Commission should not exercise its best judgment but simply rely on past data, but --

A. I think it's a difficult issue and it's a difficult case, and they should exercise due diligence in their determination.

Q. Relying on the evidence in the case, of course?

A. Sure.

Q. Then on page ten of that rebuttal testimony, toward the top, actually lines four and five and six, you're agreeing that it appears that this is in relation to one of these factors that will affect the future resale margins?

A. You're talking about MAPP now?

Q. Right. You appear to be agreeing that planned additions to generation will outstrip the projected growth and demand, and then you indicate that some believe that the recent effects

59

surrounding Enron has changed the energy markets in general. Are you saying that you have some evidence that these -- this new generation will not come into place because of the Enron situation? I didn't understand what you were getting at.

A. Well, you know, it's -- it's always difficult to determine where resources will go, and we don't have unlimited resources. Some of the resources may go to war efforts or technologies or Dot-Coms or generation. I don't know, but any time you have some market changes like we're experiencing, the market's going to respond to that and resources are going to go in different places, but -- so I guess that's what I was thinking when I wrote that. We know that Enron has affected a lot of companies. If you watch the news like I do -- I guess I have a couple -- couple of news reports, if that's what you want, that would state a similar kind of thing. If you're interested in that, I can provide that.

Q. I just was -- the question really was, I guess, more directed at your -- your assessment of the situation, and I realize none of us are -- or I guess actually I'm not an expert on the Enron situation, but do you have any strong reason for

60

believing that the Enron situation will dramatically affect the growth of future generation capacity, I guess is what I'm asking?

A. Well, I'm not an economist and I've not fully researched this. When I make this statement, it's based on news shows that I've watched and articles that I've read at my desk while working for the Commission indicating that resources are harder to come by now that Enron has caused this flap, and it's understandable. People are a little worried as to, well, what do the books and records really mean, and that reflects on the energy industry and the independent power producers, and they have to have a lot of capital to build a generation facility, and that's all I'm trying to say.

MR. PEARCE: That's all the questions I have.

MR. HOBERG: Thank you, Mr. Pearce. Perhaps we should take a ten-minute recess here before we start with Commission questions.

(Recess taken.)

MR. HOBERG: We're back on the record after a short recess, and we're about to begin questions by the Commission. Mr. Fahn, as

61

commission advisor do you have any questions of Mr. Diller at this time?

MR. FAHN: No, I don't. Thank you.

MR. HOBERG: Thank you, Mr. Fahn. Commissioner Wefald, did you have any questions of Mr. Diller, please?

COMMISSIONER WEFALD: I have a few.

EXAMINATION

BY COMMISSIONER WEFALD:

Q. Mr. Diller, I was -- went on to the web site of NERC this morning, and I found a report, and it was the reliability assessment of 2001-2010. It's called The Reliability of Bulk Electric Systems in North America, and it's dated October 16th, 2001, and it's put out by the North American Electric Reliability Council.

MR. HOBERG: Are you familiar with that, Mr. Diller?

THE WITNESS: Not really.

COMMISSIONER WEFALD: Should I pass him a copy?

Q. (COMMISSIONER WEFALD CONTINUING) Are you familiar with this report?

THE WITNESS: I'm not familiar with it.

COMMISSIONER WEFALD: May I pass this

62

report to him?

MR. HOBERG: Sure.

Q. (COMMISSIONER WEFALD CONTINUING) I've underlined several sentences under Resource Assessments for MAPP under -- on page 43.

A. Okay.

Q. Would you read those sentences?

A. Just the bottom?

Q. Mm-hmm. The things that are underlined on that page.

A. Oh, okay. All right. First part of the paragraph that's underlined, "The MAPP-U.S. region is judged to be inadequate over the 2001-2010 period."

Q. The MAPP what?

A. The MAPP-U.S. region. I'm sorry. "The MAPP-U.S. region is judged to be inadequate over the 2001-2010 period."

Q. And that refers to -- "inadequate" refers to what? What is the topic of that section?

A. Capacity.

Q. Capacity.

A. Okay. "The summer reserve margin is expected to be below the 2000 forecast and to decline from a high of 20 percent in 2001 to 15

63

percent in 2005 and 1 percent in 2010 when committed and proposed generation is considered. In addition, when a 3 percent demand forecast uncertainty is taken into account, the MAPP-U.S. area may be capacity" -- "In addition, when a 3 percent demand forecast uncertainty is taken into account, the MAPP-U.S. area may be" -- oh, there must be more -- I'm sorry. -- "may be capacity deficient by 2004 summer and nearly 5,442 megawatts by 2010.

"Because of the potential generating system inadequacy, MAPP must plan for additional resources and carefully watch construction lead times to ensure that enough resources will be available to maintain regional adequacy. The ability to import power may be severely limited in the near term because of the lack of external resource availability."

MR. HOBERG: I think we better mark that since he's been reading from the exhibit. We better mark it and place it into the record as an exhibit.

COMMISSIONER WEFALD: That would be fine.

MR. HOBERG: Would you hand it to the court reporter, please, so she can mark that?

64

COMMISSIONER WEFALD: Sure.

MR. HOBERG: It would be Exhibit 11, I think.

(Exhibit 11 was marked for identification.)

MR. HOBERG: And I think we better give Mr. Pearce an opportunity to look at that, too.

Q. (COMMISSIONER WEFALD CONTINUING) My question is -- a question on that is that in your recommendations you're recommending that we use the last three years of wholesale revenues and average those to determine an average amount that we could expect to see in wholesale revenues in coming years.

A. That is my assertion. Yes.

Q. This MAPP report indicates that -- taking all those factors into consideration -- I'm assuming they took all those factors into consideration because these are experts who write these reports -- that they're anticipating shortages not only in 2002 and 2003 and 2004 but extending into 2010. Given that information, are you inclined to change your recommendation that we average the last three years and just go with the last year?

65

A. Well, I guess besides the reasons I've already given, you know, the reason that I did that is I do see some very near term problems with sales for resale margins, but that's so -- to me some of what's driving this is the absence of winter. I mean, of course they're not selling any electricity at this in December and January and February. I've never seen a winter like this. I'm thinking longer term than MDU, and that's really the difference.

Q. Well, on the -- on this -- even for this year when they're projecting six million of wholesale revenue -- and I'll have a chance to talk to their person later on, but are -- those are based on current costs, futures costs; is that what they're --

A. The futures market, right, and I'm not an investor in futures and I don't have a lot of experience there, but my understanding is that the further out you get, the less accurate futures are going to be as far as what actual prices may end up being. I would say it's pretty accurate a few months out.

Q. So let's say that in May there's a projection for a really hot summer and they -- with the weather forecasters. Could those futures

66

change at that point? Could -- or should I be asking someone else?

A. Well, it's just getting a little outside of my expertise. I would guess that the futures market is based on normal weather. I don't think that futures are based on the Farmers Almanac or anything like that, at least I hope not.

Q. But they change from month to month?

A. Sure, they do. They change every day.

Q. Okay. And on -- MDU may have the potential to have increased wholesale sales contracts in the future?

A. Yes. That opportunity always -- always exists.

Q. And I have another question, and this is on the AVS major maintenance in your testimony on page 13.

MR. HOBERG: Direct testimony or --

COMMISSIONER WEFALD: This is on his rebuttal testimony.

MR. HOBERG: Okay. Exhibit 2.

THE WITNESS: On page 13?

Q. (COMMISSIONER WEFALD CONTINUING) Mm-hmm. You talk about -- under that, "Mr. Ball argues for the inclusion of one-third of the major

67

maintenance cost of the Antelope Valley generating station Unit II (AVS) incurred in 2001 totaling 460,000 system-wide. Originally, Mr. Ball's argument added these additional expenses to staff's 2000 test year because the cost of the maintenance was not incurred until 2001. However, since staff is now advancing the use of 2001 operating results, Mr. Ball's testimony argues for a reduction in 2001 reported results by two-thirds of the maintenance costs. Staff therefore reduces maintenance expense in 2001 by two-thirds of the total cost testified to by Mr. Ball to properly reflect a three-year amortization. An adjustment to reduce 2001 operating expenses by 920,000 is therefore necessary."

Can you please explain to me why for one test year you have a -- why it's two-thirds of the maintenance cost and not one-third of the maintenance cost?

A. I can see why that would be a little confusing if you weren't familiar with the details. It's not an issue that we're disputing with the

68

company. Both sides are in agreement with what I've done, but having said that, in 2001 MDU incurred a total cost of that 460 times three, whatever that number is. That was recorded on the books for 2001. MDU argued when I was using a 2000 test year that one-third of those costs should be included in 2000. Okay. It should be included in the test year. Well, when we updated the 2001 test year, all of the AVS maintenance costs were included in operating expenses. So all I'm doing is turning --

Q. For a total of how much?

A. Well, the 460 times 3. What is that, 1280? No. It's more than that.

Q. 460 times 3?

A. 460 times 3. And so all I've done is turned Mr. Ball's argument around on him and said, okay, if you want one-third of the amortization in 2000 when it -- when it was expensed in 2001, it's only appropriate that we exclude two-thirds of the costs in the updated 2001 expense of it, because all the costs are in there. Does that help or should I keep talking?

Q. Why are -- was this expensed over three years or was it expensed over just two years?

69

A. Well, it was booked as an expense in 2001. All of the costs were booked as a maintenance cost in 2001.

Q. All right.

A. And since we're using 2001 as a proxy for developing rates in 2002 and beyond, we only want one-third of those costs in there.

Q. Yes.

A. So to do that you have to take two-thirds out.

Q. Okay. And so at the present time you're only including $460,000 --

A. That's right.

Q. -- in 2001?

A. That's right.

Q. All right. But now you're using a 2002 test year. So can you just show me how then you updated that number?

A. Just carried it forward. I mean, if you incurred it in 2001 and you agree to a three-year amortization, then the 460,000 should still be in 2002 and 2003.

Q. Okay. All right. Thank you.

A. On a theoretical basis. I mean, MDU has expensed it already in 2001, but for ratemaking

70

purposes we've agreed to a three-year amortization on AVS maintenance.

Q. All right. Thank you. On page 14 on the MISO RTO of your rebuttal testimony, that paragraph, Mr. Ball argues that revenue streams related to MAPP Service Schedule F for power transmitted on or across its system will disappear as a result of MDU joining the Midwest Independent System Operator, Inc., regional transmission organization. MDU further asserts through its responses to staff's inquiries that no savings or additional off-system sales will occur because of MDU's decision to join MISO staff has no proof to the contrary that these revenues will -- should it be "not be lost"?

A. That these revenues -- these revenues will be lost and therefore -- well, I'm just saying that we have no proof to argue against MDU's assertion that these revenues will no longer occur. I don't know much about MAPP or Schedule F.

Q. Anyway, so we're accepting those?

A. I've trusted MDU's judgment in this matter.

71

Q. All right. On contributions on page 17, "Staff agrees to include North Dakota's share of contributions made to Energy Share of North Dakota and the Lignite Energy Council as testified to by Don Ball totaling $33,000."

What donations are given to the Lignite Energy Council and why should ratepayers pay for those?

A. That's -- that's what -- that's what Mr. Lein asked me, too. He's been assigned to staff in this case, and I guess I just didn't want to argue about it. I didn't think it was a material amount of money. I didn't give it a lot of thought, and there certainly is arguments that contributions like these should be recorded below the line and the company should be willing to pay for that out of stockholder dollars. I'm not -- I'm not hung up on it either way.

Q. Does that include the Energy Share dollars, as well?

A. Yes. I mean -- and that one's probably easier than Lignite. At least Lignite -- well, let me start over. That one seems to be easier to exclude. I mean, who is getting the benefit of being the contributor? Is it the ratepayers or is

72

it MDU? I mean, if you're getting the glory, then maybe you should pay for the cost of it.

COMMISSIONER WEFALD: I have no further questions at this time.

MR. HOBERG: Thank you, Commissioner Wefald. Before we move on to Commissioner Reinbold, we better deal with Exhibit 11 which we've marked. Have you had a chance to look at that, Mr. Binek?

MR. BINEK: No, I haven't.

MR. HOBERG: Okay. Maybe you should take a look at it, too. What is it actually titled, Mr. Binek?

MR. BINEK: Reliability Assessment, 2001 through 2010.

MR. HOBERG: Thank you.

MR. BINEK: And it's put out by North American Electric Reliability Council. I have no objection to it.

MR. HOBERG: Mr. Pearce, any objection to it?

MR. PEARCE: I have no objection as to foundation. I guess I wouldn't stipulate to its relevance or reliability, but no objection to having it received for what it is.

MR. HOBERG: Okay. I'll admit Exhibit 11 then. Commissioner Reinbold, please.

COMMISSIONER REINBOLD: Thank you. I have a couple quick questions.

EXAMINATION

BY COMMISSIONER REINBOLD:

Q. Mike, you're a good witness. That's on the record now.

A. That remains to be --

Q. That's my heavy one first. You said you didn't know if we had a recession or if we're going into recession. Would you let me know, because it makes a great deal of difference in, you know, what my plans are in the future. So as you determine, you know, whether we are in recession, let me know. You don't need to respond to that yet. Just bring me the data.

I think you said the issues are four basic issues in the case; is that correct?

A. There's some sub issues within those issues, but that's basically correct.

Q. And the money issue is -- if I've got my notes correct, the reduction of the number nine million down to five million, is that the number we're talking about? That's your testimony?

A. That's my testimony, yes.

Q. Okay. You indicated also that off-system sales, that type of income, is heavy and very significant in the case?

A. Almost -- well, without that we probably wouldn't have brought a case to the Commission.

Q. Okay. Then let me ask you the next question. Off-system sales, is it a guessing game?

A. Sure, it is. That's why I made the comment that it's more of an art than a science. It's a difficult issue. I mean, if the economy was going along like it was and there was no indication that it would falter, then this case would be easy.

Q. So you're --

A. We'd just reduce rates nine million dollars and be happy, but --

Q. Are you agreeing that it might be a guessing game by the company?

A. It -- we're both trying to provide the Commission with an analysis, an approach to projecting what we see as reasonable margins on sales for resale, and that's it, I guess.

COMMISSIONER REINBOLD: Okay. That satisfies that question. And that takes care of all of them. Thank you.

MR. HOBERG: Thank you, Commissioner Reinbold. Commissioner Clark, please.

COMMISSIONER CLARK: I do have just a couple questions.

EXAMINATION

BY COMMISSIONER CLARK:

Q. I don't believe that it's a point of contention at all, but I didn't see it discussed much in the prefiled testimony. The tax factor, just for my own edification, could you talk a little bit about how that's arrived at? Is it kind of a generally accepted accounting number? I think it's 1.65 or something like that.

A. Right. There's -- there is no argument between the parties in this case. That's a factor that's, I guess, been used ever since I came here. Well, no. We had a little, slight tax change a while back, but it's -- it's simply a factor that adjusts the results for the effect of income taxes. So if I come up -- let me -- maybe I can refer to -- if I can find one. For instance, towards the end of my Power Point presentation, just three pages back, it's labeled staff revenue excess calculation.

Q. Mm-hmm.

A. When we're all done, we have a return excess of 3 million dollars, and that's -- that's how much we want to see net regulated income adjusted downward, and in order to get that kind of a reduction you've got to actually reduce revenues by 5 million dollars because you're going to have tax savings resulting from those revenues, and so that's the principle. As far as how it's exactly calculated I could provide that later. I don't have it in front of me.

Q. But there's no disagreement on that?

A. There's no disagreement that I'm aware of.

Q. The -- this is more of just kind of a high-level regulatory philosophy question, and it -- it came to my mind because of your response to the letter from Commissioner Wefald from a few months ago where she was exploring ways of dealing with volatile types of income like off-system sales. You talked about the philosophy of regulatory lag, and that -- that that's one basis for using historic net income as a basis for rate setting. Is that still the staff position?

A. That is a high-level theoretical question, and, again, Mr. Lein, assigned to staff, has questioned me on that, Are you sure you don't want

77

to accept Commissioner Wefald's suggestions through her letter that we maybe want to include this in the fuel cost adjustment? I'm still the same free-enterprise guy that I've always been, and I prefer to see a level established in rates and let the company try to beat it than just capturing it through a fuel clause adjustment. Then it seems to me like it takes all the incentive out of the game, and that's steeped in my own personal philosophy more than anything.

Q. But the theory of regulatory lag itself would kind of say that -- correct or not -- that in the good years where MDU can outperform, they maybe make a little more, then the staff comes forward with a rate case and you reset rates a little, and maybe they -- and they may hit a few bad years and then they don't do quite as well so they come in for cases, kind of the idea that over time these peaks and valleys -- you get the right rate and kind of an equitable treatment for ratepayers over time. Is that the general theory on that?

A. That's the general theory. I would say that the staff is somewhat handicapped because of the funding, and so the regulatory lag is likely much greater for us than it is for the company.

78

When they file, we have eight months to deal with the case. When we file, we might have to wait a few years until budget dollars are there to present our case.

COMMISSIONER CLARK: Okay. Thank you. That's all I have.

MR. HOBERG: Thank you, Commissioner Clark.

COMMISSIONER WEFALD: I have a follow-up question.

MR. HOBERG: Commissioner Wefald, please.

FURTHER EXAMINATION

BY COMMISSIONER WEFALD:

Q. So if in future years MDU actually, let's say in the next five years, makes at lease 15 million dollars on wholesale power sales every year, then you would be off by -- then you should have reduced rates perhaps in this case by --

A. An additional 4 million dollars.

Q. -- an additional 4 million dollars.

A. That's true.

Q. And so then ratepayers are hurt by the calculations that were made today on this matter.

A. That's true.

Q. If MDU only makes -- it makes less, then

79

MDU is hurt by this calculation.

A. Correct.

Q. But in your mind then MDU has the incentive to make further -- take further cuts, make further efficiencies, try harder to do off-system sales in order to make up that difference; is that correct?

A. That would be my assumption. Yes.

Q. And so that's why you weren't willing to go with the proposal that it be a set percentage of whatever type on that?

A. Well, I mean, quite frankly, you could -- I guess you could -- every month if we wanted to true-up rates to reflect all the costs that MDU incurs to provide electricity, I suppose we could do that, but we would be in a lot of trouble, I think, if we got into that kind of mode because then there's no incentive to manage costs, no incentive to increase revenues because the PSC's going to flow through everything that we do. This is just a smaller piece of the pie but that same principle applies, and so that's why staff to this point has been unwilling to agree to some of the suggestions that are in this letter, but we even have some disagreements within our own group. As

80

I've already indicated, Mr. Lein asked me if I was sure, and so what I'm testifying to is my philosophy and my opinion and that's it.

COMMISSIONER WEFALD: Thank you.

MR. HOBERG: Thank you, Commissioner Wefald. Any further questions? Commissioner Clark.

COMMISSIONER CLARK: I do have one.

FURTHER EXAMINATION

BY COMMISSIONER CLARK:

Q. Are you aware of any other ways of dealing with this issue of volatile off-system sales that other commissions around the country have gone about besides just the fuel clause adjustment-type mechanism? Are refunds ever awarded? I'm just kind of trying to think outside the box.

A. Well, I have very limited knowledge about what other states are doing. You know, I did -- as I've already testified, I did come from the Oklahoma Corporation Commission, and in that state, at least while I was there -- I don't know if they're still practicing this -- they require -- they required that the company keep ten percent of off-system sales profits for themselves as an incentive to make off-system sales, and the other

90 percent would be flowed back to ratepayers through those -- through the ratemaking process. So it wasn't an automatic flow-through, but -- so there's -- I'm sure there's lots of things like that out there. I'm just not aware. I think we can be as creative as we want.

COMMISSIONER CLARK: Thank you. That's all I have.

MR. HOBERG: Thank you, Commissioner Clark. Any further questions? Anything on redirect, Mr. Binek?

MR. BINEK: Yes. I think just a couple of questions.

REDIRECT EXAMINATION

BY MR. BINEK:

Q. In response to a question from Mr. Pearce concerning expenses, I think you made the comment that you wouldn't argue strenuously against a ten percent increase for expenses. Your recommendation is that five percent is what should be the allowance?

A. That's my recommendation.

Q. And that remains your recommendation?

A. Yes, it does.

Q. Okay. Mr. Pearce also referred to Mr.

Blinsky's testimony that showed a decline -- I think a sharp decline in resale sales for the first two months of 2002, and I think you've already addressed this in another comment, but doesn't the mild weather that we've experienced here and basically across the country so far in 2002 and all winter long cause sales for resale to decrease from previous year levels?

A. Well, I know that one of their big customers is Otter Tail Power Company, at least it has been in the past, and it's a winter-peaking utility company. If you don't have any winter, that customer's sales is probably not going to happen. So I just extrapolated that little bit of knowledge when I'm stating that, of course, sales are down these first few months.

Q. And that would be true for basically all companies selling into the resale market.

A. I would think so.

MR. BINEK: I have no further questions.

MR. HOBERG: Thank you, Mr. Binek. Mr. Fahn, did you have a question?

MR. FAHN: Yes.

EXAMINATION

BY MR. FAHN:

Q. I wanted to make sure I understand the staff position. Staff started out at 9.155 million dollars -- suggesting a 9.155-million-dollar rate reduction, revenue reduction.

A. That's correct.

Q. And then changed to 7.327 and --

A. In -- or in -- I guess it's called rebuttal, that's true.

Q. Right. And we've been continuing down here -- we're now at 4.941-million-dollar revenue reduction and I guess I'm -- the Commission has to rely on the facts in the case, and so I want to make sure I understand that would you characterize your position as telling the Commission that they should not reduce revenue -- I mean, the maximum they should reduce revenue is 4.941 million, or could they reduce revenue by some other number that -- somewhere between where you started and where you are today or something less than where you are today?

A. I think there's enough information in this case the Commission could use a 2000 test year, a 2001 test year, a 2002 and beyond. My

recommendation of 5 million dollars is just based on what I feel is appropriate. After the Commission's finished hearing the rest of the witnesses in this proceeding, maybe they'll go with something lower or higher. No, I'm not suggesting that we limit it to 4.9 million dollars.

MR. FAHN: Thanks.

MR. HOBERG: Thank you, Mr. Fahn. Mr. Pearce, did you have some questions of Mr. Diller?

MR. PEARCE: Yes, just two, I think. Actually two related questions, I guess.

RECROSS-EXAMINATION

BY MR. PEARCE:

Q. Mike, in response to a question that Mr. Binek just asked you about weather being a factor, you aren't saying weather is the sole factor. As I recall, you gave 28 factors in your four pages.

A. No. I'm not arguing that weather's the only thing affecting off-system sales.

Q. One of many factors?

A. One of many factors.

Q. And I believe the evidence shows -- or will show it in MDU's testimony that there actually were more megawatts sold for resale in January of 2002 than in January of 2001; is that your

85

understanding?
A. I could probably get that understanding. I'll agree to that, subject to check.
Q. All right. What we're talking about is a matter of net margins, and that's based on price rather than -- I mean, it isn't simply a matter of the power sold, is it? It's a matter of power and the price?
A. Right. It's the product of the two. Yeah.
Q. As far as the impact of weather, that would simply impact the amount of power sold, not the price?
A. That's true. Weather would have -- well, I don't know the answer to that one.
MR. PEARCE: That's all I have.
MR. HOBERG: Thank you, Mr. Pearce. Any further questions of Mr. Diller then? Commissioner Clark.
COMMISSIONER CLARK: I do have one on the expense side.

FURTHER EXAMINATION

BY COMMISSIONER CLARK:
Q. And following what Mr. Fahn said, building a record for the Commission to decide things on, on

86

the office supply expense you recommend --
COMMISSIONER WEFALD: What page are you on, Commissioner Clark?
COMMISSIONER CLARK: Well, this would be in Mr. Diller's rebuttal, 18 and 19.
Q. (COMMISSIONER CLARK CONTINUING) It talks about office supply expense and making a -- specifically on 19 -- making an upward five percent inflationary adjustment. Where is that five percent derived from, or should we have something on the record that verifies that is an appropriate inflationary increase?
A. Well, as far as where the percentage comes from, I think I've testified that that's arbitrary, but as far as how it's calculated, if you take the 2000 expense level, the more normal level, if you will, of $2,122,000 and you take that times 1.05, you will come up with the $2,228,000, and so you just compare that with the 2001 number of $2,906,000 and you get an adjustment required of $678,000. That would be on a total company basis.
Q. But the five percent isn't tied to the CPI or any specific --
A. Not tied to anything.
Q. Okay. For the insurance expense -- I'm

87

not sure exactly where that is pagewise in the testimony, but I remember it more from your slide presentation. I heard you saying that's a little bit tougher to tell and you just don't think we have the information yet to verify if the insurances expense is a legit increase?
A. Right. I'm just -- I'm not sure. It doesn't appear that they've analyzed all of the pension and benefit costs, but I could be wrong. I guess I'm waiting for Mr. Ball's testimony to --
COMMISSIONER CLARK: Thank you. That's all I have.
MR. HOBERG: Thank you, Commissioner Clark. Any further questions then of Mr. Diller? Mr. Binek?

REDIRECT EXAMINATION

BY MR. BINEK:
Q. I hate to get back into this weather situation, but Mr. -- Mr. Pearce asked you basically about the correlation between demand and price. If we have -- if we have warm weather like we're experiencing and experiencing it throughout the country basically, even if MDU's sales -- resale sales are high, you know, comparably high, the fact that we have warm weather does result in

88

overall decreased demand and decreased price for the product, doesn't it? It does have an effect also on price?
A. That's why I changed my answer and said I don't know. I would think that it would, but -- it seems to me like it would be, yes.
MR. BINEK: Nothing further.
MR. HOBERG: Anything further of Mr. Diller? No further questions of Mr. Diller? Thank you, Mr. Diller.
THE WITNESS: Thank you.
MR. BINEK: At this time I'll call Charles King.
COMMISSIONER WEFALD: Could everyone have a copy of that exhibit then?
MR. HOBERG: Yes, yes.
COMMISSIONER WEFALD: Thank you.
MR. HOBERG: Good point. Mr. Pearce -- I think at a break or something we'll make copies of Exhibit 11. Please be seated, Mr. King. I think you were present earlier when I gave the admonition in regard to percentage; is that correct?
THE WITNESS: Yes.
(Witness sworn.)
MR. HOBERG: Thank you. Mr. Binek,

please.

MR. BINEK: Thank you.

CHARLES W. KING,

having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. BINEK:

Q. Please state your name and business address for the record.

A. My name is Charles W. King. My business address is 1220 L Street Northwest, Washington, D.C.

Q. And what is your occupation?

A. I am an economic consultant.

Q. And by whom are you employed?

A. I am the president of the economic consulting firm of Snavely King Majoros O'Connor & Lee, Incorporated.

Q. And how long have you been in this position?

A. I have been either president or vice president of this company since it was founded in 1970, which makes it what, 32 years now.

Q. And could you just briefly state your educational background?

A. I am a -- received a Master -- a Bachelor of Arts in economics from Washington and Lee University and a Master of Arts in public economic policy from the George Washington University.

Q. And did you prepare prefiled testimony in this case, both direct and rebuttal testimony?

A. Yes, I did.

Q. I show you what have been marked as Exhibits 4 and 5 and ask if you can identify those exhibits.

A. Those are the testimonies that I prepared. Yes.

Q. And if I asked you the same questions today that are contained in these exhibits, would your answers be the same?

A. Yes, they would.

Q. And do you adopt your prefiled testimony as your sworn testimony in this case today?

A. Yes. I should note that the rebuttal testimony to some extent supersedes some of the information that was in the initial testimony.

Q. Yes. Do you have any corrections that need to be made to your testimony?

A. A couple minor typos that one could correct. In the initial testimony, page 4, line

29, the word -- the fourth word in that line is "if." It should be "it," so that it reads, Nothing prevents it from inflating the company's -- from inflating the equity percentage. And then page 11 of that same initial testimony, at line 22 is missing a word. It should read "that it must be a large corporation." Those are the only corrections I have.

Q. Okay. And with those corrections do you adopt this as your sworn testimony?

A. Yes, I do.

MR. HOBERG: Are you offering these, Mr. Binek?

MR. BINEK: Yes, I will offer them.

MR. HOBERG: Okay. Exhibits 4 and 5, which are Docket Nos. 14 and 53, have been offered. Mr. Pearce, any objection?

MR. PEARCE: No objection.

MR. HOBERG: No objection. Exhibits 4 and 5 are admitted.

Q. (MR. BINEK CONTINUING) Thank you. What rate of return are you recommending -- I guess I should -- what rate of return are you recommending be allowed to MDU's electric operations in North Dakota?

A. I am recommending an overall rate of return of 9.22 percent, which incorporates a returned equity of 11.7 percent. This is a revision upward from the testimony that I submitted last August in which I had recommended a returned equity of 11.2 percent.

Q. Have you read the rebuttal and surrebuttal testimony of MDU witness Stephen Gaske in this proceeding?

A. Yes, I have.

Q. What rate of return does Dr. Gaske recommend for MDU's electric operations in North Dakota?

A. Dr. Gaske recommends a return of 10.7 percent with an equity return incorporated into that of 12.75 percent.

Q. Can you identify the specific reasons for the difference between your recommendation and that of Dr. Gaske?

A. Yes. There are four reasons for the difference between our recommended rate of return. The first is the cost of the debt that should be included in overall rate of return.

The second -- well, the next three go to the cost of equity, but they are respectively the

93

selection of companies that are comparable to MDU for purposes of determining the appropriate rate of equity return; the addition of an increment to the equity return in the amount of -- for stock flotation costs; and, finally, a tiny difference in the procedure for calculating the value of next year's dividends in the process of computing a DCF, discounted cash flow, rate of return.

Q. Are there other areas -- any other areas of disagreement with Dr. Gaske?

A. Yes. We disagree as to the appropriate checks for our respective discounted rate -- discounted cash flow rates of return.

Q. Okay. What is the issue with respect to the cost of debt?

A. The issue relates to how to treat the cost of refunding the old debt that was repurchased back in 1992 when the company acquired or sold much of the long-term debt that it now has outstanding. These costs were considerable. They were 13 million dollars out of a total of 136 million dollars in debt, or about 10 percent of the principal. Now both Dr. Gaske and I agree that these costs should be recovered. The question goes to where they should be recovered and how.

94

Dr. Gaske advocates what's called the yield to maturity approach. If you think of the cost of debt as a fraction, the numerator of the fraction is the annual cost of debt, the denominator is the total principal amount. Under the yield to maturity approach the cost of -- these flotation costs -- I'm sorry, not flotation -- they were costs of issuance, mostly of the cost of repurchasing the old preexisting debt, the 13 million. That is backed out of the denominator. That is, it's backed out of the amount of money to be recovered.

There is the alternative approach, which I have employed, which we will call the accounting approach, in which the amount is -- the cost of issuance of a debt is added to the numerator, that is, the annual amount that is recovered in the rate of return. These yield very different costs of debt.

The yield to maturity approach in this particular case yields 9.22 percent, and the accounting approach, which I recommend, yields 8.62 percent.

Now I've adopted the accounting approach because MDU's 9.22 percent debt cost is way out of

95

line with that of other utilities. NSP, which is -- now calls itself I believe Xcel Energy -- has an embedded debt cost of 6.99 percent. That is about -- well, let's see, 223 bases points -- a basis point being a hundredth of a percentage -- below what MDU is requesting. Otter Tail's embedded debt cost is 7.68 percent. You saw those -- these comparisons in one of Mr. Diller's slides. This rate of 9.22 percent is also way above any current cost of corporate debt, the yields to corporate funds in the public markets.

What I am proposing is a significant -- significant reduction over the -- over the yield to maturity approach, but it reflects certain known facts. The first is that no competitive company would be able to maintain debt costs of 9.22 percent, 2 percent -- 2, 3 percent above what current yields are, without some hurt to its stockholders.

We are not asking for a hurt to the stockholders of MDU. We're just asking that debt issuance costs be recognized exactly as they appear on the financial books. This isn't such a shocking idea because NSP proposed exactly this approach in its rate case here last year.

96

Q. The NSP approach, do you have an exhibit that shows NSP's approach?

A. I'm sorry. I do not have -- it's set forth in Dr. Gaske's testimony.

Q. Okay. So your -- at this point your position is the accounting approach should be used?

A. Yes. As I indicate, this is easier on ratepayers, it reflects the fact that the company's debt costs are excessive. You will probably hear -- you will hear this afternoon of elegant reasons why the company could not reduce its debt costs.

The fact remains that all the rest of the -- the other two utilities in North Dakota and all other utilities I am aware of are able to maintain debt costs well below eight percent. I do not understand why it would be impossible for this company to reduce its debt costs. To use the financing approach, which is fair to ratepayers and fair to shareholders, gives the company some incentive to reduce its debt costs whenever possible.

Q. Mr. King, on -- in your direct testimony on page six you make reference to a 40-million-dollar term loan from the Bank of America, and you

97

state that the 40 million dollars was borrowed on December 29, 2000, and matured on January 2, 2001. Is that correct?

A. That's correct. The -- the -- go ahead.

Q. Okay. Was that -- was the full 40 million dollars being carried on MDU's books as debt for the year 2000?

A. What brought it to my attention is when we initially began this proceeding, we had received a statement from the company as to its cost of capital, and the full 40 million dollars was shown as outstanding on December 31st of 2000.

Q. And this loan only covered a period of three days in the year 2000; is that correct?

A. Apparently the company had taken out the loan -- I can't remember the exact dates -- December 29th and it repaid it on something like January 2nd.

Q. Do you know what the interest rate was for that loan?

A. It was 9.575 percent.

Q. Did you make an adjustment in your testimony?

A. Yes, I did. I inquired of the company as to what the average outstanding amount against this

98

line of credit was during the year 2000. The company responded that it was 1.3 million. So I reduced the amount in the capital structure and in the debt structure to 1.3 million, and that is reflected in the debt allowance that I've got, and I believe the company has accepted that adjustment, at least Dr. Gaske has not objected to it.

Q. Okay. Does that complete the issues with regard to the cost of debt?

A. Yes, it does.

Q. What is the issue with respect to selection of comparable companies for the purposes of DCF calculation?

A. Well, you have to understand you can't measure MDU's equity return directly, and the reason is that it has too many nonregulated businesses. MDU's parent, of course, is the only company that sells stock. MDU -- M-D Utilities, which I think is the official name of the affiliate or the subsidiary that we're dealing with, does not sell stock in the open market.

The parent company really has only about a quarter of its earnings generated by regulated activities. Three-quarters of its earnings come from nonregulated activities, a lot of it in the

99

pipeline and energy exploration business, and that's in my initial testimony. The result is that it's necessary to use surrogate companies that are heavily regulated that reflect the kind of business that MDU is engaged in.

I set up a series of criteria for selecting these companies. First, that they had to be -- 85 percent of their revenue had to be regulated, that is from rate base return type regulations such as we're talking about here. The companies had to have investment grade beyond ratings; and, finally, the companies had to have sufficient size to be reasonably comparable to MDU, and I established a threshold of annual revenues of 100 million dollars.

I made two selections, one electric-only company and the other a combination gas and electric company, and the listing of these companies is set forth in an exhibit to my initial testimony.

I found only five electric-only companies that fit this standard, and I believe ten -- yeah, it was ten combination companies, and those are the companies that I studied for purposes of determining their return to equity to MDU.

100

Having studied those, I found that the electric-only companies generally had higher rates of return, that is discounted cash flow indicating rates of return than did the combination companies, and I concluded that the combination companies should be used as the comparable utilities to MDU. Why? Because MDU is a combination company.

Now this might not matter if there were no difference between the risk of a combination company -- by combination I'm talking about gas and electric -- if combination companies had the same risk as electric-only companies.

The two objective reasons for believing that a combination company is less risky: In the first place for some uses of energy the two were competitive. That certainly is true of cooking and hot water heating, and in much of the company it's true of heating, as well. Maybe less so in North Dakota where electric heating is relatively rare. Elsewhere in the company electric heating is quite competitive with gas heating.

The other reason has to do with the weather. Most gas companies -- well, all gas companies peak in the wintertime because the principal use of gas is space heating. Most

101

electric companies in this country, not all, but most, peak in the summer because the principal use for electricity is air conditioning. If you have both services, electricity and gas, you have -- you spread the risk of unusual weather. So that if you have a warm winter, like we're having now, that's going to hurt your gas operation, but that could be offset by a warm summer, which will pick up on the electricity side.

So as a consequence combination companies are less risky. MDU, being a combination company, I selected the returns from the combination companies. Dr. Gaske strongly objects to this. He thinks that electric-only companies are the appropriate surrogate, and obviously we disagree, and it's, I guess, for you to decide which of us is right. So that's the principal disagreement there.

Q. Why do you object to Dr. Gaske's selection of electric-only companies?

A. Well, Dr. Gaske used a different threshold of regulated revenue than I did. I set the threshold quite high at 85 percent. Even at 85 percent there's still a fairly significant influence in investors' minds of unregulated activities because often those are the fastest

102

growing and the potentially most profitable but in the near term often the least profitable activities the company engages in.

Dr. Gaske set his threshold lower. He set it at 75 percent and in the process picked up three companies. IDACORP, which is Idaho -- what is it, Idaho Gas, Idaho Utilities Energy -- but anyway, that's its new name, IDACORP -- AEP, which stands for American Electric Power, and Cleco, these are all electric utilities that have between 75 and 85 percent of regulated revenue. They also have very high DC -- discounted cash flow rates of return as computed by Dr. Gaske. They range from 12.5 percent to 15.4 percent.

I have included in my rebuttal testimony an exhibit which has the -- the Value Line writeups for these three companies. If you look at those writeups, you will see that what excites Value Line at least is the nonregulated activities of each of these three companies. That's what's driving investor expectations, particularly as to future growth.

Now, it results in a much higher rate of return? Why? Because these are riskier activities, being unregulated. These -- these

103

companies can't go to regulators if profits go south on these -- on these unregulated ventures. As a consequence I believe these companies are inappropriate to compare with MDU's regulated electric activity.

If you take these three companies out and if you ignored Dr. Gaske's flotation cost adder, which I will talk about in a minute, you find that the remaining I believe seven companies have rates of return virtually in the range that I'm talking about, that I recommend, 11.7 to 11.9 is his range for the remaining companies. That probably is one of the bigger areas of disagreement between us.

Q. What is the issue with respect to flotation costs?

A. Well, flotation costs are the costs of selling stock, and they involve underwriters' commissions and discounts and a whole host of things. Dr. Gaske has increased the discounted cash flow equity return by 4.75 percent to capture what he claims is a necessary component for flotation costs, and this number's based on a survey that he conducted of the cost of floating new stock by a number of utility companies.

Now I reject this adder for a number of

104

reasons. First of all, it's too large for MDU. If you take MDU's total flotation costs for the last five years and compare it to the amount of stock that it sold or issued, it comes to only about .94 percent, but that's not the real objection. The real objection is that Dr. Gaske would take this flotation cost, which pertains to selling new issues of stock, and apply it to the entire value of all the equity that had ever been sold by this company, including equity that's been sold through dividend reinvestment plans which have virtually no flotation costs, and stock that is not necessarily issued in public offerings.

The result is that when you apply Dr. Gaske's 4.75 percent, you come with a figure of about 6 million dollars every year that is recaptured for flotation costs. Well, 6 million dollars exceeds the entire cost of flotation companies incurred for all stock issues over the last five years. It's a gross overrecovery.

Now, I don't think that flotation costs should be excluded from the recovery of capital costs, but if you take the actual flotation costs of MDU for the last five years and you annualize them, it comes to about a million dollars a year.

105

You compare that to the total value of -- book value of MDU's equity and it comes to about .1 percent. The number is so small that it gets lost in the rounding, and I think it is not unfair to simply ignore it because it is a minuscule item.

The company's stock is selling well above book value. It does not -- oh, and we'll get into that. That's the other reason for Dr. Gaske's proposal, to include flotation costs. He argues that if you don't include flotation costs, the company's stock will sell below book value. Why? Because DCF is a calculation of the investor-required return. If you apply it to book values as Dr. Gaske has, the stock will sell at book value, and as a consequence when shares are sold, the subtraction from proceeds for flotation costs means that the company receives in terms of real money less than its book value, less than the -- and there is a dilution of the value of -- book value of these shares of the company.

I have an exhibit which I presented to you about a -- was it last year when I was here for the NSP case, which demonstrates that that flatly isn't so, and if we could hand that out, I could show why this is the case.

106

MR. BINEK: Why don't we mark this.

MR. HOBERG: This hasn't been marked yet, Mr. --

MR. BINEK: No, it hasn't.

THE WITNESS: In the NSP --

MR. HOBERG: Just a minute, please.

(Exhibit 12 was marked for identification.)

MR. HOBERG: Do you want to look at the exhibit first?

MR. BINEK: Yes. I would like to have him identify what this exhibit is.

MR. HOBERG: Okay.

THE WITNESS: This exhibit was distributed in the NSP case -- and I can't remember exactly the date I was here, but it was last year -- where I was rebutting the NSP -- NSP of course is Northern States Power and is now called Xcel Energy, but I think we all know it as NSP, but in any case, their rate-of-return witness argued that investors looked to a return on market value rather than book value and that we should be applying the DCF return to market value, and I was trying to show -- because -- unless you do that you will depress the stock down to its book value and you will not be

107

able to maintain ratios of market value to book value that are higher than one.

The purpose of this exhibit was to demonstrate that it flatly isn't true that when you give a discounted cash flow based rate of return to the book value of a regulated utility, that the consequence is a market value that equals book value.

Now if you look at the -- and what this has is the market per share -- market value per share, book value per share, the market-to-book ratio, and then column D is earnings per share, and then we get the return on first the market price and then on the book price, and --

MR. HOBERG: Before we testify on this, though, we better offer it.

MR. BINEK: Yes. I will offer this as an exhibit.

MR. HOBERG: Okay. Exhibit 12, Mr. King's chart from last year's NSP case, Mr. Pearce, any objection to Exhibit 12?

MR. PEARCE: No objection to foundation.

MR. HOBERG: Okay. Exhibit 12 is admitted. Mr. Binek, please.

Q. (MR. BINEK CONTINUING) Yes. Would you

108

proceed, please, with your explanation?

A. Yes. Look at the far right column. This is the percent earnings on book value. Now these are all gas companies, and in the NSP case I had recommended a rate of return of 11.2 percent on -- for NSP, and I believe in the settlement that subsequently was made it was agreed that the allowed rate of return would be 11.5 percent.

So if 11.2 to 5 -- let's say 11.5 is the appropriate rate of return on book value, then we can observe several instances where companies are earning less than 11.5 percent on book value. AGL Resources, that stands for Atlanta Gas & Light, is only earning 10.8 percent; Leclede Gas is only earning 9.1 percent; Northwest Natural Gas earning only 10.2 percent; Wisconsin Energy, 9.1 percent. These companies are clearly not earning an adequate return on their book value.

But look then at the market-to-book ratios. In every case they are still well above one. Why is that? And the reason is that the companies -- that investors are not looking at the current return on book value as the basis on what they'll buy that share for. They'll buy the shares for both the current return and the forecast future

earnings. All the -- investors in all of these companies are anticipating that earnings will increase; and, therefore, they are willing to accept very low returns on market price, and that's column E here, which, as you see, not one even approaches ten percent. Not one -- well, there's only one that does, that's Energy East, but all the rest are in the 6, 7 and 8 percent return. That's the current return that investors are making on the market value of their shares, and that's because they are betting that these utilities will be able to generate increased earnings in the future.

So I -- the basis of all this is that if you offer a book return -- a return on book value that matches the discounted cash flow return, which I believe to be 11.7 percent, the result will be a market price which exceeds the book value and easily recaptures the flotation costs that Dr. Gaske contends will be lost otherwise. So that's my rebuttal to that piece of Dr. Gaske's supplemental testimony.

Q. And what is the issue with respect to forecasting of dividends during the coming year?

A. Well, this is a mechanical thing. The theory of DCF is that the -- the dividend yield

piece, which is the immediate return of the discounted cash flow formula, should be next year's dividend over recent price. That's the dividend yield.

Now the question is we have -- we know what this year's dividend is. What's next year's dividend going to be? It probably will be increased over this year's dividend. Conventionally -- a rather mechanical way it's done -- is that you take the growth factor, which you've already identified as part of the DCF, and you divide it in half. Why in half? Because the probability of the dividend increase is randomly distributed through the coming year, and half of the coming year is six months from now and that's half of the annual increase in earnings that you predict for the company.

And so I used an adder of .5 of the growth factor to increase the dividend in my dividend yield calculation. Dr. Gaske says that's wrong, it should be .625, and Dr. Gaske will have to tell you why he's right and I'm wrong, but the result is negligible difference in our rates of return. It really is a nit on the whole calculation, but it is an area of disagreement.

Q. What is the -- what is the issue with respect to various checks on DCF rate of return?

A. Well, as you know, the DCF is the standard classical way you calculate rate of return, if you've sat in enough of these proceedings, but there usually is a need to have some kind of sanity check on what you get from the discounted cash flow procedure.

The sanity check I used was to look at the trend in interest rates since earlier rate-of-return decisions, and if you look at Schedule 4 of my initial testimony, you'll see a chart which traces both corporate and, I believe, government interest rates since the 1980s, and what you will see there is a gradual downward trend. It ziggles, but currently it's lower than it's been in 15 years. That's partly because of the Federal Reserve, it's partly because of the decline in inflation, but whatever the reasons, interest rates now are considerably lower than they were when rates of return were last set for this company, and the chart has on it the rates of return that were established not only by this Commission but by the -- I believe the Wyoming, South Dakota and Montana commissions to the extent that they made

decisions during the last 15 years.

COMMISSIONER WEFALD: Which page is that on?

THE WITNESS: That's exhibit -- Schedule 4 of the initial testimony.

COMMISSIONER WEFALD: Thank you.

MR. HOBERG: That's Exhibit 4.

THE WITNESS: It's just before the little resume, and I assume it's paginated the same way. It looks like this.

COMMISSIONER WEFALD: Thank you.

THE WITNESS: And at the far right of this I show the rate of return that I had picked last August, but that should have a new little star, which is a little higher for the rate of return which I'm now recommending of 11.7 percent instead of 11.2 percent.

Dr. Gaske has used two very different checks. Oh, I should say that the interest rates are not directly correlated with returns to equity. They vary because of different concerns about the assurance of equity return, the stock market variations, and inflation has a lot to do with it because an -- stocks are perceived as a hedge against inflation, and bonds -- if you lock in a

113

low interest rate and inflation goes through the roof, why, you're really losing because you're simply not -- I mean, you've got a fixed interest rate, and if you're earning five percent and the inflation rate goes to seven, you're behind two percent every year.

So these variations from year to year affect the risk premium of stocks over bonds, and -- but in general there is a -- is a correlation between stock returns and bonds, and that is -- that's called the risk premium check, and that's what I've attempted to do here.

Dr. Gaske has used the infamous Ibbotson Singfield approach, which I find rather bizarre. It goes all the way back to 1926 and says, let's trace what the difference between the returns to equity and the returns to debt have been over 50 -- now, what, 60, 70 -- I don't know how long that is -- almost 70 years, and that difference will wash out because it's many, many, many years -- will wash out the year-to-year fluctuations that might come about because of depressions and recessions and booms and busts and that's a good measure of risk premium, which I think is ridiculous.

114

First of all, if short-term expectations don't pay off, in other words, if you buy stocks this year thinking that you'll do better than bonds and as we saw in the last year the DOW goes from -- what is it now, 10,000 now, but it was close to 15 -- I mean, close to 12,000 a year or so ago, Nasdaq has gone -- is tanked, then you didn't realize your expectations, and that happened in the short run, and the idea that if you add all the short-run failures with some of -- and they'll offset the short-run successes that would have happened if you bought stocks back in the mid Nineties and kept them and sold them right at that magic moment in March 2000, well, that's ridiculous, that these would wash out and result in some real believable measure of risk premium.

The other objection -- or two other objections to this approach. The other one is that there's some sort of fixed, unchangeable risk premium over bond -- bond yields that applies for decades at a time. That's not true. Bonds and stock vary in their relative risk and benefit as I discussed a minute ago.

And the final objection is a purely mathematical one. If you look at the variations

115

in -- annual variations -- actually these are monthly measures, but if you look at the variations from year to year and the yields in the risk premiums over bond yields, they -- those variations exceed the average, exceed the mean, which means that the mean has no statistical significance whatever as a predictive instrument. And so I would dismiss this procedure for measuring risk premium completely.

Q. (MR. BINEK CONTINUING) What is your assessment of Dr. Gaske's alternative equity investment analysis?

A. Well, that's Dr. Gaske's other check on his equity return. He comes up with an equity return of 12.75 percent, and this is pumped up by the use of companies that are heavily engaged in nonregulated activities and by his 4.75 percent kicker for flotation costs.

Then he says, ah-hah, let's see what the return-to-book equity for industrial companies will be, and so he takes several hundred industrial companies and says that over 5 years they have earned 29.4 percent on their book equity value, and this means that a return of 12.75 percent to MDU is really quite modest and quite low.

116

Well, what this ignores is the very different relation -- different importance of return to book equity for an industrial company as compared to a utility company. If you want to buy a share of an industrial company, you have to pay the market price. There's no way you can get the book value. The book value is a historical number which measures how much money was put into the capitalization of the company over the past, but it's not a number that is meaningful to you as an investor. The only number that's meaningful is what is your return on the market value.

Overwhelmingly, market values exceed book value all across the economy, and so what appears to be a very high 29.4 percent on book value when you look at the market value is a much, much, much lower number.

Now why is that different from MDU or other utilities? It differs from MDU and utilities because MDU is regulated based on its book value. Book value has importance for utilities that is nowhere found in industrial companies because regulators, such as yourselves, decide what rate of return should be allowed on a rate base, and that rate base is not tied to the market value of the

117

company but to its book value, and that's why book value returns are important in utilities. They are not important or relevant in industrial companies.

Q. Do you have any final comments you'd like to make to the Commission?

A. Yes. I think there really are only two or three decisions you have to make. With respect to debt costs you have to make a simple decision of whether you would go with one calculation or another, and I've given you reasons for using the financial return, which I mentioned is used by NSP. So it's not an unthinkable thing.

The financial calculation of the cost of debt. We need to have some incentive to this company to get that debt cost down, which is excessive. That's one decision.

The other decision I don't think is all that great, that is the return to equity, because when you -- when you peel off Dr. Gaske's -- the two areas where Dr. Gaske has pumped up his equity return, which is including three highly -- well, three companies where nonregulated activities are clearly demonstrated -- are inflating the expected return and if you get rid of this flotation cost kicker, you find that his returned equity on his

118

selection of companies, which I don't even agree with, is about the same as mine. It's 11.7 to 11.9. I recommend 11.7 because it's based on combination gas/electric utility, and MDU is a combination electric gas and electric utility, and that's I think really -- I tried to reduce to a nutshell the decisions you have to make.

MR. BINEK: Thank you. At this time I'd tender the witness for cross-examination.

MR. HOBERG: Thank you, Mr. Binek. Perhaps this is a good time to take luncheon recess.

MR. BINEK: I would like to comment, Your Honor, that Mr. King does have to leave this afternoon. I think he probably needs to go to the airport, what, about 3:30?

THE WITNESS: Well, the plane's 4:40, so 3:30 is --

MR. BINEK: And I think MDU also has a witness in that same situation.

MR. HOBERG: Is that correct, Mr. Pearce?

MR. PEARCE: Yes. And I don't have a very extensive cross-examination for Mr. King, so that would certainly be no problem having him finished, I would think, within a half-hour after we get back

119

from lunch.

MR. HOBERG: Okay. So you don't have any problem with taking a luncheon break?

MR. PEARCE: No. That's fine.

MR. HOBERG: Till one o'clock?

COMMISSIONER WEFALD: Right at one?

MR. HOBERG: One o'clock. Okay. We'll be back after lunch at one o'clock.

(Noon recess taken.)

MR. HOBERG: We're back from luncheon recess, and we're about to begin the cross-examination of Mr. King. Mr. Pearce, please.

MR. PEARCE: Thank you.

CROSS-EXAMINATION

BY MR. PEARCE:

Q. Mr. King, I may have misheard, but at the very beginning of your testimony it seems to me that you said that your overall cost of debt was 9.22. I think you meant 9.92. Maybe I misheard it.

A. Let me make sure. That's a pretty important number.

MR. HOBERG: He said 9.22.

Q. (MR. PEARCE CONTINUING) Right. And I believe your number is 9.92.

120

A. 9.92, right.

Q. Okay.

A. Overall capital cost.

Q. Right. That's what I thought I heard. Now you testified on the -- as to your basis for reducing MDU's cost of debt from 9.22 to 8.62 percent. If I understood your testimony, your opinion is based solely on the -- your perception that that 9.22 is unreasonably high; is that right?

A. That's correct.

Q. And I think you also testified that the debt level of NSP that you talked about was based on your accounting based approach, not a yield to maturity?

A. The debt return is based on the accounting approach which amortizes the acquisition costs, the reacquisition costs over the life of the debt issued, which is the standard accounting treatment for these costs.

Q. Now I believe that -- doesn't FERC practice and also the prior practice of this Commission is to use a yield-to-maturity approach for the cost of debt?

A. That has been the case, yes, as I say so in my reply testimony.

121

Q. And that typically will yield a higher cost of debt than the accounting approach you testified to?
A. Yes.
Q. I believe you stated in a data response that you didn't know how the Otter Tail debt-comparison figure was computed; is that right?
A. No, I do not. I don't have background on that.
Q. Now when you say that the MDU cost of debt is unreasonably high, that -- again, that's simply your opinion based on comparing it to two other utilities, Otter Tail and Xcel?
A. Not just them. You get the Federal Reserve report on what current interest rates or bond yields are. You'll find numbers dramatically lower than 9.22 percent.
Q. Yes. And those are current rates, not embedded --
A. Current rates, right.
Q. Have you done any investigation into the MDU debt as to the purpose for the occurring of the debt or the timing of the debt issues that make up its --
A. I've looked at the report on the 1992

122

refunding. I've looked at it fairly carefully, but if that's investigation, the answer is yes.
Q. Is that the extent of the investigation that you've done?
A. I think so, yes.
Q. Now -- but in order to actually come to a reasoned judgment, expert opinion about the cost of debt, wouldn't you have to look at all of the history by which MDU acquired and refinanced and incurred the current embedded cost of debt?
A. I guess I don't understand your question.
Q. Well, let me -- perhaps I phrased it in a convoluted way again, but in order to make an informed judgment, let's say, about whether a debt cost is unreasonable or not, wouldn't you have to look at all the circumstances under which each issue of debt was incurred and the refinancings that occurred subsequently?
A. You know, I'm not even sure that would do the trick. Everything had to do with timing, and it would appear that MDU picked a very poor time or did poor timing, for whatever reason, in its refunding, and the refunded -- the effective costs of much of the refunded long-term debt was no lower than the cost of the debt that was refunded. Those

123

would show up in the MDU data.
I'll give you a specific example. Here's a retired issue -- a retired issue of -- looks like 74 million dollars with a cost of money of 10.498 percent. The new issue is effective cost of money of 11.024 percent.
MR. HOBERG: Mr. King, what were you referring to there?
THE WITNESS: I'm sorry. The document I'm referring to is not in evidence, and maybe it will be, though. Maybe this is provided by one of your witnesses, but what it is is the -- I had asked for a cost benefit study for the refunding of the debt that was responsible for these very high long-term embedded costs, and I was given two sheets of paper. One shows the long-term debt capital as of December 31, 1991, and the other one shows the cost of capital as of -- or cost of debt, rather, as of December 31, 1992, and presumably the difference between the two is the effect of the refunding.
So I was -- you know, I can't explain why it appears that those particular issues having been refunded wound up resulting in a higher cost than the previous issue. That's something your folks will have to explain. I couldn't rationalize it.

124

Q. (MR. PEARCE CONTINUING) You didn't look into or inquire as to the specific reason for the refinancing that was done?
A. No. I didn't get into why the refinancing.
Q. Now turning for a moment to your comparison companies, your proxy companies, I'm looking at your Exhibit CWK-3R, I believe it is, listing both -- showing both your list of electric-only utilities and your list of combination gas/electric utilities.
MR. HOBERG: Is this in the direct or rebuttal?
MR. PEARCE: I think that CWK-R is in your rebuttal. I think it's the last page, I believe, in exhibits to your rebuttal.
THE WITNESS: I have it.
Q. (MR. PEARCE CONTINUING) I note that under the electric utilities -- or electric-only you have -- just taking a couple, for example, Pinnacle West and Great Plains Power, which I believe is the successor to Kansas City Power and Light; is that right?
A. That's correct.
Q. Both have a DCF return of 12.9 percent.

125

A. Yes.
Q. And now those are companies, which I believe if we look at -- and the same evidence may be in your testimony, but I took this particular page from Mr. Gaske's schedule which shows the percent of revenues from electric operations of all the companies that derived 75 percent or more. I believe it's in his initial testimony in response to your direct. It's his JSG-2, Schedule 3, page 1 of 2?
A. JSG-2, Schedule 3.
Q. It's entitled "Mr. King's Electric Companies That Derive 75 Percent of Revenue From Regulated Electric Service."
A. Yeah, I have it.
Q. Now I notice that those two companies I mentioned, electrics-only, Kansas City Power & Light, which is the same as Great Plains, and Pinnacle West derived 95 percent of the revenue from electric operations. So we're looking at companies that are -- as you say, they're electric-only. They derive the vast bulk of their revenues from electric operations.
A. Yes, sir.
Q. It would seem that these would be logical

126

ones to compare to Montana-Dakota rather than, for example, looking down in your list of combination companies of Con Ed and Energy East, which I think respectively derived 73.6 and 68.4 percent of their revenue from electric operations and have significantly lower DCF figures then of about 9.6 and 10.9 percent. I know you've testified as to your theory about the combination companies and the risk, but doesn't it just as a matter of common sense make more sense to be comparing Montana-Dakota Utilities' electric operations to companies that are deriving essentially -- or a large bulk of their revenue from electric operations?
A. No. And the reason is that the fact that Montana-Dakota Utilities also has regulated gas services means that the appropriate comparison is with entities that provide both electric and gas service under regulation and very little else, that is very little in the way of nonregulated activities, and the reason is that the electric -- the risk of the electric activity is not a stand-alone risk as Dr. Gaske seems to think. It is affected by the presence of the regulated gas activity for the reasons that I've discussed. So

127

the comparable company is the one that is the combination company.
Q. Well, suppose for a moment as an example that for whatever reason there was a very bad year for electric sales for Montana-Dakota and a very good year -- well, suppose a lot of customers switched over, as you've suggested they might, to gas. Then Montana-Dakota would have to invest significant additional funds into its gas operations, I assume, doesn't that make sense, to serve them?
A. It might. But the virtue is that it's better off than if it had no gas operations. That's the advantage that a combination company has that an electric-only company doesn't have.
Q. And if that happened, the Commission would then, of course, need to allow Montana-Dakota to recover those additional expenditures on the gas side; right?
A. Conceivably, but we're talking about rate of return and investors' perception of business risk, and investors' perception is that the presence of gas -- regulated gas operations in the same service territory is a protection, not a -- not an obstacle to the company's business success.

128

Q. But would those investors -- how would they factor into account? In my example if the electric -- substantial electric costs were now stranded because the customers have switched over to gas, is the Commission going to allow MDU to recover on the electric side of those stranded costs in plant?
A. Well, there's very little -- virtually no example that I could think of where shifts between fuel sources has created stranded facilities of any kind, and the reason is that in most of the country total fuel consumption, because of total population, if nothing else, and also economic activity is expanding, so that when you have a shift from, say, electricity to gas, it is at the increment. It isn't that the electricity contracts and you have stranded electric facilities which you wind up as having a slower rate of growth for the electric side and a higher rate of growth for the gas side and the reverse if there is a shift in the other direction.
Q. But aren't we now in a recession, and for Commissioner Reinbold I will say my opinion is that we are in a recession, so won't that affect your increasing economic, aren't we going in reverse?

129

A. It's conceivable that in a recessionary period if you had a dramatic shift from one -- from one fuel source to another, you could have a temporary loss of capacity utilization. I don't know of any example of where that has in fact occurred.

MR. PEARCE: That's all the questions I have.

MR. HOBERG: Thank you, Mr. Pearce. Mr. Fahn, did you have any questions of Mr. King?

MR. FAHN: No, thank you.

MR. HOBERG: Thank you. Commissioner Wefald, did you have any questions of Mr. King?

COMMISSIONER WEFALD: Yes, I do.

EXAMINATION

BY COMMISSIONER WEFALD:

Q. I have one on flotation charts, the flotation costs. On page four and on page -- on page four of your testimony, Mr. King --

A. This is my rebuttal testimony, I assume, because --

Q. Your rebuttal testimony, yes.

A. -- the issue didn't come up in the initial testimony.

Q. Right. You state that the -- I guess it's

130

on page three. You state that Mr. Gaske calculates the average flotation cost of new common stock issues at 4.75 percent, and then you discuss about how he applied these -- how if you divide -- flotation costs are a little hard for me, so you'll have to excuse me. I need a little time to ask my question. You talk about how the -- and let me make sure I understand flotation cost first. Flotation cost is how much it costs to put out this new stock offering to the public or to whoever wants to take it; is that correct?

A. That's right. It's things like underwriters' commissions.

Q. Okay. So I think I've got the basic concept. All right. Now, when -- when Mr. Gaske -- Dr. Gaske figures this, you're saying that he multiplies it by the whole 1.77 million book equity value of the company and that comes to 6.3 million dollars annually, which is more than all the flotation costs the company has incurred in the past five years, and so therefore -- then you talk about what their actual flotation costs have been in the last five years, and that's 1.1 million.

A. That's correct.

Q. That's all on page four.

131

A. Right.

Q. But in their rebuttal testimony to yours, the final thing that we received last week, they talk about how some of these were mergers and so then the mergers didn't really have much. They were acquiring stock or something, there was hardly any cost.

A. I don't know the detail, but my impression is it may have been exchanging stock or something like that.

Q. Exchanging of stock or something. So his comments about the exchange of stock, does that make any difference on your testimony on this issue?

A. It goes to my .94 percent, which Dr. Gaske says is understated, because I used in that the denominator of all -- the value of all the shares issued, including the acquisition shares. I don't know for certain how this acquisition worked and whether there was in fact an increment in the capital of the combined companies, but taking Dr. Gaske at his word, then the 9.4 percent isn't a good expression of the cost of getting new equity capital, new as opposed to exchanged equity capital, and he comes up with a figure of

132

three-and-a-half percent or something like that.

That doesn't change, though, the figure that I talk about on line 17, page -- I mean, line 16, page 4, the 1.1 million. That is in fact the average annual real flotation cost incurred by the company each -- on average each year in the last five years. So that number is unaffected by this whole business of acquisition equity.

Q. In --

A. So his recovery of six million is still six times what it ought to be.

Q. All right. And does he actually use that figure for calculating the -- for adding -- for adding this flotation adder?

A. Well, it's the effect of his flotation adder. If you take this -- this adder of 4-and-a-half percent and apply that to the total equity of the value of the company, it comes up to 6.3 million annually.

Q. Are you -- even if -- but he points out in his testimony that there is a -- that the 4.5 is closely associated with the cost of issuing new stock that would be comparable to MDU Utility stock, and is it your position that there just should not be an adder, period?

133

A. If you wanted to put an adder in, you should take some expression of the average flotation cost annually and use that as the basis for the adder. What I contend -- you'll see that on page four -- is that this would be an allowance of .1 percent.

Q. And do you even think an adder should be used, because you said if a flotation cost adder is used.

A. Yeah.

Q. You say "if." Are there situations when -- in rate cases where people do not allow a flotation cost adder?

A. Oh, rarely is -- I've been in a number -- I fight this battle all the time, and generally commissions do not allow flotation adders. Now there are probably some that have, but it's not -- it's not one that sells well with commissions because it results in such an astronomical increase in the cost of equity relative to the true cost of flotation.

This 1.1 million versus 6.3 million comparison is repeated anytime that a company does what Dr. Gaske's proposing, which is to take the cost of floating incremental, that is to say new

134

equity, and apply that as an adder to the entire volume of equity of the whole company. It's just an apples-and-oranges application and results in an inflated recovery of what is really not a very big cost.

Q. And then the other issue that you said was very small and that has to do with the one where you're using a number of .5 and they're using shall and MDU's using a number of point --

A. .625. That's even --

Q. -- 625. And you said that's very small as far as dollar factor. You said, "The effect of this disagreement on the final result, however, is minimal," page nine.

A. Yes. And that really is a nit. I suspect Dr. Gaske would agree with me on that.

Q. Okay. So how many dollars would you think that's worth?

A. I haven't figured it out, but I could do it.

COMMISSIONER WEFALD: All right. That's all the questions I have right now. Thank you.

MR. HOBERG: Thank you, Commissioner Wefald. Commissioner Reinbold, please.

COMMISSIONER REINBOLD: Thank you. Just a

135

couple to clarify my notes here so that I can read it myself.

EXAMINATION

BY COMMISSIONER REINBOLD:

Q. Mr. King -- Dr. King, excuse me, do you agree with Diller, basically there are about four issues here in this case?

A. That's about it.

Q. Okay. So you wouldn't -- from a previous time you had stated that you were in favor of 11.7 percent on equity and you dropped it to 11.5.

A. It's the other way around. I started out at -- I ran these numbers back in August and it was 11.2 percent on equity, and between August and February we had such things as the California energy crisis and we had a little problem with a company called Enron, and I think the public -- the investing public took a somewhat dimmer view of utilities as investment vehicles, and I think that's bumped up the cost of equity for utility companies, and that's evidenced in my revision to 11.7 percent.

Q. Okay. Then my last question is the one we're all trying to get an answer to, and that is: Have we had a recession?

136

A. They tell me it's over. That's what I heard on the radio the other day. We can all go back and put our feet up and relax.

COMMISSIONER REINBOLD: Can we kind of knock off early today so we can do that? Thank you. That's all I have for this witness at this time.

MR. HOBERG: Thank you, Commissioner Reinbold. Commissioner Clark, please.

COMMISSIONER CLARK: I have no questions. Thank you.

MR. HOBERG: Thank you. Let's see. Mr. Binek.

REDIRECT EXAMINATION

BY MR. BINEK:

Q. Mr. Pearce asked you some questions about the timing of MDU's debt financing activities. Over the long run could we expect MDU would be on the winning side of timing just as often as being on the losing side?

A. Well, as these long-term issues that are carrying very high coupon rates and bearing these reacquisition costs, as they mature the cost of refinancing will -- will drop because the premium that the company would have to pay to buy these

bonds back will decline. One of the most expensive issues is due up, I believe, in 2007.

So within the next few years it'll pay this company to refinance. Whether they can do it right now beneficially, I don't know.

One additional reason for setting the debt rate a little lower than the company would like is the very fact that if we lock in this very high 9.22 percent debt return and, as Mr. Diller suggested, that we don't have a rate case for a number of years, the company can enjoy a nice windfall when it does refinance because it will have a revenue award that reflects very high debt costs and yet it's refinanced its debt down 300 basis points, which is quite possible.

So that's yet another reason that I think we should go with the lower financial or accounting calculation of debt cost.

Q. When Mr. Diller had his slide show earlier, do you recall that he indicated that MDU's long-term debt has always been quite high compared to Otter Tail and NSP for the past 15 years, and so wouldn't you expect that over time MDU's cost of debt would become -- begin to come in line with those other companies?

A. I would hope so, yes. I would hope the financial planning would improve and the company can reduce its debt cost.

MR. BINEK: I have nothing further.

MR. HOBERG: Thank you, Mr. Binek. Mr. Pearce, anything further?

MR. PEARCE: No.

MR. HOBERG: Mr. Fahn, anything further?

MR. FAHN: Just one question.

EXAMINATION

BY MR. FAHN:

Q. Just to confirm, when you -- your resulting cost-of-equity number does not include any flotation?

A. No explicit adder for flotation. No.

MR. HOBERG: Thank you Mr, Fahn. Any further questions then of Mr. King? No further questions? Thank you, Mr. King.

THE WITNESS: Thank you.

MR. BINEK: Staff has no further witnesses to present.

MR. HOBERG: You rest at this time?

MR. BINEK: We rest.

MR. HOBERG: Thank you. Okay. Thank you, Mr. Binek.

MR. HOBERG: Okay. Mr. Pearce, are you ready to present MDU's case.

MR. PEARCE: Yes. May I have just a moment to arrange my papers here?

MR. HOBERG: Sure. We're off the record.

(Off the record.)

MR. HOBERG: Mr. Pearce, your first witness is whom?

MR. PEARCE: Wayne Fox.

MR. HOBERG: Mr. Fox, please. I think you heard the admonition I gave earlier in regard to perjury, Mr. Fox?

THE WITNESS: I did.

(Witness sworn.)

MR. HOBERG: Thank you. Mr. Pearce, please.

MR. PEARCE: Thank you. I just have a very few comments by way of opening statement, and then I will ask Mr. Fox to testify.

The basis for the proceeding is already in the record. The evidence that the company will present will demonstrate that Montana-Dakota Utilities will immediately begin to incur revenue deficiency if new rates based on the Commission staff's position go into effect in 2002 and

continue in effect.

And, of course, as the case has already shown, the primary driving force behind this conclusion -- behind the case in general is the sharply declining level of margins on wholesale electric sales, also called off-system sales, that the company believes it's now able to make and will be able to make in the future as compared to the unusually high margins that were in effect for sales in the years 2000 and especially 2001.

The company's evidence will demonstrate clearly that the wholesale market for electric sales is declining dramatically and for a variety of reasons will continue to do so, including the reasons that have already been mentioned, the precipitous decline in the price of natural gas, the advent of new generation facilities that can compete economically with the company's coal-fired generation in the wholesale market, the present economic recession in the United States, and a resulting falling off of demand and many other factors.

The company's witnesses will address these factors in detail in their testimony; and, finally, the company, of course, also takes issue with the

141

conclusions as to the appropriate rate of return that Mr. King has testified to. Our testimony will show that the appropriate and reasonable rate of return on equity is 12.75 percent and an actual cost of debt in the yield to maturity basis is 9.222 percent with a resulting overall rate of return of 10.7 percent.

There are, as has been mentioned already, several other minor issues in the case, but these are the major points, and with that I will ask Mr. Fox to -- to take the stand, and I will -- I don't need to use those yet.

C. WAYNE FOX,

having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. PEARCE:

Q. Would you state your name and your business address, please?

A. My name is Wayne Fox, 400 North Fourth Street, Bismarck, North Dakota, 58501.

Q. And what is your position with Montana-Dakota Utilities Company?

A. President of Montana-Dakota Utilities.

Q. And how long have you been in that

142

position?

A. August of 2000.

Q. And how long have you been employed by the company?

A. Since June 1980.

Q. And I believe you have a summary of testimony that you would like to make, and I would ask you to just go ahead and read that into the record.

A. I do. Should I proceed?

Q. Yes.

A. In my direct testimony I explain the company's position regarding the North Dakota Public Service Commission staff's recommendation for electric rate decrease and introduce the other witnesses who sponsored testimony on behalf of Montana-Dakota in this proceeding.

It is our position that there is no basis to reduce Montana-Dakota's electric rates at this time. The staff case does not take into account a number of necessary adjustments in making an appropriate determination regarding the reasonableness of the existing electric rates.

Our direct testimony filed on January 11th, 2002, indicated that there is a revenue

143

deficiency of $710,000. Our surrebuttal testimony filed on February 19th, 2002, reflecting an update to 2001 actual information consistent with the staff position, indicates a revenue deficiency of $1,727,000.

The testimony of the other witnesses addresses the necessary adjustments to the staff position. Montana-Dakota's electric rates were last changed in February 1987. From 1987 to 2001 the Consumer Price Index has risen 59 percent.

In spite of this significant increase, we have been able to hold our electric rates flat for this entire period by finding ways of operating our businesses more efficiently and taking advantage of new technology where it makes sense to do so, and that's maintaining a consistent focus on providing reliable and safe electric service to our over 70,000 electric customers in North Dakota at reasonable and at competitive prices.

My direct testimony contains examples of what we did to take advantage of technology and operate more efficiently. We also continue to look for other opportunities to operate our businesses more efficiently and to reduce cost.

In the years -- excuse me. In the years

144

since 1987 our earnings have sometimes fell below the authorized level set by the Commission and sometimes above that level. A regulated utility on average and over time should be able to earn at or near its authorized return. A regulated public utility is only afforded the opportunity to earn a reasonable return on its investment and facilities dedicated to the public utility service. There is no guarantee.

The earned return levels for the last few years that gave rise to this proceeding were caused primarily by a single element, the selling of power in the wholesale market as the opportunities arose. It was a market anomaly that afforded us and other utilities across the country the ability to temporarily obtain significantly increased revenues and margins from sales of electric energy into the wholesale market in the last few years.

Those opportunities, we believe, peaked in 2001 and will be significantly reduced in the year 2002 and beyond. The reasons for the loss of opportunities are described in the testimony of Mr. Blinsky, Mr. Gaske, Mr. Wilkinson and Mr. Schiffman.

In short, the last few years were an

145

unusual period of time in the energy markets where high gas prices, high demand and a strong economy converged to create high demand and high prices for wholesale power. These conditions have now changed and are not likely to be present in the near future, and those reasons are explained in the four witnesses I just mentioned.

What this means for Montana-Dakota is that we will no longer be able to sell power in the wholesale market at the higher prices that we have seen in the last few years. This translates to a significant downturn in our earnings and our returns. The effect of this on our earnings is quantified by other witnesses.

In addition to the wholesale sales levels, there are other changes in cost levels from the year 2000 basis and now the year 2001 basis which staff has adopted that the Commission needs to take into consideration in determining the reasonableness of our electric rates. These changes are discussed in detail by other witnesses.

So in view of the above, in my opinion there is no basis to reduce our electric rates at this time. That represents a summary of my testimony.

146

MR. PEARCE: I have no questions for this witness.

MR. HOBERG: Did you want to introduce your exhibits or offer your exhibits at this time, Mr. Pearce?

MR. PEARCE: I think I'll wait until -- the summary that Mr. Fox did was separate from our bound and marked exhibits, so I think I'll wait until our first witness -- I mean, our next witness.

MR. HOBERG: Oh, okay. Thank you, Mr. Pearce. Mr. Binek, did you have any questions of Mr. Fox?

MR. BINEK: No.

MR. HOBERG: Mr. Fahn, did you have any questions of Mr. Fox?

MR. FAHN: Just one, I guess.

EXAMINATION

BY MR. FAHN:

Q. MDU is not asking for a rate increase at this time?

A. Not at this time.

Q. Why not?

A. Well, we've bit the bullet several times over the last decade. If you look at Mr. Diller's

147

first slide on his exhibit, you'll see that the company failed to earn its authorized return for about a four- or five-year spread there, and when I say bite the bullet, what we did in those particular cases, we froze our labor rates, which is a significant portion of our cost. We looked for efficiencies of operation, and that's outlined in my testimony, a list thereof.

So we're going to continue to look for ways of operating our business more efficiently and take advantage of new technology. So I'm not ready at this point to give up on it, but there clearly is, from my testimony and the testimony of Mr. Ball and other witnesses in this case, that there exists a likely revenue deficiency for 2002 -- or based upon the test year -- I'm sorry, based on the test year 2001 as adjusted.

Q. Do you have anything in mind for the efficiencies that you were talking about, to save money in the future?

A. Well, one we haven't implemented yet, but I think it's already recorded in the case, is the Itron hand-held meter reading. We found that Itron is now going to support the method that we have adopted here several years ago. It's more

148

efficient, and so we think that we'll probably go to the hand-held technology that's now available to us. We'd like to go to even a higher technology, but we can't see the economics of doing so, but that's just one example.

Joint meter reading with municipalities -- again, we reflected some of that in the case. We started doing that for the towns here in Richardton -- and there's one other town that I forgot the name of it already -- that we're enjoying joint meter reading right now, but we're looking for other opportunities to do that.

Joint trenching is allowing us to provide service to other customers that we couldn't otherwise do, especially with the telecommunication companies. That's helped us get service into areas that we couldn't, but the list actually just goes on, but some of them are not real material but you kind of add them up over time, but that's how we've stayed away from this Commission as far as asking for a rate increase since 1987, is trying to do those type of things.

Q. Will any of those things be implemented in the test year, the 2002?

A. Like I said, they're already reflected I

149

think in this 2000 case because we're looking ahead on the 2001 cost adjustments.

MR. FAHN: Okay. Thanks.

MR. HOBERG: Thank you, Mr. Fahn. Commissioner Wefald, did you have any questions of Mr. Fox?

COMMISSIONER WEFALD: I have no questions for this witness.

MR. HOBERG: Commissioner Reinbold.

EXAMINATION

BY COMMISSIONER REINBOLD:

Q. Mr. Fox, it sounds as though you subscribe to the idea that the wholesale market is kind of a guessing game, you don't know what it's going to be now or in the future?

A. Well, I tell you, I think it's an unknown, and we struggle with that ourselves in the sense of what is going to happen. Terry Blinsky, who is our operator and trying to take advantage of sales as they come along, he's really reacting, if you will, to opportunities that are out there. He doesn't really know what's going to come down the pike, but when it does, he's going to try to make the best deal that he can.

I've talked with experts, American Gas

150

Association, we've talked with other people, including the Edison Electric Institute. As Mr. Diller's done, we watch the news and take advantage of that, as well, but the reason I brought in three experts today is so that you and I can get a better handle on what might be a reasonable determination of wholesale levels in the future, and these folks are here to help us understand that.

COMMISSIONER REINBOLD: That's all I have.

MR. HOBERG: Thank you, Commissioner Reinbold. Commissioner Clark, please.

COMMISSIONER CLARK: I have no questions. Thank you.

MR. HOBERG: Thank you, Commissioner Clark. Any further questions then, Mr. Pearce?

MR. PEARCE: No.

MR. HOBERG: No further questions? Thank you, Mr. Fox.

THE WITNESS: You're welcome. Thank you.

MR. HOBERG: Your next witness, Mr. Pearce, please.

MR. PEARCE: I'll call Dr. J. Stephen Gaske.

COMMISSIONER REINBOLD: Who?

MR. HOBERG: Dr. Gaske.

151

MR. BINEK: Dr. Gaske.

MR. HOBERG: Please be seated. Is it Gaske or Gaske.

THE WITNESS: Gaske.

MR. HOBERG: Dr. Gaske, I think you heard the admonition I gave earlier in regard to perjury; is that correct.

THE WITNESS: Yes, I have.

(Witness sworn.)

MR. HOBERG: Thank you. Mr. Pearce, please.

J. STEPHEN GASKE,

having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. PEARCE:

Q. Dr. Gaske, I'm going to show you a bound book that's labeled Exhibit 6 and Exhibit 7 and just ask you to identify that your previously-filed testimony appears in those two books.

A. Yes. Yes, it does, with --

Q. Go ahead.

A. Okay. There was one schedule omitted from the surrebuttal testimony.

Q. And I believe that's been marked as

152

Exhibit 8 -- of the Commission exhibits. It's your JSG-4, Schedule 1, I believe. I think I must -- I have it here.

MR. HOBERG: You marked something as a separate exhibit?

MR. PEARCE: I think we marked that as a separate exhibit. I think it was inadvertently omitted from the --

MR. HOBERG: Oh, yes. Exhibit 8. Part of the surrebuttal?

MR. PEARCE: That's right.

Q. (MR. PEARCE CONTINUING) I'm showing you also what's been marked as Exhibit 8. Is that the schedule that was inadvertently omitted from your rebuttal testimony?

A. Yes. This was a data request -- or a response to a data request that I provided to Mr. King.

Q. Do Exhibits 6, 7 and 8 appear to contain your original rebuttal testimony and surrebuttal testimony as filed in this case?

A. Yes, they do.

MR. HOBERG: Just for the Commission's information, 6 and 7 contain all of the direct and all of the surrebuttal of MDU.

153

COMMISSIONER WEFALD: Yes.
MR. PEARCE: And with the Commission counsel's agreement and the hearing officer's agreement, I think what I would suggest doing is I'll offer Exhibits 6, 7 and 8, offering 6 and 7 with the proviso that as each witness testifies, I will ask him if that is his testimony as filed.
MR. HOBERG: I think that would be acceptable. Mr. Binek, is that all right?
MR. BINEK: Yes.
MR. HOBERG: Okay. So you're offering in total then Exhibits 6, 7 and 8.
MR. PEARCE: 6, 7 and 8, yes.
MR. HOBERG: Any objection, Mr. Binek?
MR. BINEK: I was just taking a look at 8 here. No, I have no objection.
MR. HOBERG: Okay. 6, 7 and 8 are admitted, and just for the record, Dr. Gaske's direct and surrebuttal are Dockets 49 and 63. Mr. Pearce, please.
Q. (MR. PEARCE CONTINUING) Dr. Gaske, first I would ask you to -- and you may simply read this from the first couple of pages of Exhibit 7, if you wish -- to summarize your background and experience.

154

A. My educational background is that I hold a Bachelor's degree from the University of Virginia. I hold a Master's of business administration degree from George Washington University, and I hold a Ph.D. from Indiana University where my major fields of concentration were public utilities, financing and microeconomics.
My professional experience is that subsequent to receiving my MBA I worked at the consulting firm of H. Zinder & Associates for several years as a research associate and director of -- later as director of research.
I left there and worked for a year with Olson and Company and then went back to school to get a Ph.D. During that time I continued to do independent consulting. I also taught a number of different courses, including public utilities and transportation. I also during that time was the coordinate to the Edison Electric Institute rate course.
In 1986 I went to work for Trinity University as a professor of finance and left there in 1988 to come back to H. Zinder & Associates where I've been since then as a consultant.
Q. And have you previously testified in rate

155

proceedings?
A. Yes. I've testified or submitted testimony in, I believe, more than 40 proceedings.
COMMISSIONER REINBOLD: Could you speak up a little bit, please?
MR. HOBERG: Could speak up a little bit please, Dr. Gaske?
THE WITNESS: Yes.
Q. (MR. PEARCE CONTINUING) Drawing your attention, Dr. Gaske, just for a moment to Exhibit 7, I believe there was a number correction that needed to be made there on line 17 of page 20 of your surrebuttal. That would be Exhibit 7.
A. Yes. That refers to the Montana-Dakota estimate of the margins that will be available. The number shown shows 7.2 million. The corrected number that's in the surrebuttal testimony of Mr. Blinsky is 6,429,778.
Q. With that correction does your -- your testimony as contained in Exhibits 6 and 7, is that true and accurate and complete as you --
A. Yes.
Q. Now you heard the testimony of Mr. King here in this proceeding this morning, I think, have you not?

156

A. Yes.
Q. Would you respond to the issues and the comments that Mr. King has made?
A. Yes. I guess I'll take them one at a time, in the same order that Mr. King addressed them, and I guess I should say at the outset that most of what I'm going to say is in my surrebuttal testimony.
During Mr. King's response he mostly repeated what was in his rebuttal testimony and appeared to not address almost anything that was in my surrebuttal testimony. So much of what I'm going to say actually is in written form in the surrebuttal testimony and will respond to what Mr. King said while he was on the stand.
The first issue as to the debt cost is that the accounting based approach that he advocates is equivalent to disallowing a portion of the company's debt cost, and the reason it is is that the accounting based approach does not reflect the effective cost of the debt, what it really economically costs and what the company needs to recover to recover its costs.
In particular, if you focus on the reacquisition cost issue, by having Montana-Dakota

157

recover reacquisition costs, you know, as they're being amortized for accounting purposes, you're essentially assuming that the reacquisition costs are going to be incurred this year and next year and the following year, when in fact the company actually wrote the check for the reacquisition costs many years ago.

The company spent the money, the cash is outstanding, and when you use the accounting approach, you're making an entry, a simple book entry each year, to spread that cost over a number of years, but that does not reflect the fact that the money was already spent many years ago, and essentially they lose the carrying value of the dollars that they spent. It's equivalent to no allowed rate of return on the reacquisition costs. So when you use his approach, you are going to effectively disallow a portion of the true cost of the debt.

As to the reasonableness of the debt cost, in my surrebuttal testimony I have a calculation where I show that the debt issuances that occurred since April of 1992 have an average cost of about 7.31 percent. That's right in the same ballpark with the costs of Otter Tail and Northern States

158

Power. In fact, it could even be lower than theirs in that the 7.31 reflects the yield to maturity approach for calculating cost, and we're not entirely sure how, for example, the Otter Tail costs were calculated. I asked for a calculation of those costs from Mr. King. He said he did not know how they were calculated, either.

So the debt that has been issued since 1992 has basically the same cost or possibly even a lower cost than the other utilities in the state.

The real issue with regard to the debt cost has to do with reacquisition costs and the high cost of debt that was issued really initially in the late Seventies and early 1980s. At that time Montana-Dakota had several things going on, but the biggest thing was that they were building an electric plant, and anyone who remembers that time period remembers that very suddenly interest rates went to extremely high levels and stayed there throughout the early Eighties.

So the company had a very large need for financing at the same time that interest rates were very high. It issued a very high cost debt at that time, and I think Mr. Mahowald will talk about this in more detail, but it had to refinance those

159

high -- or it found it advantageous to refinance those costs in 1986, but the fact of the matter is that once you have very high cost debt out there, in order to get it back from investors and get them to, you know, give up the high interest rates that they were getting on that debt, you have to pay a fair amount to get the debt back, and there was a lot of money involved.

They -- the company refinanced in 1986 to get the cost down, and -- but they still had high cost debt that in 1992 they again refinanced. So what you really see on the books of Montana-Dakota today is -- are debt costs that are right in line with everybody else except for the fact that they have some high reacquisition costs that have been carried over quite a number of years and date really from a time period that they needed to build a new plant and raise a lot of money at high interest rates.

The plant is still in service. It provides, as I understand it, very economical service to the ratepayers, but the fact of the matter is is that plant was built at a high cost in terms of what they had to pay for interest at the time.

160

So I -- when you look at the overall circumstances and delve into them a little bit -- and Mr. Mahowald will be able to go into more detail, I think, than I can, you find that their debt costs are perfectly reasonable considering the circumstances under which they were incurred.

They're higher than other utilities, and at some point in the future as the reacquisition costs are paid down and the current debt that those reacquisition costs are associated with, as that disappears off their books, they will -- their costs will drop down to a level that's probably commensurate with everybody else. If they were to refinance today, they would still have those reacquisition costs hanging over them in one form or another.

So the second -- and really it was a whole set of issues that are related to the return on equity. One of the major differences between the two of us is the use of proxy companies and what we consider to be comparable companies for measuring the cost of -- the cost of equity for investing in electric utility operations. That -- that's really the issue in this case.

We're not talking about combination

161

companies or highly diversified companies, but we're trying to come up with cost of common equity for investing in electric utility operations, and the issue between us is probably best understood if you were to turn to my Exhibit JSG-2, Schedule 3.

MR. HOBERG: Is that in --

MR. PEARCE: That's in 6, Exhibit 6.

MR. HOBERG: Thank you.

COMMISSIONER WEFALD: That's in your direct testimony?

MR. PEARCE: Direct testimony.

THE WITNESS: In the direct testimony, yes, ma'am.

COMMISSIONER REINBOLD: What page?

MR. HOBERG: What page was it again?

THE WITNESS: This is Schedule 3, page one, and it's towards the back of the direct testimony. The -- for the most part the data shown here are taken from Mr. King's exhibits. He provided -- with one exception. He provided all of the basic numbers that went into these. I just combined two of his exhibits in one place and then sorted the numbers. I calculated the percentage of revenue from electric operations and then just sorted them from highest to lowest.

162

In the left column underneath where it says "King company," I've designated where it's an electric company in his group with an E or whether it's a combination company with a C. The companies in bold are companies that I've used in my analysis.

The thing to point out is that Mr. King has decided not to use electric companies. So, for example, where you see Southern Company and Kansas City Power & Light with 98 and 95 percent of their revenue from electric operations, he has concluded that these are not appropriate companies for setting -- or making a comparison to the risk of electric operations and setting rates for electric operations. So he has calculated a cost of capital for those companies, but he's thrown those results out, they're not relevant.

If you look about halfway down, you'll see the last three -- or actually the last three that have Cs next to them -- and actually Madison Gas & Electric, which he would -- he indicates that he would have used except he couldn't get an analyst forecast or growth for them. These are companies that he would use in setting the electric rates because they're combination companies. He would

163

use them for setting electric rates for Montana-Dakota.

These companies have approximately 73, 68, 68 percent, and actually Madison Gas & Electric has 62 percent of its revenues associated with electric operations. So I basically objected to and disagree with the idea that when you're in an electric rate case, you would throw out a company like, say, Kansas City Power & Light that's getting 95 percent of its revenues from electric operations and replace it with a company like, say, Alliant or Consolidated Edison where you're getting 73 or 68 percent from electric -- or electric operation.

This has a very real impact on the results in a couple of ways, and I guess probably the best way to look at the results would be to turn to Mr. King's direct testimony, and in particular page 18 of his direct testimony. Actually, let me take that back. Since he updated his rate of return, his rebuttal testimony has the newer numbers, and those appear on Exhibit CWK-3R, which is at the back of his rebuttal testimony.

MR. HOBERG: That's Exhibit 5, rebuttal testimony.

THE WITNESS: Looking at the companies

164

that I just referred to, you have, for example, Pinnacle West, which has about 95 percent of its revenues from electric operations. He doesn't consider that to be relevant, but the DCF return is 12.9 percent, and it's virtually an all-electric company. He threw that out and replaced it with, say, a company like Consolidated Edison with a rate of return of 9.6 percent, which only gets 72 percent of its revenues from electric operations.

Similarly, he threw out up above where you have Great Plains Power, which used to be Kansas City Power & Light. They get 95 percent of their revenue from electric operations, and they have a required return of 12.9 percent. He considers that to not be reasonable -- to not be relevant to this proceeding and instead replaces it with a company like, say, Energy East with a required return of 10.9 percent.

I maintain that the best way to approach this problem is to include all of the companies that get at least 75 percent of their revenue from electric operations. You can see that back on the Schedule 3 of Exhibit 6 that we were talking about a few minutes ago. I believe it's appropriate to include those companies and include companies that

165

get 98 percent of their revenue from electric operations even if they don't have a gas operation.

Now, one of the big differences in us is Mr. King believes that the required rate of return for an electric company somehow is affected by whether or not it's owned by a combination company. You have the ability to more or less offset good years in the gas business with bad years in the electric business, and he's right. That's true for every company.

If Montana-Dakota were to merge with Qwest, their electric operations, maybe they have a bad year there but their telephone operations have a good year and the two things offset each other. The question you have to ask yourself is: Does that mean that it's more attractive to invest in new utility plant to serve people in North Dakota if the company merges with Qwest?

Or the alternative way of looking at this is if Montana-Dakota were to spin off its gas operations, would it suddenly be less attractive to build a new utility plant, new electric generating plant to serve people in North Dakota, and my answer to that is, no, that the risk really doesn't change between the two.

166

Now another component of his testimony goes to this question of, well, if you're an electric-only company, investors require a higher rate of return because you don't happen to also own a gas distribution company or have that rolled in there to work out or offset some of the risks.

Well, if you look at a company like Southern Company that gets 98 percent of its revenues from electric operations, if I'm an investor and I really believe that the cost of capital is lower if -- if in fact you have some gas operations, I'll go out and I'll buy stock in Atlanta Gas & Light and Alabama Power Company, which are in the same -- I'm sorry, Alagasco, which are gas distribution companies that are in the same territory. So now I as an individual investor own stock in both the gas distribution companies in that area and the electric company in that area.

Does this mean that my cost of capital for the electric utility has suddenly gone down? Well, I probably have a diversified portfolio now, but I think that I still perceive the risk in the electric company the same way. If I was concerned about the risk and thought that having gas distribution stocks would eliminate the risk, then

167

I could buy some gas distribution stocks and put them in my portfolio.

Investors are smart enough to figure this out. So if there is a benefit to having stock in both companies, that's already reflected in the required rate of return for Southern Company or for Kansas City Power & Light. They can accomplish this diversification on their own.

So what you're left with is a rate of return that investors require for investing in electric operations with the full knowledge and ability to also buy natural gas stocks in their portfolio to eliminate whatever risk natural gas distribution companies do eliminate for the companies, and so in almost every respect you get a true rate of return for an electric company that also considers the possibility of owning gas stocks to eliminate the risk.

Now, one of the points that he makes is that, well, gas and electric compete with each other, and therefore if the same company owns both, it really is indifferent as to what happens and that somehow reduces the risk of investing in one or the other. That's not true for several reasons.

First, and by far the most important one,

168

is the fact that when you sit down and you try to -- to decide whether to invest in, say, a new generating plant or a transmission line, you look at the risks that that faces. You look at the electric market, you look at competitive alternatives, and you make the investment.

If the investment later goes bad and you lose your money, you know, that's part of the risk, but it's the risk of the electric operation that you're considering when you make your electric investment. It's not the risk of the combination company, because when you're investing in the gas business, you sit down separately and say, what's the risk of investing in the gas business, and you make investments there, and they may or may not pan out.

On both sides of the coin there are significant examples. In the early 1980s utilities all over the country ended up having to write off massive investments in generating plants that they started and had to cancel, and, you know, whether they were a combination company or not a combination company, they had to do that, and those were really big risks that they still face today that somehow they'll start a plant and the market

169

will change on them or -- and in some respects they may face even greater risks today because of the possibility of deregulation in the future, that you build a plant and four, five years from now the market is opened up for competition and they lose their shirt on the plants that they've built. So they face that, and it's an electric-related risk.

In the gas business quite a few companies -- this applied more to gas pipelines than gas distribution companies, but in the past they've lost an awful lot of money by signing contracts to buy gas and -- and then finding that the markets changed on them and industrial customers in particular won't buy their gas.

So each type of investment basically needs to be evaluated differently. Mr. King said that I strenuously object to the use of combination companies. However, if you look at Schedule 3, I don't really object to the use of combination companies. I include combination companies, but what my criterion is is that you have 75 percent of your investment from electric operations, and he objects to that, but he was very happy to include a number of companies that have a smaller percentage of their revenues from electric operations.

170

I think I've picked a reasonable and indicative group. There are three in particular that he objects to, IDACORP, American Electric Power and Cleco, and in my surrebuttal testimony I quote from the Value Line page for IDACORP where it talks -- talks about the fact that IDACORP makes sales for resale and has made some fairly decent amount of money in recent years on their sales for resale, but in 2001 those sales were down significantly, and Value Line and investors expect those sales for resale to go down quite a bit more next year in 2002 because the prices in the market for power have more or less crashed.

Well, I look at something like that and I say, what's the issue in this case? The issue in this case is -- I mean, the really big issue in this case is the sales for resale by Montana-Dakota, and if you're looking for companies that are comparable to Montana-Dakota, I can't think of a company that would be more comparable than one that is making sales for resale, in addition to having a high percentage of their revenues in the electric business.

So -- and the same thing is true with American Electric Power and Cleco. They have some

171

unregulated operations, but as this table indicates, all of them still are getting at least 75 percent of their revenue from regulated electric operations, or at least that's according to Mr. King.

So these are overwhelmingly primarily regulated electric companies who also are making some sales in the sale for resale market and some unregulated electric sales which makes them even more comparable to Montana-Dakota.

So for all of those reasons, I think that I've got a reasonably representative proxy group company for setting electric rates in Montana -- excuse me, for Montana-Dakota in North Dakota.

COMMISSIONER REINBOLD: Did you misspeak and say Montana?

THE WITNESS: Pardon?

COMMISSIONER REINBOLD: Did you say Montana?

THE WITNESS: Well, I started to say for Montana-Dakota and I stopped at Montana.

COMMISSIONER REINBOLD: Pretty dangerous in North Dakota to make any reference to Montana.

THE WITNESS: Where is it located? I guess the next area that I'll address is the

172

flotation cost adjustment, and I addressed this in my surrebuttal testimony, but initially I'll say one thing about it is that Mr. King keeps using the number 6 million dollars, and for purposes of this case the impact is approximately $365,000. So I think that'll probably put that more in perspective. 6 million sounds so large when you're talking about electric operations that have only a rate base of 128 million, but the fact is the impact is 365,000.

More importantly is the reason that a flotation cost adjustment is needed and necessary. Both of us agree that if you apply the DCF adjustment -- approach and you come up with a cost of common equity, the value of the electric operations should be equal to their book value, and he testified to that earlier.

So if I'm Montana-Dakota and I go out and I raise a dollar to invest in my electric operations, I raise that dollar, I pay 5 cents of it to brokers and investment bankers and other people who have their hand out in the process, I've got 95 cents left to invest, but I -- and I go and I invest it in my electric operations and I've got 95 cents worth of electric plant, but I had to go

173

out and I had to raise 1 dollar to invest 95 cents in my electric operations.

Your DCF result when you apply that rate of return sets the book value of the plant that you bought for 95 cents, sets the market value equal to that also. So you have a value of 95 cents for your plant, but you had to spend 1 dollar to get that, and the flotation cost adjustment is designed to recognize that fact.

Now, the other crucial point is that in setting the cost of capital for common equity it's a little bit different from almost any other component in your cost of service. The other components in your cost of service are really -- you can look up on the accounting books and you can see what they are and you can make adjustments for various things, and -- and they're right there, but the return on common equity has to be a forward-looking number.

The courts have had fundamental tests that it must be sufficient to attract capital in reasonable terms. Now, that doesn't say only -- only sufficient if you need to actually raise capital. The point is that if it's reasonable, it's reasonable to raise capital whether you need

174

to do so or not, and that's why the going back and measuring what they've spent on flotation costs over the last several years misses the main point of the flotation cost adjustment.

It's just like having a good credit rating. I'll worry about getting a good credit rating when I need to borrow money, but if I don't need to borrow money right now, I'll maintain a bad credit rating. It just doesn't work that way. You need to be in that position at all times that you can raise capital on reasonable terms.

Now, it's not -- this is not a completely ridiculous notion. In my surrebuttal testimony I have quotes from several leading treatises on the subject of setting public utility rates and the cost of capital, and I point out that I'm not the only one who advocates those.

The point that Mr. King made about Montana-Dakota having a book value in -- or a market value in excess of book value -- and that's really for MDU Resources, their publicly traded stock, but when they go out and they issue new stock and perhaps they issue it at a price above book value, they get that money and they have several options.

175

If they invest it in electric operations at -- that really have a value of 95 cents after that I have raised the dollar and spent their money on flotation costs, they've -- they've essentially lost some value to their entire company, and that value comes out of the pockets of the stockholders.

If on the other hand they take that dollar and they pay the 5 cents to the brokers and they have 95 cents to invest, they go out and they invest it in industrial assets, they can create value for their stockholders, and the average market-to-book value for industrial companies is about 6. So they could turn that 95 cents into nearly 6 dollars if they invest it somewhere else.

So the other point about flotation costs is that, sure, their market value is above book value. They have other operations, and yet their overall market-to-book ratio is pretty low compared to other industrial companies, even though Montana-Dakota has industrial operations.

If they invest the dollar -- or actually the 95 cents in industrial operations, then Mr. King is right. They can maintain the value of their company with no dilution. If on the other hand they invest it in the regulated electric

176

operations, they're going to dilute the market value of the company.

Now, in his statement earlier he kept referring to the book value, they can increase the book value, but they're actually going to reduce the market value; that the investors in the company will be hurt if Montana-Dakota takes that money and puts it in electric operations and reduce the value of it. So there's a disincentive, and essentially the rate of return would be inadequate if you don't recognize the flotation cost.

The next area -- it's a fairly small area, but I addressed this also in my surrebuttal, but it probably is worth going into here -- is why I have a .625 adjustment to the dividend yield in the DCF model that I apply, and I guess probably the best way to describe the difference between us, if you don't mind, I'd like to write on the board behind me.

MR. HOBERG: As long as you're explaining as you go for the record so we --

THE WITNESS: Yes. I --

COMMISSIONER WEFALD: You can take the microphone with you.

MR. HOBERG: Yeah. You probably should,

177

in fact, so we can all hear you.
THE WITNESS: Yeah. People keep telling me I talk too softly. There are several concepts that get rolled in together when you're looking at this adjustment for the dividend yield, and the math is fairly complicated. It would fill several pages of algebra, but the intuition is really very simple.
You've got one concept which is the idea that you have a timing of your dividends, and if you look on a time line that's measured in years, you might get your dividend or your dividend increase immediately, which would be at time zero, or you might get is one year from now at time one. Well, on average, you would look at this and the average timing of your dividend would be at 0.5 years or half a year.
And Mr. King and I both agree on that. We're in absolutely complete agreement, and my number reflects that assumption and he says that assumption is correct.
Where we differ is that he stops there. He thinks that's all there is to the DCF model, but when you work through the math of it, the crucial insight in a DCF model is the fact that there's a

178

time value to money, that a dividend received today is more valuable than a dividend received a year from now.
So to see what the impact on the DCF model is you need a second line, which would be your present-value line, and if you received one dollar right now, it's worth one dollar in present-value terms, and that would be reflected in the stock price if people expected to receive the dollar right now.
If, on the other hand, you were to receive that 1 dollar a year from now, the present value of the 1 dollar would have to be discounted and you'd have to take into account the time value of money, and say your cost of capital is 11 percent. You would divide that 1 dollar by 1.11 and you'd have a value of 90 cents.
COMMISSIONER WEFALD: Is that because of inflation that it's discounted or is there another reason?
THE WITNESS: No. It's -- if you could get your one dollar now, you could invest it and earn 11 percent. So --
COMMISSIONER WEFALD: I could? How do you come up with that 11 percent number?

179

THE WITNESS: I just made it up for --
COMMISSIONER WEFALD: Example?
THE WITNESS: -- for an example.
COMMISSIONER WEFALD: All right. Thank you.
THE WITNESS: But, you know, in this case your bond yields -- say, they're nine percent.
COMMISSIONER WEFALD: They're not right now.
THE WITNESS: Yeah. But if you had something that was nine percent -- well, actually if you had bonds that yield an 11 percent, the way they get that 11 percent is by discounting back to the present to come up with a price that you would pay today in order to get 1 dollar a year from now, and as it turns out, if you were buying a stock that was going to give you a dividend a year from now of 1 dollar, you would pay 90 cents today, and a year from now when you get -- actually get 1 dollar, you're -- the 90 cents you paid for today when they give you 1 dollar, you've earned 11 percent.
COMMISSIONER WEFALD: But you're just using 11 percent as an example. It could be any number. It could be 3 percent.

180

THE WITNESS: Yes. It could be any number at all.
COMMISSIONER WEFALD: All right.
THE WITNESS: As we both agree, on average you end up in the middle -- or as to the timing of when you get your dividend. So the average present value over the course of that year would be 1 dollar plus 90 cents divided by 2. So one plus .9 over 2, which is equal to -- what am I at? Yeah -- and actually you've got to multiply it by your probability, but on average you end up with something like -- yeah --
COMMISSIONER WEFALD: .95.
THE WITNESS: Yeah, .95. So it -- you don't end up with 1. You end up with .95 if it's in the middle of the year.
COMMISSIONER WEFALD: If you guess that it's going to be an 11 percent return.
THE WITNESS: Yes, yes.
COMMISSIONER WEFALD: Thank you.
THE WITNESS: As long as there's any kind of cost of capital that pays interest or requires a time value, that will be true.
Now, if you knew that you're getting your dividend here, the -- your dividend adjustment

181

factor would be 0. If you knew that your dividend was going to be here, it would be 1, and if on average it's going to occur halfway through the year at this point, it's not halfway between 0 and 1. Because of the time value of money the fact that this is .95 and not 1 as the average, your dividend adjustment factor is .625. The reason it's not the .5 that you had for the timing halfway through the year has to do with the time value of money, and it's .625.

I hope I haven't thoroughly confused you with this, but mathematically that's the way it works out, and intuitively that's why it is not .5.

Now, Mr. King also commented on my risk premium approach to more or less measuring or setting a benchmark for the rate of return. The numbers I used for any risk premium approach are the -- come from the -- what I would refer to as the famous Ibbotson & Singfield study. It was referred to this morning as the infamous study.

However, it's quite famous. It's used by investment analysts, it's used by mutual funds in talking to people, it's used for a variety of purposes to estimate the average premium that stocks have earned over bonds over a long period of

182

time.

Now, it's hard to imagine a better stand-alone independent estimate of what kind of a risk premium you need at any given point in time to invest in the average common stock than this long historical period unless you use a DCF approach.

In my mind a DCF approach is really how you estimate the cost of common equity, but this number does provide a good benchmark for determining whether or not -- you know, is this in the kind of ballpark that anybody in their right mind would think companies need to earn, and so I use this approach as a benchmark to more or less see whether I'm in the right ballpark. Well --

COMMISSIONER WEFALD: Can you tell me what page that's on where you discuss that? It's in your first direct testimony, I believe, of January 11th.

THE WITNESS: Sure. It's in my direct testimony. The summary of all of the approaches is in the -- is on page 46.

MR. KING: That's 33 through 34.

THE WITNESS: And on page 46 I've looked at risk premium varies different ways, the historic premium over treasury bonds that large company

183

stocks have earned, and that's 13.3 percent. Small companies of the size of the Montana-Dakota electric operations are 17.6 percent, and if you compare it to corporate bonds and the premium that common stocks have had over corporate bonds, the number is 14.8 percent for large companies and the companies the size of Montana-Dakota electric operations, it's 19 percent.

So at least to my mind this is an independent check on whether or not the rate of return is reasonable. It's not definitive. It doesn't absolutely answer the question, but it does tell me that, you know, I don't have a number that's wildly out of line with the kinds of premiums that have been earned over a long period of time in the past.

The second check that I have is my alternative equity investment approach where I look at the returns that companies have actually learned in recent years, and those returns are 20.7 percent on average for the S&P 500 and 20 --

COMMISSIONER WEFALD: What are those years?

THE WITNESS: Those would be in this testimony '96 through 2000. Now that time period

184

is exceptionally high. I mean, those were some of the best years ever, and so, you know, you wouldn't place too much weight on those.

COMMISSIONER WEFALD: If you use the most recent three years, I wonder what your numbers would be.

THE WITNESS: Oh, even higher. Well, because these are returns actually earned on the book value, you know, if you looked at the -- what the company earned, not what stockholders earned. Stockholders -- the price of their stock went down for a lot of companies and they didn't make much money, but the companies themselves have made very substantial profits on their book values. I don't expect this upcoming year or -- and it's quite possible 2001 is going to come in much lower, but I don't have those numbers yet.

But this gives you a general idea of the kinds of returns that are available on average -- for an average company and have been in recent years.

Mr. King's response to this is that investors don't have access to book value returns, and that's not really true. Investors in common stocks of these companies don't have direct access

185

to this. They've bid up the price of the stock to the point where what they really get on their stock is something less than 29 percent, but numbers like this are relevant if you're asking the question of does Montana-Dakota have an alternative place to put its capital rather than putting it in electric operations? Could it go out and build, you know, additional mining facilities and earn a 30 percent return on those or can it put the dollars directly into the electric operations and earn 12-and-three-quarters, which is what I've recommended.

So it is relevant in terms of looking at the kinds of returns and options that are available to investors who actually go out and build plant, actually build the facilities, and usually that's within a company and the company has capital budgeting processes that it goes through where each year it will sit down and it will look at what projects could we do and which ones will give us the best return for the risk and whatnot, and then they make those investments.

Within most corporations these -- these are the kinds of returns that you can get on nonregulated industrial-type investments, and they consider that possibility that they could get that

186

kind of a return and compare it to what they could get on their electric.

So it has some relevance. Again, it's not definitive because, you know, the fact -- the fact that they earn these returns is one reason they have such high book values. These returns are really higher than the cost of their capital, but, you know, if I can make more than my cost of capital, I'm happy to invest in something like that, and that competes with whether or not I'm going to build another electric generating plant for the people of North Dakota.

So in that respect the allowed return that you grant is -- needs to be competitive with these other returns, but I don't place heavy emphasis on these because particularly in the last several years they've been so high.

I believe that completes my comments on Mr. King's testimony.

MR. HOBERG: Mr. Pearce --

THE WITNESS: And most of this, I think, you'll find in my surrebuttal testimony.

MR. HOBERG: Mr. Pearce, is this the witness that needed to be at the airport.

MR. PEARCE: No, no. I do have one more

187

question for Dr. Gaske.

MR. HOBERG: Okay.

Q. (MR. PEARCE CONTINUING) Dr. Gaske, in your surrebuttal testimony, I think it starts on page 20, this is Exhibit 7, I believe, you discuss some of the factors affecting sales for resale margins. In that frame of work do you have any comments on Mr. Diller's testimony from this morning on that issue?

A. Yes, a few points. One is that if you look at the general economy, several comments have been made about whether we're in a recession or not in a recession, but a few days ago data on industrial production came out, and in January, once again, the industrial production had gone down. So that sector of the economy is shrinking and continues to shrink and that's a major source of demand.

The data on this are actually shown in a graph that's on -- or data that supports this are on a graph that's in Exhibit -- what is JSG-4 numbered?

Q. That would be 8, I believe.

A. 8. Schedule 2, page two, where it's a bar graph showing manufacturing production.

188

Q. I'm sorry. That's actually in the book. That is in the book. I'm sorry. That's not a separate exhibit.

A. Oh, yeah, yeah. That is in the book.

MR. HOBERG: In his direct or rebuttal?

THE WITNESS: In the rebuttal.

MR. PEARCE: It's in the surrebuttal. It's JSG-4, Schedule 2, page one of six.

THE WITNESS: Actually I'm addressing right now page two.

MR. PEARCE: Page two.

MR. HOBERG: So Exhibit 7, the surrebuttal?

MR. PEARCE: Yes.

THE WITNESS: Yes.

COMMISSIONER WEFALD: Is it -- did you say it's JSG-4?

THE WITNESS: Schedule 2, page two, and it -- it looks like this.

COMMISSIONER WEFALD: All right.

THE WITNESS: You may not have a colored copy.

COMMISSIONER WEFALD: This one?

THE WITNESS: Yes.

COMMISSIONER WEFALD: Thank you.

189

THE WITNESS: Yes. If you see what was happening with manufacturing production, it was rising fairly rapidly and peaked in the third quarter of the year 2000 and since then has declined regularly and steadily, and the forecast declined throughout 2001, and the forecast for 2002, as you can see, is quite a bit lower than, say, the average for the 2000 and 2001 time period. So that -- that's one factor.

COMMISSIONER WEFALD: Is this national?

THE WITNESS: This is national, yes, and in -- just as an aside, in the last couple of months almost every other week it seems you're hearing another -- one of the car manufacturers announcing massive layoffs, and that continues to happen. So we have been in a recession for -- since the middle of last year. The level of manufacturing production projected for next -- for this upcoming year is quite a bit less than it's been over that 2000, 2001 time period.

The second point that I would like to make goes to some of the discussion that occurred this morning, in particular regarding the use of futures prices to forecast the margins for the upcoming year. The one point I want to make most strongly

190

is that when you use a futures numbers, it's not the same as a forecast. It's not a guess. It's something that you could realize today.

In other words, the price that Montana-Dakota will sell its electricity at next October it could sell in -- it could sell it at the futures price right now, today, and lock that in.

So we're not -- we're in part talking about forecasting, but when you're using futures prices, those are real prices that you could actually sell next October's electricity at right now, today, and in that way it's not the same thing as sitting down and trying to come up with some model to forecast. It's a real market price for that power next October.

It's equivalent to, say, asking the question what could I buy MDU Resources stock for today? Well -- you know, or approximately what could I buy it for today? I could take two approaches. I could use an econometric model and figure out what the valuation is and come up with a price, or I could look it up in The Wall Street Journal and see what it's trading for right now.

One approach is similar to forecasting, and you use all these different techniques to kind

191

of make your best guess, and the other is, you know, looking up and seeing exactly what people are buying and selling next October's electricity for.

So in that sense the data that Mr. Blinsky has put together on prices should be given a great deal of weight and should not be confused with the uncertainty and vagaries of forecasting. They're real prices.

MR. HOBERG: Any further questions, Mr. Pearce? Oh, are you done?

THE WITNESS: No. I was going to make just a couple of other points. All of -- all of the witnesses on this issue will address this, and different ones of us will address different portions of this fact, but anybody that's been reading the newspaper over the last couple of years is well aware that in 2000 and 2001 the energy markets in the United States went haywire, and those were extremely unusual conditions where a lot of different factors came together simultaneously to drive rates to very, very high levels.

Nobody truly expects the next couple of years to be anything like they were in 2000 and 2001, and if you just take actual results during that time period, you'll get a very poor, you know,

192

forecast going forward for setting your rates.

Now, Mr. Diller made the point that gas prices and electric prices sometimes correlate, but last year MDU's margins seemed to stay high even after gas prices dropped in the latter half of the year.

Mr. Blinsky will really talk about this in more detail, but the fact is that early in the year they had a power contract, they sold power for next summer later in the year in January at essentially the futures prices that were available early in the year. So they locked in a high price. I think it was a price of like -- well, it's in his testimony, but something along the order of $140 a megawatt-hour.

So later in the year when the power markets tanked and the price was $40, they were selling for $140. That to a large extent explains why you didn't see, at least in the MDU data, this correlation between the gas prices dropping dramatically and the electric margins dropping dramatically.

If they hadn't just gotten lucky and signed a longer term contract for the power that year, you would have seen that correlation. You

193

would have seen the margins that they were getting dropping just like the gas prices.

So -- and that continues to be true today. The gas prices are down quite a bit below the unusual prices they reached during that time period and are forecasted to continue to do so.

I've got -- at the back of my surrebuttal testimony there's a graph on gas prices. These are -- once again, these are average nationwide prices, but generally over the last decade gas prices have been around the two dollars -- low two-dollar level, and on average they spiked up to over four dollars in 2000 and 2001.

COMMISSIONER CLARK: Excuse me. Is this page one of six on Schedule 2?

THE WITNESS: Yes. I'm sorry. It's page one of six. So you can see the -- the checkered -- or the triangle colored -- or pattern graph are the gas prices, and you see them getting very, very high. The slashed pattern bars all refer to coal prices, and the coal prices stayed fairly flat during that time period, and as a result if you had coal power to sell, you got huge margins all of a sudden, but those margins are projected, at least in 2002, to go back down to a lower level and

194

possibly even be lower than they were in even '98 and '99.

So I think that concludes all of my comments on Mr. Diller's testimony.

MR. HOBERG: Mr. Pearce, anything --

MR. PEARCE: Yeah. Just maybe one or two questions, I guess.

Q. (MR. PEARCE CONTINUING) In your -- in your surrebuttal testimony, Dr. Gaske, you did also mention the coming on of large amounts of new efficient electric generation in the near future. Is that a part of your conclusion that margins will go down?

A. That plays a role, but I think Mr. Schiffman is the one who will really be addressing those dynamics in the electric markets.

MR. PEARCE: I think I have nothing further of Dr. Gaske.

MR. HOBERG: Thank you, Mr. Pearce. Let's take a recess at this time of about 10 to 12 minutes.

COMMISSIONER WEFALD: Do you need -- one of the people has to go to the airport, but do they need to be a part of these questions?

MR. BINEK: Well, he will be here for a

195

while yet.

COMMISSIONER WEFALD: Okay.

MR. HOBERG: Let's go off the record.

(Recess taken.)

(Exhibit 13 was marked for identification.)

MR. HOBERG: Okay. We're back from a short recess, and we were about to begin the cross-examination by Mr. Binek, but, Mr. Pearce, you say you have at least one more question.

MR. PEARCE: Yes, Judge. Just one more question really, if I may.

Q. (MR. PEARCE CONTINUING) Dr. Gaske, would you just very briefly summarize your response then to the question of resale sales margins?

A. Various factors that contributed to the high margins in 2000 and 2001 are not likely and not forecast to continue in the upcoming year. In particular the ones that I was addressing had to do with the manufacturing production, which has an impact, the general overall economy, which is in recession, and natural gas prices, which are down, and in particular down relative to coal prices, and in addition, I discussed the fact that futures prices are real prices in the sense that you could

196

do a transaction right now at those prices to sell your power over the course of the next year at those prices.

So they're considerably more reliable than just a forecast, and I think that that would sum up my testimony. Other witnesses will be addressing other aspects of those issues.

MR. PEARCE: Thank you. I have nothing further.

MR. HOBERG: Thank you, Mr. Pearce. Mr. Binek, did you have some questions of Dr. Gaske, please?

MR. BINEK. Yes, I do.

CROSS-EXAMINATION

BY MR. BINEK:

Q. First of all, on the sales for resale, have you done any in-depth study of this issue?

A. Not of the sales for resale market. I look pretty closely at the gas price market.

Q. You testified concerning the manufacturing production, a reference to your JSG-4, Schedule 2, page two, and you talked about the manufacturing production being down from 2001. According to the chart you have here, in fact the projection is for the manufacturing production to increase in 2002,

197

isn't it?
A. What I was talking about is that in 2002 if you look at the average level of it --
Q. I realize that --
A. -- it's projected to increase from where it is right now.
Q. Right.
A. But over the course of this --
Q. That was my question?
A. Yeah. And over the course of this entire year, though, it would be quite a bit lower.
Q. But it is increasing?
A. That's the projection.
Q. Okay.
A. We hope that in the next few months we won't continue to have manufacturing production declining as it did last month.
Q. When you talked about use of the futures market, you said that's not a forecast, and I understand the discussion that you had, but aren't futures prices established using estimates in forecasts? They don't just pick a figure out of the air and say, this is what we're going to pay in September 2002.
A. Implicitly in -- within the prices that

198

people are willing to pay is a forecast or their guess, and so basically you have a buyer and a seller who are both trying to pick what the price will be and they come together and that's what it is, but the -- so, yes, implicit in that is probably a forecast of both the buyer and seller, and when their forecasts agree, they do a transaction, and to the extent there are people in the market who dramatically disagree with the forecast, they have opportunities to jump into the market and either buy or sell, depending on whether they think it's too high.
So overall it represents an unbiased estimate by all the players in the market, even the people who don't get into the market because they might stay out because they think, yeah, that's a fair price. If they thought it was traumatically unfair, there would be opportunities for huge profits for them.
Q. I'm going to kind of jump around here a little bit, if it's all right with you.
A. All right.
Q. First of all, you talked about Mr. King's 6.3 million dollars being the wrong figure, and your reference was to CWK-1R, I believe, from Mr.

199

King's testimony. Why is his 6.3 million figure wrong?
A. The -- the rate base in this case is 128.9 million dollars. The -- in percentage terms or in terms of what the cost of capital difference is for common equity between having a flotation cost and not having it, I've recommended 12.75 percent. If you took out flotation cost adjustment, you'd have 12.17 percent. The difference is that -- so essentially we're talking about 0.58 percent is the value of the flotation cost adjustment.
Now, not all of the rate base is financed by common equity. 48.87 percent of the rate base is financed by common equity. So if you take 128 -- or 128.9 million dollars in rate base, multiply it times .4887, the equity component of that, and then multiply that times .0058, which is the flotation cost adjustment to the equity return, you have $365,000 as the amount that would be included in the cost of service.
Q. Would you please go to Exhibit 1R, CWK-1R?
COMMISSIONER WEFALD: And that's found in?
MR. BINEK: That is in --
MR. HOBERG: Exhibit 5.
MR. BINEK: -- Mr. King's rebuttal

200

testimony. Right.
COMMISSIONER WEFALD: Thank you. His surrebuttal or his rebuttal?
MR. BINEK: His rebuttal.
COMMISSIONER WEFALD: Thank you.
MR. BINEK: Mr. King's.
COMMISSIONER WEFALD: Okay.
Q. (MR. BINEK CONTINUING) Is the -- looking at line 23 -- are you at that exhibit?
A. Yes.
Q. Is the figure of 0.58 percent correct?
A. Yes, it is. That's what I just said earlier, was the flotation adder, 0.58 percent.
Q. All right. And is the -- Mr. Gaske, is it true that if .58 percent is applied to the total company -- total book equity, that the figure that Mr. King used is correct, the 6.3?
A. Mathematically it's correct, but it's not what I've proposed in this proceeding and it's not -- essentially when the company decides whether or not to raise capital for, say, an unregulated part of its operation, it looks at the cost of capital for the unregulated part of the operation and it would have to consider flotation costs for that, but in terms of providing an allowed rate of

201

return of 68 million dollars to their unregulated operations, those are not at issue in this proceeding.

So the $365,000 number that I mentioned earlier, that does total out in dollars that are at issue in this proceeding.

Q. Would you agree that the -- that the 6 million flotation charge is more than the total flotation cost for the company for the last five years?

A. Yes, I would.

Q. Okay. Thank you. And if you scale it back to North Dakota, the same relationship would exist?

A. Yes, in terms of what actually was incurred during that period of time. As I said before, what we're -- we're dealing with a forward-looking approach of what rate of return do they need to attract capital.

Q. Do your book value returns under alternative investments measure the return available to new investment?

A. No. They measure the return that's available to all of the investment.

Q. To the embedded investment?

202

A. Yes, sir.

Q. I'd like to refer you to page 2 of -- this is your surrebuttal testimony -- page 2, lines 11 and 13. I'd like -- where did Mr. King admit that he had incorrectly calculated debt cost?

A. I have different line numbers in mine, but --

Q. Well, it's just under debt cost, the first question, and you started out with your answer that in his rebuttal testimony Mr. King concedes that he had incorrectly calculated the cost of debt for Montana-Dakota in his direct testimony, and then in 13, "Nevertheless, he recommends that the PSC adopt his admittedly incorrect debt cost," and my question to you is: Where did Mr. King admit that he had incorrectly calculated debt cost?

A. It comes in a -- that conclusion comes from the combination of his direct testimony and his rebuttal testimony. In his direct testimony he indicates that he used the accounting based approach, and he indicates that the reason he used that was it matched the FERC accounting regulations.

In my direct testimony in response to that I pointed out to -- to him and to the record that

203

FERC's accounting regulations don't require a calculation of the rate of return on the debt, that you have to go to its regulation regarding rate filings, and in the regulations regarding rate filings they specify that in calculating the cost of debt you use the yield-to-maturity approach.

So the reason in his direct testimony that he provided for -- for the number that he came up with was that this is the way the FERC regulations say to do it.

When I pointed out that he had gotten the wrong part of the regulations, he came back and he said on -- on his -- in his testimony -- and this would be his rebuttal testimony -- on page 2, lines 13 to 15, he says, "Dr. Gaske is correct that the yield-to-maturity procedure is the conventional method of calculating the cost of debt. Indeed, I am informed that the North Dakota Commission staff normally uses that procedure," and I take that to be a concession that indeed I was right, that that was the right way to calculate the cost of debt, and in fact it is the right way to calculate the cost of debt.

Q. Is the word "incorrect" ever mentioned in Mr. King's testimony?

204

A. This may be quibbling quite a bit, but let me -- let me again read directly what he says on page 2, line 13 of the rebuttal testimony. "Dr. Gaske is correct that the yield to maturity procedure is the conventional method of calculating the cost of debt."

So to answer your question, the answer is, no, he does not say "incorrect" -- he did it incorrectly. He says that when I pointed out that he had done it incorrectly, I was correct, and it's a very small --

Q. And he says --

A. I mean, I might not understand your question because the word "incorrect" in one context and the word "correct" in this context are exactly the same thing.

Q. Well, let's stop splitting hairs here. Didn't Mr. King state in his testimony that NSP used the accounting method, so it -- while yield to maturity may be the conventional method, he also says on line 14, I am informed that North Dakota Commission staff normally used that procedure, but in fact NSP didn't use -- in the NSP case the accounting method was used. So we aren't splitting hairs here. There is a difference between what

205

you're saying and what Mr. King is saying.
A. Now, I don't believe -- I don't believe that's true, but let's go to the NSP case that you just brought up. If indeed they used the accounting based method, and as Mr. King noted earlier, that will come up with a lower number -- or lower cost than the yield-to-maturity approach, the correct way of doing it is the yield-to-maturity approach, and if you use the accounting base approach, you will not recover your flow debt costs. It's equivalent to a disallowance.
If NSP calculated their costs that way, they inadvertently did it wrong and they should probably come back in the next rate case with the yield-to-maturity approach because they're not -- they don't have a component in their costs that would fully recover the debt cost.
Q. Or maybe NSP intended to do that.
A. I don't know. I can't put myself in their place.
Q. You're speculating.
A. Yes.
Q. Okay. If this commission provides MDU with a yield-to-maturity debt cost return as you proposed, what incentive will the company have to

206

examine the feasibility of refinancing its debt to a lower cost?
A. Good management, and that's sort of a loaded question, and I'll -- if you don't mind, I'll answer the full load of the question. As we've talked about earlier --
Q. Well, the question is: What incentive do they have?
A. Right. And as we talked about earlier, their opportunities to greatly reduce that debt cost are limited or nonexistent, and that's because a big part of the difference in the debt cost is the hangover from the long-term debt that they had to issue many years ago, and once that's gone, the cost will go down.
In general regulatory theory a company always has an incentive to keep its costs down in between rate cases, but the fact of the matter is that -- and I think Mr. Mahowald will address this -- they don't have many opportunities to reduce that cost of debt at this point in time.
Q. In terms of incentive wouldn't it be to MDU's advantage to lock in its high debt cost in this rate case and then refinance its debt to a lower rate?

207

A. I don't believe so because what we're really talking about is their share of the overall MDU Resources capital structure and debt obligations, and if you go to my Exhibit -- it's one of the exhibits with my direct testimony, and it's Exhibit JSG-2, which is in my direct, and that's Exhibit No. -- is that 6?
MR. HOBERG: Oh, no. That's Exhibit --
MR. PEARCE: It's 6.
MR. HOBERG: Yeah, 6. That's right.
THE WITNESS: Okay. On Schedule 4, page one, down towards the bottom, that schedule shows assets and operating revenues and operating income for my electric utility proxy companies, but down towards the bottom it shows the -- on the very last line it shows Montana-Dakota's electric utility operations as a percent of the total MDU Resources Group operations, and you can see that the assets are about -- of the electric operations are about 13 percent of the whole.
If MDU Resources were to go out and refinance that debt, the scenario you just described would make money for them on 13 percent of their operation and lose money on 87 percent of their operation.

208

So, frankly, their biggest incentive is -- would have been to do that as soon as they possibly could, possibly years ago if they could have done it profitably, but I think as Mr. Mahowald will tell you, because essentially they're carrying over these high costs and high refinancing costs from many years ago, there are not a lot of opportunities to get rid of that carryover, and so there are not a lot of opportunities to get a better debt rate, but the incentive for them given that only 13 percent of their assets -- and even only 8.6 percent of their revenues are in the electric utility part of MDU Resources, they have huge incentives to do that as soon as they possibly can, and there's not much to the -- not much to be gained from the -- from postponing it for an electric rate case and then losing out on those savings for, you know, 87 percent of their operations.
So, yeah, the question for MDU Resources, I'd say, no, they don't have any incentive to do that when you look at the total benefits to the company.
Q. (MR. BINEK CONTINUING) Do you have any empirical data that would demonstrate that failure

209

by a commission to provide for flotation costs in a return to equity has resulted in an inability to sell common stock at net proceeds less the book value of that stock?

A. I'm not aware of any company that has specifically said we didn't issue common stock this year because we didn't have a flotation cost adjustment.

I'm aware of utilities that have said we're not issuing stock at this time because our stock price is too low, which could be the result of flotation costs -- the absence of the flotation cost adjustment, and I'm aware of companies that have issued stock at less than book value essentially because they had an inadequate rate of return, which may or may not be just flotation costs. It could be flotation costs and other factors, but they've gone ahead and issued it and really taken a loss on the issuance and invested it in public utility operations because they felt that they had a -- or at least the things that I read at the time when this was happening -- they felt they had a public service obligation to continue to provide reliable service, even when the Commission did not grant them an adequate rate of return, and

210

that happened in the late 1970s in several instances. A lot of companies needed to build plants, or at least felt they needed to build plants, and their stock prices were below book value.

Q. Do you believe that most years regulatory commissions do not allow flotation costs?

A. I haven't done a complete survey. I -- I would agree that -- yes, I would agree with that. Probably a majority. It's a split thing.

Q. Do you have any evidence that there are any MDU investments in either electric or gas operations that have become stranded by reason of loss of market?

A. Not at this time.

Q. Isn't it true that the wholesale sales at issue in this proceeding are those made from the same generating facilities that provide the retail power for which this Commission sets rates?

A. Yes.

Q. Wholesale sales from generating units that might be owned by MDU that are altogether outside of its retail service territory would be excluded from this case, would they not?

A. Yes.

211

Q. I'd like to refer you to Mr. King's rebuttal testimony, and in his -- Exhibit CWK-2R talks about Value Line reports for IDACORP?

A. Yes.

Q. Do you have that in front of you?

A. Yes, I do.

MR. HOBERG: That's Exhibit 5.

MR. BINEK: Right.

Q. (MR. BINEK CONTINUING) First of all, do you know where Mr. King got this Value Line information?

A. I don't have his exact exhibit in front of me. I have the November 16th Value Line, but I presume that's what he has because it had the same quote that he had.

Q. Okay. Yes, that is the same.

A. Yes.

Q. Would you read the lead paragraph in Value Line's write-up about IDACORP?

A. "IDACORP's noncore enterprises are an important source of income. The wholesale energy subsidiary, which operates in 31 states, Canada, and Mexico, will likely be a major profit driver over the next three to five years."

Q. Why don't you read the whole paragraph?

212

A. Oh. "Too, IDA invests in affordable housing, which generates profits through income tax credits. It also has an interest in 12 unregulated hydro plants that are steady contributors to net. Other subsidiaries" -- do you want me to just keep on reading?

Q. Yes. That whole paragraph?

A. Actually I'll read the whole thing, if you'd like.

Q. That whole first paragraph.

A. Okay. "Other subsidiaries, still in start-up stages and not expected to be profitable for a few years, include a telecommunications unit and a provider of energy-related products and services. Finally, the company owns 70 percent of a fuel cell business that has a patent on four reformers that convert hydrogen fuels into electricity. It already has contracts for 3.5 million for the sale of 110 units of the Bonneville Power Administration, and it is pursuing orders in Japan and France. Those varied activities will likely produce 40 percent of company profits by 2004."

Q. Thank you. Now I'd like to reference you to page 19 of your rebuttal -- or, yes, your

213

rebuttal -- your surrebuttal testimony. Is that marked as 8 or 7?

MR. HOBERG: 7. It's 7.

Q. (MR. BINEK CONTINUING) Okay. And I would ask you to look at lines 15 through 17, and please read that sentence. It starts with "An allowed rate of return."

A. I was looking at something else. Could you give me the reference again?

Q. Okay. It's page 19.

A. Of my surrebuttal?

Q. Right.

A. Yes.

Q. And starting on line 15, would you please read that sentence, and then tell the Commission whether you have any empirical data that would support this statement?

A. "An allowed rate of return established by the DCF method should make the value of the electric operations equal to the book value of those operations in the absence of a flotation cost adjustment."

The theoretical underpinning of the DCF approach is that that in fact is true.

Q. Well, my question is whether you have any

214

empirical data that supports the statement. That's the question.

A. No, I don't.

Q. Going back to the -- your earlier testimony you talked about -- you were responding to what Mr. King had said, and you talked about debt cost, and in talking about the reasonableness of the debt cost and the -- the -- you talked about the situation that occurred in the -- I believe it was the late Seventies, early Eighties when MDU was having to borrow money at high rates, and it was in the process of -- one of the main reasons was, as I understood it, it was in the process of building a power plant.

A. Yes. The Coyote plant.

Q. Okay. Otter Tail Power Company was a partner with MDU in the building of the Coyote power plant, weren't they?

A. I'm not aware of that. Mr. Mahowald can probably address that.

Q. Okay. Thanks. When you were talking about the use of proxy companies and you were -- you have disagreements with Mr. King about the -- his decision not to use electric companies and to use combination companies. MDU is a combination

215

company, isn't it?

A. MDU Resources Group, yes, it is.

Q. Well, isn't -- okay. You said -- you made a statement that in -- concerning -- you were talking about investment portfolios, and you were talking about electric companies, gas companies and combination companies, and you said that investors -- if they -- if they are concerned about electric investments, they can invest in gas, you know, vice versa, but if they -- if there's a combination company, they can invest in that, and don't they reduce their risks by making the investment in a combination company?

A. And the answer to that is that the company probably reduces its risks, but it doesn't reduce the cost of capital to the electric operations.

Q. You also mentioned the possibility of deregulation as a risk. Is there any move towards deregulation in North Dakota?

A. It's my understanding that it's being studied at this time.

Q. Do you know if there's any move toward deregulation?

A. I don't know what the definition of "move" is in the context of it's being studied, which

216

implies to me that somebody must think it's worth thinking about.

Q. Well, who's studying it?

A. Let's see.

COMMISSIONER CLARK: Page 43 of your original testimony is the spot you're looking for.

THE WITNESS: Apparently there -- the legislature has an Electric Industry Competition Committee.

Q. (MR. BINEK CONTINUING) Do you know if they're doing anything at this point?

A. No, I don't know.

Q. I've got to find the right testimony here. On pages 12 and 13 of your direct testimony you discuss --

MR. HOBERG: Exhibit 6.

MR. BINEK: Pardon?

MR. HOBERG: Exhibit 6.

MR. BINEK: Yes.

Q. (MR. BINEK CONTINUING) You discuss economic factors that affect the cost of capital, and you state that in recent months the economy has been shrinking and is in a recession. Isn't it true that with a shrinking economy or a recession that investors are looking more favorable at

217

investments in companies such as MDU where rates are regulated and risks are limited?

A. I think Mr. King indicated this morning, and I agree with him completely, that in recent months people have been very concerned about utility investments, and in fact that was part of the reason for him revising his rate-of-return study.

During -- during difficult times or recessions or when there's more uncertainty in the economy, they may move their money into utility stocks, but unfortunately utility stocks aren't what they were 20 or 30 years ago. They're now considered to be relatively risky investments.

What more often happens and the thing that really affects the capital markets is that they start holding cash and cash equivalents, and there's been an enormous increase in the holding of cash and cash equivalents in the last year.

Q. But you would agree, wouldn't you, that an investor during -- during times when there's an economic downturn, utility stocks are a more favorable investment, you know, granted that there is more risk to utility stocks just as there is more risk to every other kind of stock?

218

A. Yes. I would agree with that, and I think given the fact that we have a down turn and what you've just described, the DCF analysis that I've performed reflects that because it reflects the recent stock prices, and so 12.75 percent would reflect exactly the phenomenon that you've just described.

(Exhibit 14 was marked for identification.)

MR. BINEK: That's Exhibit 15?

THE REPORTER: 14.

MR. HOBERG: 14.

MR. BINEK: 14.

Q. (MR. BINEK CONTINUING) You're familiar with Public Utilities Reports?

A. Yes, I am.

Q. I show you Advance Sheets of the Public Utilities Reports dated December 15, 2001, and I also show you an Exhibit 14, and could you tell me if you would agree that Exhibit 14 is a copy of the preliminary statement and an annual summary -- or annual survey of electric and gas utilities as compiled by the Public Utilities Reports?

A. Yes, it looks like it's a correct copy.

Q. Have you reviewed the results of that

219

survey that's contained in the Public Utilities Reports?

A. No. But I'll do so --

Q. Okay.

A. -- as quickly as I can for your benefit.

Q. Okay. I guess before doing that, would you just read into the record the first paragraph of the first page, the Roman numeral -- small I or small l?

A. "The following pages present the results of our latest annual survey of authorized rates of return or common equity for state-regulated energy utilities. This year's survey covers orders issued by state regulatory commissions during the period October 1, 2000, through September 30, 2001."

Q. Would you -- yeah. I think that's sufficient.

MR. HOBERG: Are you offering that, Mr. Binek?

MR. BINEK: Yes, I will offer it at this time.

MR. HOBERG: Okay. Exhibit 14, the Public Utilities Report, Advance Sheets, December 15, 2001, do you have any objection to that, Mr. Pearce?

220

MR. PEARCE: No, I wouldn't -- I wouldn't agree that it's relevant, but I have no objection to it being accepted for what it is.

MR. HOBERG: Okay. Exhibit 14 is admitted.

Q. (MR. BINEK CONTINUING) The actual survey begins on the third page; is that correct? For -- I won't ask you to count the number of companies, but would you accept, subject to check, that there are 46 companies listed here?

A. Yes.

MR. BINEK: I would like to point out that I noticed that Public Utilities Report does have an error on page seven of their survey. Under North Dakota they show Otter Tail Power Company Electric and below that they show Otter Tail Power Company Gas. It's the same case number, same decision date, and I think that everyone here can agree that that is a mistake, that there is no Otter Tail Power Company Gas and that it's just a duplication of the prior Otter Tail Power Company Electric, and I would ask that that -- Mr. Pearce if he would stipulate to that.

MR. PEARCE: Yes. I'll agree that there's no Otter Tail Power Company that provides gas.

221

Q. (MR. BINEK CONTINUING) Okay. So that leaves 45 companies then in this list.
A. Yes. Or I'll accept that subject to check.
Q. Okay.
A. I'll take your word for it.
Q. Now I've -- if you'll notice, I have highlighted some companies in there hopefully to help you with the questions I'm about to ask. Okay. Out of these 45 companies can you tell me how many of those companies have an authorized rate of return on common equity greater than the 11.7 percent ROE recommended by staff in this case, and for -- for your convenience and your help, those are the companies that I've highlighted in yellow.
A. Thank you.
COMMISSIONER WEFALD: Higher than 11.75?
MR. BINEK: Pardon me?
COMMISSIONER WEFALD: Higher than what?
MR. BINEK: 11.7.
COMMISSIONER WEFALD: Higher than 11.7. Thank you.
MR. BINEK: If I said 11.75, that was my mistake.
COMMISSIONER WEFALD: No, no.

222

THE WITNESS: It appears 11 companies in that time period.
Q. (MR. BINEK CONTINUING) Okay. Now, looking at page five of that report, would you agree that two of these companies are located in Minnesota and that the ROE for those two companies is 11.71 percent or one-one-hundredths of a percent higher than the staff recommended ROE in this case?
A. For back in that time period, yes.
Q. I mean, that's what the survey says; right?
A. Right. I'll kind of make that --
Q. That's all that I'm asking.
A. Yeah. I'll continue to make the distinction about the time period, but yes.
Q. Okay. And two of the companies -- and I'll refer you to page seven. Two of the companies are NSP Electric and Otter Tail Electric in North Dakota that are at 12 percent. Those are the companies that Mr. Diller referred to earlier with performance-based regulation?
A. Yes. I'll --
Q. I think if you'll look at the footnotes, it does talk about the performance-based regulation.

223

A. Yes.
Q. And the third -- there's also a Northern States Power Company Gas, and that's the 11.5 percent ROE that Mr. Diller talked about earlier, the rate case with Otter Tail.
A. Yes.
Q. Okay. That brings us down to the remaining seven companies. Would you agree with me that six of those remaining companies are all located in Wisconsin, the last page, and that the ROEs there range from 12.1 to 12.9?
A. Yes.
Q. The seventh company is -- on page five is Cleco, or however you pronounce that, in Louisiana. Cleco is one of the companies that you included as a proxy and that Mr. King says shouldn't be included as a proxy; is that correct?
A. Yes, that's correct.
Q. Okay. And their rate is at 12.25 percent?
A. Yes.
Q. Okay. Out of these 45 companies listed, how many of those companies have a -- an authorized rate of return on common equity equal to or in excess of the ROE of 12.75 percent that is proposed by you in this proceeding?

224

A. In that time period the Wisconsin companies -- there were two at 12.9 and one at 12.75, the same number.
Q. Okay. So 3 out of 45 companies had ROE at equal to or greater than your recommended ROE for MDU?
A. In that time period, yes.
Q. So to summarize, would you agree that this annual survey conducted by Public Utilities Reports for the period of October 1, 2000, through September 30th, 2001, shows 3 out of 45 companies with ROEs equal to or greater than MDU's proposed 12.75 ROE and 34 out of 45 companies have ROEs less than the 11.7 percent ROE proposed by staff; is that true?
A. Yes, in that time period.
MR. BINEK: I have no further questions.
MR. HOBERG: Thank you, Mr. Binek. Mr. Fahn, did you have any questions of Dr. Gaske?
MR. FAHN: No questions. Thank you.
MR. HOBERG: Thank you, Mr. Fahn. Commissioner Wefald, did you have any questions of Dr. Gaske?
COMMISSIONER WEFALD: I have just a couple.

225

EXAMINATION

BY COMMISSIONER WEFALD:

Q. On futures it's my understanding that we may know the futures price today for what the futures price -- what someone will pay or sell for today for that -- in that futures market but that it's awfully hard to predict what that futures price is going to be tomorrow or next week; would you agree?

A. Yes.

Q. And so sometimes a company -- let's say they purchase electricity. Their price of electricity right now on the futures market may be low, but do you know what it's going to be next week for this summer? Do we know what -- we know what the futures price today is if you were purchasing electricity for July, but do you know what the futures price for electricity is going to be next week?

A. No.

Q. And do you know what it's going to be in May --

A. No.

Q. -- for that same -- for that same June period?

226

A. No. The futures price at any given point in time reflects the best estimate of the market as to what it will be in the future, and as you get closer and closer to a time period or as -- in people's perceptions of the market change, that can change.

Q. For example last fall, didn't the -- there was a time period when there was a prediction there was going to be an exceptionally cold winter, I believe it was the end of October, and the futures price for natural gas went way up, and, I mean, went up considerably in a blip, but then two months later the futures price was down considerably because it wasn't happening, that cold weather wasn't developing. Do you agree that there are -- that there are changes in the futures market based on predictions of the weather or other indications of market supply and market demand and those other factors?

A. Absolutely. The point of my comments earlier --

Q. You said there was certainty about the futures market, you said, about today's price.

A. Right. So you could lock in that price right now today.

227

Q. Yes. But you don't know if that's the correct price because tomorrow it may go down or it may go up, and that's part of the guesswork of the futures market.

A. Right. You can lock that price in if you actually do the transaction.

Q. Oh, I know you can, but you have to guess then -- or make your decision is that market going to go up or is it going to go down?

A. Right.

Q. I know in the -- otherwise if everyone knew what was going to happen in the futures market, it really wouldn't be a futures market. It would be -- it would -- there wouldn't be any guesswork about it, do you agree, because when you make a decision today, you're making a calculated risk that you think you're getting the very best deal today.

A. Right. People like MDU, if they don't sell on a long-term basis in the sales for resale market or if they don't sell a futures contract, they take a risk that the price will either go up or it will go down, and so --

Q. So if they waited -- even if they waited till next week, they might get a higher price for

228

their electricity if they didn't sell it today at the low price.

A. Right. For purposes of trying to figure out how much money they're likely to make over the next year, though, the current futures prices is the best available evidence.

Q. Well, what if we were holding this case next week and the price was way up?

A. Then --

Q. Then would that be the best price? If that price was going to make them 20 million dollars this year, would that be the price you were arguing was the best price?

A. Yes.

Q. It would be? Even though -- but today you're arguing that price is a lower price, and so therefore you're saying that that's the best price today and it's, you're saying, 6 million dollars or whatever would be made this year?

A. Right. I'm not arguing for a specific price, but I am saying that if you as a regulator have to make a decision as to what the most likely price is to be over the next year, there's nothing that can beat those futures prices as the best estimate at this point in time, and if you had to

229

make your decision right now at this point in time or based on the record available at this point in time, there is nothing that would be a better -- in my mind, a better predictor or estimator for what price and margin they'll be able to achieve.

Q. I appreciate your opinion on that.

A. Okay.

Q. Okay. And then on page -- the manufacturing production, that's that schedule you referred to, Schedule 2, of page two of six.

A. Yes.

MR. HOBERG: Which exhibit?

COMMISSIONER WEFALD: It's Schedule 2, page two of six.

MR. HOBERG: In his direct.

COMMISSIONER WEFALD: It's in surrebuttal testimony.

MR. HOBERG: Okay. Exhibit 7. Thank you.

Q. (COMMISSIONER WEFALD CONTINUING) That shows national manufacturing production. How does this relate to our MAPP region?

A. Well, I think other witnesses will probably address that even more than I will, but MAPP and the adjacent regions are all tied together in a large transmission network, and a huge portion

230

of the manufacturing production is occurring in the Upper Midwest, in Illinois and Wisconsin and Detroit -- or in the Michigan area and in Indiana, and so those are relatively nearby areas.

To the extent utilities between here and there can't sell electricity to those areas, they would compete directly with MAPP in selling electricity and they wouldn't -- there wouldn't be demand for their electricity.

So that would, you know -- in a very general way the electricity that's being sold in MAPP that perhaps moves east has to compete with electricity that -- and prices in those adjacent regions, and I think Mr. Schiffman talks about the link between the adjacent regions and MAPP and how that plays into the prices in MAPP.

Q. Who has MDU traditionally sold its electricity to up in the Upper Midwest in these contracts?

A. I don't know exactly. Mr. Blinsky is the witness on that.

Q. Okay. Thank you. And then on the -- on the previous page, Schedule 2, page one of six, that's the average annual U.S. energy prices, but again this is nationally -- the national chart;

231

right?

A. Right.

Q. And then in the Upper Midwest in the MAPP region, did we have -- this is for U.S. energy prices. This shows natural gas, right, and then it shows coal prices, but in the Midwest did we have those same high natural gas prices in -- does this reflect the whole year or what does this reflect?

A. This reflects an average over the year. You had periods in, oh, November, December of 2000, January, February of 2001 where the price was nine, ten dollars.

Q. Okay. And so that's the average of the whole year for that period then?

A. Right.

Q. Well, in 1999, though, on the chart that Mr. Diller gave us, it shows that --

MR. HOBERG: Which one is that?

COMMISSIONER WEFALD: This is on the back of his --

MR. HOBERG: His presentation?

COMMISSIONER WEFALD: -- rebuttal testimony.

MR. HOBERG: Okay. Exhibit 2.

Q. (COMMISSIONER WEFALD CONTINUING) Your

232

point is that high gas prices can translate into higher revenues for off-system sales?

A. Yes, that's correct. Or that's one of the factors that --

Q. One of the factors, but in 1999 Mr. Diller's chart shows that Montana-Dakota Utilities made $8,772,000 on off-system sales, and that's a year when gas prices were at $2.50 average. The next year, in the year 2000, when gas prices were up to, let's say, 4-and-a-quarter, they made $9,900,018. So there wasn't -- there was a million dollars -- not quite -- a little more than a million dollars difference that they made on those -- between those two years.

Would you agree that there's -- they made considerably more in 1999 than they did in 1998 on off-system sales even though gas prices were pretty much the same as they were in 1998 as they were in 1999?

A. Yes. And that was not driven by gas prices. I think Mr. Schiffman will address this in his testimony --

Q. All right.

A. -- that it had to do with nuclear plants shutting down.

233

Q. Thank you. And then I think I have just one more question.
A. Okay.
Q. You mentioned -- this was on your page one of nine, Schedule 4. This is in the direct testimony filed January 11th, 2002, under your name, and it's Schedule 4, page one of nine, and you mentioned that if Montana-Dakota Utilities Group chose to refinance right now, that 13.2 percent of its assets would be in electricity, around 97 percent would be in their other portions of their company. So is it possible for MDU Resources Group, Inc., to only refinance its electricity debt?
A. No. This is overall debt of the company that's, as I understand it, been allocated to the electric operations.
Q. But my question is: Is it possible for only the electric portion to refinance its electricity debt?
A. I don't believe so, no.
Q. Why not? Why couldn't you just take those bonds or whatever and --
A. Because those are actually bonds of MDU Resources Group, at least that's my understanding.

234

Q. But you said they had to do with building electric plants back in the early Eighties.
A. Exactly. That was the time period when the company issued it, when they needed a whole lot of additional capital.
Q. So --
A. And MDU Resources, I don't think, was nearly as diversified as it is today. So the reason that the debt was issued was to raise a lot of capital at that time when they were -- when they needed to build plants for the utility operations, but overall, MDU Resources, as I understand it, this is their debt, it's the parent company debt. Mr. Ball can probably talk to this more directly.
COMMISSIONER WEFALD: Thank you. That's all I have right now. Thanks.
MR. HOBERG: Thank you, Commissioner Wefald. Commissioner Clark, did you have any questions for Dr. Gaske?
COMMISSIONER CLARK: I do, just a couple.

EXAMINATION

BY COMMISSIONER CLARK:

Q. One is a followup on some things that Commissioner Wefald was asking, and that is about the futures market and any potential predictive

235

value that they have, and you had commented that nothing is a better estimator of what could be happening down the line here a little bit, and I'm wondering if you're aware of any studies that contract statistically the predictive value of the futures market and how often they're wrong or right. Or in the absence of that maybe just anecdotally. Looking at the run up to 2001 where we had on the gas side such high prices in January, did the futures market a year before that or however many months before that predict that that was going to happen?
A. I think the futures market is virtually never correct in terms of how things actually turn out, but if you want the best unbiased estimate of what is most likely to happen, it's the futures market, and if you actually do a transaction in the futures market, if you actually sell your power in the futures market, then it's absolutely guaranteed that that's what you will make.
So right now today you could absolutely guarantee it, but I think, as with virtually any prediction, it -- it would be almost uncanny if it were actually ever right, but people make decisions based on that. Yeah. I was suggesting that this

236

is the best basis for a regulatory decision.
Q. Okay. On page 41 of your direct testimony -- you may not --
MR. HOBERG: Exhibit 6.
Q. (COMMISSIONER CLARK CONTINUING) Exhibit 6. If this is a question that's better given to another witness, just let me know, but since you brought it up in your testimony, the Territorial Integrity Act or TIA, I think you used that as an example of kind of potential risk factors that -- that impact Montana-Dakota, but it got me wondering, and just out of curiosity have you or MDU, that you're aware of, ever calculated the effects of TIA, being that you had brought it up in your testimony, and what that is on net income and what then translating that through the potential impact could be on other ratepayers?
A. No, no. That really would be a long-term -- or its effect is sort of on the long-term dynamic of the market of -- for their product, but I'm not aware of any study that's quantified it.
COMMISSIONER CLARK: Okay. Thanks. That's all I have.
MR. HOBERG: Thank you, Commissioner

237

Clark. Mr. Pearce, did you have any further questions?

MR. PEARCE: Just very few, as lawyers say, but actually I mean it, just a very few.

REDIRECT EXAMINATION

BY MR. PEARCE:

Q. Looking at Exhibit 14, the PUR report, Dr. Gaske, I don't imagine it would surprise you, would it, that in a report like this ranging over the whole country there would be ranges in return on equity from 9.98 to 12.9?

A. No.

Q. And given the fact --

A. I'm surprised that there are any as low as 9.8, but it wouldn't surprise me that there's a range.

Q. And that's taking into account the fact that there are test years ranging from '98 to 2001 here, I think, as well.

A. Yes.

Q. And it wouldn't be your advice to a commission, would it, to pick a return on equity looking at other returns around the country at diverse and different companies?

A. No. And the reason I continually stated

238

"in that time period" was that Mr. King and I agree on this, and he talked about it this morning, that since September 11th and since Enron, the investors have looked at utilities very differently, and we both believe that the cost of capital is now higher than it was for utilities prior to that time period, and the -- these specifically -- the results in Exhibit 14 specifically end in decisions that were issued September 30th. So I have to think that the record in those decisions closed before September 11th.

Q. Now turning just briefly back again to the DCF method, you were asked whether you had any empirical evidence to support your conclusion that allowed rate of return established by DCF should make the value of the electric operation equal to the book value. Isn't that simply an underlying assumption of the DCF methodology, so you wouldn't expect empirical data needed to support that?

A. Yes. And there's a little more to it than that, and that is that what you would have to be able to do is set a -- set an allowed rate of return, come back and see how companies are doing and be able to do that in a clean, pure environment where nothing has changed and it was a clean

239

company and didn't have other operations, the cost of capital hadn't changed in the meantime, maybe interest rates hadn't changed, and ultimately, yeah, it would be very difficult to do an empirical study that would prove or disprove the theory. Virtually everyone agrees with the theory. Mr. King and I agree on that. I think he said very specifically this morning that the DCF approach would produce a market value equal to book value.

MR. PEARCE: That's all I have.

MR. HOBERG: Thank you, Mr. Pearce. Mr. Binek, anything further?

MR. BINEK: Yes, just a couple.

RECROSS-EXAMINATION

BY MR. BINEK:

Q. Has MDU entered into any futures contracts for 2002?

A. I'm not aware of any. I'm not the right witness to answer that question.

Q. Who would be the right witness?

A. Mr. Blinsky.

Q. I forgot to ask you one question. It's not all that important, but this dividend yield -- I glanced up and saw that up on the board yet, and you spent a considerable time -- amount of time on

240

that. My recollection is that Mr. King said it really doesn't make much -- any difference. Do you agree with that; it really doesn't make any difference?

A. It's a small difference. I just -- it makes some, but it's a small difference, and I didn't want to leave, you know, that unrebutted since mathematically it's just simply not true.

MR. BINEK: Okay. Nothing further.

MR. HOBERG: Thank you, Mr. Binek. Mr. Fahn, anything further?

MR. FAHN: No questions.

MR. HOBERG: Commissioners? Commissioner Reinbold, you didn't get a chance to ask questions.

COMMISSIONER REINBOLD: No questions.

MR. HOBERG: Okay. Any further question? Okay. Thank you, Dr. Gaske. In view of the fact that we'll be back tomorrow, might this be an appropriate time to -- I don't know if your next witness is a long one, Mr. Pearce. What's your thought?

MR. PEARCE: Well, it always depends, of course, on the cross-examination. We were proposing to put on Mr. Wilkinson as a short -- he's got about ten pages --

241

COMMISSIONER REINBOLD: Who?
MR. PEARCE: Paul Wilkinson. -- today, which we could finish 15 minutes on direct. I'm not sure what he might have on cross.
COMMISSIONER WEFALD: I think we should move ahead until five o'clock.
MR. HOBERG: Okay. We'll try and get Mr. Wilkinson today then.
MR. PEARCE: I'll call Paul Wilkinson.
MR. HOBERG: Okay. Mr. Wilkinson, were you here earlier when I gave the admonition regarding perjury?
THE WITNESS: Yes, I was.
(Witness sworn.)
MR. HOBERG: Thank you. Mr. Pearce, please.

PAUL L. WILKINSON,

having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. PEARCE:

Q. Mr. Wilkinson, I'll show you Exhibit 7, which I'm opening to what appears to be an opening page of your surrebuttal testimony. I would ask you to look at that testimony and -- ten pages, I

242

think, and is that -- does that appear to be your surrebuttal testimony as previously filed?

A. Yes, it does.

MR. HOBERG: Just for the record, that's Docket No. 60.

Q. (MR. PEARCE CONTINUING) Would you please state your name, please?

A. My name is Paul L. Wilkinson.

Q. And by whom are you employed and in what capacity?

A. I'm employed as vice president of policy analysis at the American Gas Association. I've been an AGA vice president since January of 1995, and I've been employed by AGA since June of 1980. I'm responsible for all analytical activities at AGA. These activities include energy markets in general, natural gas markets in particular, including issues related to energy supply, energy demand, energy prices, energy data and information collection and dissemination. I've also been heavily involved in environmental issues that affect energy markets. In all of these areas I conducted research and prepared and published analyses either directly or by supervisor of AGA employees or contractors.

243

Q. Would you please briefly describe your educational background and professional experience?

A. I hold a Bachelor's degree in economics from the University of Maryland and also a Master's degree in economics from Catholic University of America. I've also completed numerous graduate-level courses in economics, energy and the environment at Georgetown University and George Washington University between 1974 and 1977.

Q. On whose behalf are you testifying in this cause?

A. I'm testifying on behalf of Montana-Dakota Utilities, a division of MDU Resources Group, Inc.

Q. And what is the purpose of your testimony?

A. I will be addressing natural gas market conditions in the 1990s and during the 2000-2001 winter season, as well as future market conditions.

Q. Can you describe the natural gas market conditions during the winter of 2000-2001?

A. The natural gas market was extremely tight during the winter of 2000-2001. Demand had increased significantly in 2000, and gas production capability had trouble keeping up with the demand increase. As a result of this pressure on gas supplies, prices increased substantially. In fact,

244

as reflected on Exhibit PLW-1 attached to my testimony, the gas price hit ten dollars per MMBtu, by far the highest level in a decade. All classes of consumers, residential, commercial, industrial and electric utilities, paid more for gas than in recent years. This was true in all parts of the country.

Q. How did these conditions compare with previous winter periods during the 1990s?

A. Most of the 1990s can be characterized by the term surplus deliverability. That is, the decade of the Nineties was in general one in which the ability to produce and deliver gas exceeded the demand for that gas, and as a result wellhead gas prices remained in a fairly narrow range with an equilibrium price of roughly two dollars MMBtu for most of the 1990s.

In fact, when adjusted for inflation, gas prices in the 1990s were about one-third less than in the mid 1980s. The early portion of the winters in the 1990s tended to show some upward price movement. However, this upward movement was, in general, rather modest and it tended to fall back quickly in the later winter periods.

Q. Were there any price spikes during the

245

1990s comparable to the one we saw during the winter of 2000-2001?

A. No. The NYMEX price of gas at the Henry Hub hit 10 dollars per million in December of 2000, and this was twice as high as any spike in the prior 10 years. There were relatively modest spikes in December of 1996 and October of 1997 when the price of gas hit 4.57 per MMBtu and 3.80 per MMBtu. However, in both cases the prices retreated back to about 2 dollars per MMBtu fairly quickly. In general, the price of gas fluctuated in a relatively narrow price band around 2 dollars per million for the decade of the 1990s.

Q. How could a more normal weather pattern have affected prices during the 2000-2001 winter?

A. Prices were in the mid-4-dollar to mid-5-dollar range for most of the 2000 summer. They had a temporary peak of $5.54 on October 13th but then fell back to 4.48 by October 30th. I believe that if we had seen normal or warmer than normal weather in November and December instead of extreme cold, the price would have shot downward from the 4.48 level instead of rocketing upwards.

Q. To what do you attribute the market conditions during the winter of 2000-2001?

246

A. The marketing conditions during the winter of 2000-2001 were attributable to supply factors, demand factors, and what I call market factors. These individual factors combined in an unusual pattern to put extreme upward pressure on gas prices.

On the supply side the critical factor was a serious decline in drilling for gas. We like to see the number of gas rigs operating nationally at 600 to 800 rigs or more. For most of 1998 we were at the lower end of this range. However, in the spring and the summer of 1999 there was a severe reduction in the number of gas rigs operating as a result of low wellhead gas prices. The number of operating rigs fell off to the 300 to 400 range, and the impact of this drilling decline was masked in 1999 due to extremely mild weather that moderated gas demand. However, when demand surged in 2000, it was clear that production capability had fallen to a critical level.

A second factor on the supply side was the amount of gas held in storage. Gas withdrawn from underground storage satisfies about 18 percent of gas demand during the heating season. The volume of gas in storage was at a relatively normal level

247

in the spring of 2000. However, gas prices began to rise in the summer of 2000, and some storage operators reduced their storage injections in an expectation that prices would fall off.

Also, the demand for gas for electricity generation was increasing in response to a hot summer, reducing the volume of gas available for storage. As a result, storage volumes in the late summer and the early fall were running 8 to 10 percent behind normal based on the 5-year average, and this deficit approached 30 percent by the end of the year due to extremely heavy early winter storage withdrawals.

The key variable on the demand side was the weather. The summer of 2000 was significantly warmer than normal, increasing the demand for air conditioning and thus the demand for electricity. Gas is being used increasingly for electricity generation due to both economic and environmental factors. The hot summer was followed by a very cold, early winter. Energy demand switched from air conditioning to heating as we moved into the coldest November and December period on record.

An often overlooked demand factor is economic activity. The economy was very strong for

248

most of 2000 with an annual GDP rate of 4.8 percent in the first quarter and 5.6 percent in the second quarter. This strong economic activity translated into strong gas demand to fuel factories and commercial establishments throughout the country.

Normally, the relatively high gas prices that were experienced in mid 2000 would have resulted in fuel switching from gas to oil and large industrial establishments with dual fuel capability. These large facilities switched back and forth between gas and oil depending on the relative fuel prices, thereby offering a price relief valve when prices increase. However, oil prices had roughly tripled from their level from 18 months earlier, and this relief valve was effectively eliminated.

Finally, in addition to the supply and demand fundamentals, there was a market factor that further exacerbated the high prices of 2000 and 2001. The gas market is a real-time market traded on the NYMEX in a very robust fashion.

There is very limited real-time information regarding gas supply or demand on a real-time basis. Thus, it tends to move on the basis of incomplete information and speculation.

249

That real-time information that is available tends to be overemphasized, gas storage information, weather information, storm activity in the Gulf of Mexico.

As indicated above, the gas market in 2000 became very tight and supply was struggling to keep pace with demand. Speculation and overreaction to incomplete market information at a time when the market was very tight resulted in significant price volatility.

Q. To what extent was weather a contributing factor to the market conditions during the winter of 2000-2001?

A. Weather was a critical factor. In fact, it was the most important factor on the demand side of the gas market equation. It was important both in the summer of 2000 and the winter of 2000-2001. The summer was warmer than normal, which increased the demand for air conditioning, which in turn increased the demand for natural gas to generate electricity.

The winter was colder than normal, particularly the early winter, driving up the demand for gas as a heating source. These increases in demand at a time when markets were

250

already tight and prices were relatively high forced prices even higher.

Q. How warm was the summer of 2000?

A. On a national average basis it was about 7 percent warmer than normal. However, parts of the south and west were 15 to 20 percent warmer than normal. This is key because most of the electricity generation that uses gas is located in the South and the West. In addition to pushing up the overall demand for gas, using gas for electricity generation in the summer also diverts gas that otherwise would be injected into storage. When storage levels are lower than normal, as was the case in the summer of 2000, market uncertainty increases and prices tend to move higher.

Q. How cold was the winter of 2000-2001?

A. The winter of 2000-2001 was extreme by any measure. In particular the early winter, November and December, was the coldest on record on a national basis. Not only was it cold, but it was extremely cold, it was cold early and it was cold everywhere. Oklahoma, Arkansas, Missouri all had the coldest November and December on record.

Across the country the last two weeks of November were 36 percent and 33 percent colder than

251

normal, respectively. Further, it was colder than normal in all ten geographic regions during these two weeks. Such uniform cold is very unusual. Although temperatures moderated in January and February, the damage with respect to gas prices was already done.

Q. Were these general market conditions isolated in specific geographic areas?

A. No. The natural gas market is in essence a national market. The tight market and the high prices were experienced in all parts of the country. Consumers buying gas are essentially paying for two things, the cost of the gas commodity and the cost of delivering that gas to them. The cost of the gas commodity went up dramatically in 2000-2001 irrespective of where that gas was consumed. The cost of gas delivery is a function of distance and various operational factors and thus it does vary by location. However, delivery charges are regulated and they did not fluctuate in 2000-2001 as did the commodity charges.

Q. Have you or other employers of the American Gas Association addressed the market conditions of the 2000-2001 winter in the service

252

territories of other local gas utilities?

A. Yes. This is a national issue, and we have addressed it in various forums all over the country. We have spoken to legislators, regulators, media and customer groups from Louisiana to New York to Washington and California. The problem was universal and it was extreme.

Q. What is your outlook for the near-term natural gas market?

A. First, let me say that AGA does not perform short-term price projections for antitrust reasons. However, I can comment on some of the factors that do affect gas prices.

The retreat in gas prices following the 2000-2001 winter was as dramatic as their rise. Prices have been in the low two-dollar range for several months now. We have moved from a situation of high demand and low supply to one of low demand and high supply. This situation is expected to continue throughout 2002.

On the demand side, the economy remains sluggish and expectations are that this will continue for most of the year. In addition, weather has been very mild, and the long-term forecast of the National Oceanic and Atmospheric

253

Administration suggests that heating and cooling demand in 2002 will be normal or less than normal.

The volume of gas in storage, one barometer of the supply situation, remains at a very high level. As of February 8, 2002, there was 43 percent more gas in storage than the prior five-year average.

Given the economy and the weather conditions, this surplus is expected to carry into the 2002-2003 winter season, thus continuing downward pressure on gas prices.

Q. Do you believe others share your view on near-term market conditions?

A. Yes, I do. The short-term energy outlook of the U.S. Energy Information Administration, EIA, projects that wellhead gas prices will be less than $2 per thousand cubic feet for the second, third and fourth quarters of 2002, and that they will range from $2.24 to $2.76 for 2003. Similarly, future gas prices on the NYMEX are in the high $2 to low $3 range for all of 2002 and 2003. These prices are in short contrast to the $10 peak we saw last winter.

Q. How about natural gas prices in the longer term?

254

A. Going out to 2010 I expect prices to remain generally below four dollars. Between 2004 and 2010 I expect prices to move within a band of two dollars to four dollars, although temporary movements outside this band are certainly possible.

Q. And do other experts share this view, as well?

A. I would say that in general, yes. While there's certainly no unanimity in long-term energy price projections, the long-term outlook of the EIA projects wellhead gas prices of $3.65 per thousand cubic feet in 2010. We can also look at the NYMEX prices and see that they do not exceed $3.75 going out to December of 2007. Prices are not available beyond this point in time.

Q. Does this mean that natural gas market conditions in the future can't repeat the 2000-2001 experience?

A. The prices we saw in the winter of 2000-2001 were extreme and attributable to a number of factors that all came together at once as I previously mentioned. Some refer to last winter as a perfect storm scenario. A recurrence is certainly not impossible but it is unlikely, and I would certainly not use last winter as a baseline,

255

nor would I suggest that last winter was in any way normal or representative of future likely market conditions.

Q. One additional question. You referred several times to the NYMEX price or NYMEX price at the Henry Hub.

A. Yes.

Q. Could you just very briefly explain what that means?

A. Well, if you look at the Exhibit PLW-1, that shows the NYMEX Henry Hub futures. That's at the specific dates that are indicated on the lower axis, how much you could contract for gas 30 months in advance and that there are buyers and sellers willing to make a deal at that price at that point in time.

Q. Does this complete your testimony?

A. Yes, it does.

MR. PEARCE: I have no further questions.

MR. HOBERG: Thank you, Mr. Pearce. Mr. Binek, do you have any questions of Mr. Wilkinson?

MR. BINEK: Yes.

CROSS-EXAMINATION

BY MR. BINEK:

Q. Mr. Wilkinson, what is AGA?

256

A. AGA is American Gas Association. We represent local gas utilities across the country. We represent 187 local gas utilities that deliver gas to 50 million -- 52 million residences and commercial establishments throughout the country.

Q. What do you mean by you represent?

A. What do I -- we provide services to these member companies based on their advocacy needs and also their informational needs or other operational needs.

Q. How are the operations of AGA financed?

A. They are financed based on the dues of these member companies.

Q. Is MDU a member company?

A. Yes, it is.

Q. On page four of your surrebuttal testimony, beginning on line three, you talk about market conditions and market factors during the winter of 2000-2001. One of the critical supply side factors that you talked about was the serious decline in drilling for gas. With the current decline in natural gas prices has there also been a decline in drilling activity?

A. There has been a decline. We are currently a little under 800 rigs, so certainly

257

nowhere near the decline that we saw, the 300 to 400 range, back in '98, '99.

Q. And doesn't decreased drilling activity generally occur with falling gas prices or low gas prices?

A. Yes. There is a correlation between gas prices and drilling activity.

Q. So if the low prices continue, would you anticipate there will be a further decline in drilling?

A. Well, low price is a relative term. There was a period in 1999 where we had, I believe, nine months in a row of gas prices between roughly $1.50 and $2, and right now we're at about $2.30. So prices are certainly low today relative to what they were a year ago. They are certainly not low relative to what we saw two years ago.

Q. Do you agree that most new electric-generation facilities that have come on line or that are being constructed are fueled with natural gas?

A. Natural gas has been the fuel of choice in recent years for new generating capacity.

Q. Won't that drive up the demand and price for natural gas again?

258

A. Price is a function of supply and demand. As demand increases to meet that load, if there was not a -- an increase in supply of an equal amount, prices would move upward. Certainly, increased demand does mean upward price pressure to some extent.

Q. Aren't many experts saying that economic recovery has begun or will begin in the near future?

A. I think that in general most economists are saying that the economy is sluggish at best through the end of this year.

Q. If the economy does rebound and we had the projections from the last witness concerning manufacturing projections and that showed that the projections were increasing for 2001, won't that drive up the demand and the price for natural gas?

A. Economic activity is one factor that affects industrial gas demand. As industrial gas demand goes up, there would be upward price pressure until supply response.

Q. On page five of your surrebuttal -- or your rebuttal testimony -- I guess it is surrebuttal, beginning on line -- line eight of your surrebuttal testimony, you state that the key

259

variable to the market conditions or market factors during the 2000 -- during 2000-2001 was the weather. Isn't it true that the unusually warm and mild winter we're experiencing throughout most of the United States at the present time has contributed significantly to the current reduced demand and lower prices of natural gas?

A. Yes, that's true.

Q. On page 6, line 18 of your surrebuttal testimony you state weather was a critical factor. In fact, it was the most important factor on the demand side of the gas market equation. That statement applies today just as it did in 2000-2001, doesn't it?

A. Weather is the critical variable, particularly with respect to residential and commercial markets.

MR. BINEK: Thank you. I have no further questions.

MR. HOBERG: Thank you, Mr. Binek. Mr. Fahn, any questions?

MR. FAHN: Yes.

EXAMINATION

BY MR. FAHN:

Q. On page six of the testimony -- of your

260

testimony you talk about market factor and you talk about limited real-time information regarding gas supply or demand, and I'm wondering if people that are in the futures market -- that's what they're seeing, right, limited real-time information? They're making their decisions based on real-time information?

A. Yes, I would agree with that.

Q. And I'm wondering if you could tell us more about why you describe it as limited.

A. You cannot find information in the marketplace today that tells you how much gas was consumed last week or how much gas was produced last week. You can -- you can find information on how much gas was injected into storage last week. So in terms -- because there is no supply demand data available, other than on a monthly basis with significant time lags, I think that there is an overemphasis on that information which is available. For example, you'll hear that there's a storm coming into the Gulf and you'll see the NYMEX shoot up as a reaction to that, when in fact most of those rigs rarely stop operating, even in severe storm conditions.

Q. I don't think you'll know the answer to my

next question, but I'll ask it anyway. Would you think the same -- we have the same problem in the electric business? The people that are buying futures in the electric business, would they have limited real-time information?

A. I'm really not an expert on that, so I won't comment on it.

MR. FAHN: Thank you.

MR. HOBERG: Thank you, Mr. Fahn. Commissioner Wefald, did you have any questions for this witness?

COMMISSIONER WEFALD: Yes, I do, a couple here.

EXAMINATION

BY COMMISSIONER WEFALD:

Q. Mr. Diller this morning in Exhibit 3 laid out a whole group of factors that could affect future resale margins.

A. Electricity.

Q. Do you have a copy of those?

A. No, I don't.

Q. Can you get a copy of those?

MR. HOBERG: Mr. Pearce, can you provide him a copy of -- or somebody over there?

Q. (COMMISSIONER WEFALD CONTINUING) You

mentioned with natural gas that the key variable on the demand side was weather. Do you think that's the key variable in this list, as well, affecting through to resale markets?

A. I don't want to portray myself on as an expert on electricity markets, and so I really would not speculate on that.

Q. All right. Why do you think you were brought in today to be an expert? Because it's -- natural gas prices is only one of all of these factors that's listed out of the 20-some factors. Why do you think you were brought in today?

A. Well, I think that the assumption is, and I think it's a correct assumption, that the amount of electricity that can be sold into the market is heavily dependent on the price of natural gas. If you are a coal-based electric utility, then certainly the price of natural gas going into your competitors' boiler units is a critical factor. I don't know whether it is the most critical factor out of this list. This is a long list, but it's certainly a very important factor.

Q. Is it more important than how much generation capacity is available in the region?

A. I would say that they are both very

important factors.

Q. Is it more important than the role of weather when you have -- let's say you have, you know, a period of really high peak demand in the middle of the summer and there's -- and you have a real need for electricity. Is it more important than weather?

A. Well, it -- it may be, but then the -- it's also reacting to weather.

Q. How about is it more important than plant outages that occur? Let's say a whole bunch of plants go down and there's a need for electricity to avoid a brownout.

A. Probably not.

Q. So there's a bunch of different factors, and you're here to just represent one of those --

A. That's correct.

Q. -- that could be important.

A. That's correct.

COMMISSIONER WEFALD: Thank you. That's all.

MR. HOBERG: Thank you, Commissioner Wefald. Commissioner Reinbold, please.

COMMISSIONER REINBOLD: I have a question.

EXAMINATION

BY COMMISSIONER REINBOLD:

Q. Do you know Eric Weiss?

A. Yes, I do.

COMMISSIONER REINBOLD: Well, that's a point for you, and when you see him, you tell him I got him into the transcript of a very big case. That's my only question.

MR. HOBERG: Thank you, Commissioner.

COMMISSIONER REINBOLD: Oh, I have one more question.

Q. (COMMISSIONER REINBOLD CONTINUING) Are you on the stand tomorrow morning, too?

A. No, I don't think so.

Q. Are you done today?

A. I hope so.

COMMISSIONER WEFALD: Unless you've got a bunch of questions.

COMMISSIONER REINBOLD: Oh, no, no, no.

COMMISSIONER CLARK: I haven't gone yet, Commissioner Reinbold.

COMMISSIONER WEFALD: Commissioner Clark may have a whole bunch of questions.

COMMISSIONER REINBOLD: Okay. We'll leave it up to Commissioner Clark.

MR. HOBERG: Thank you, Commissioner Reinbold. Commissioner Clark, please.
COMMISSIONER CLARK: I have no questions. End of the suspense.
MR. HOBERG: Okay. Anything further of Mr. Wilkinson, Mr. Pearce?
MR. PEARCE: No, I have none.
MR. HOBERG: Mr. Binek?
MR. BINEK: No.
MR. HOBERG: Mr. Fahn, anything further?
MR. FAHN: No.
MR. HOBERG: Okay. Thank you, Mr. Wilkinson.
COMMISSIONER REINBOLD: Excuse me. I've got one more question to ask you.
Q. (COMMISSIONER REINBOLD CONTINUING) Is this your first trip to North Dakota?
A. Yes, it is.
Q. How do you like it? We put on a little blizzard for you.
A. I appreciate that.
COMMISSIONER REINBOLD: Good to have you here.
THE WITNESS: Thank you.
MR. HOBERG: Okay. Thank you, Mr.

Wilkinson --
COMMISSIONER WEFALD: And we also ordered up some cold weather for him.
COMMISSIONER REINBOLD: That's right.
MR. HOBERG: Okay. Does it look like quitting time until tomorrow? Approximately what?
COMMISSIONER WEFALD: Should we say 8:30?
MR. HOBERG: 8:30, is that fine?
MR. PEARCE: That's find with us.
COMMISSIONER WEFALD: Would that be okay, Commissioner Reinbold?
COMMISSIONER REINBOLD: 8:30 tomorrow, fine.
MR. HOBERG: Okay. We'll stand in recess then until 8:30 tomorrow when we'll continue with MDU's case, and that will be your third witness then.
MR. PEARCE: Right.
MR. HOBERG: Okay. We'll stand in recess.
(Recessed at 5:02 p.m., Monday, the 25th day of February, 2002.)

$

$1,727,000 [1] 143:5
$1.50 [1] 257:13
$10 [1] 253:22
$128,902,000 [1] 24:8
$140 [2] 192:14 192:18
$2 [2] 253:17 253:20
$2,122,000 [1] 86:17
$2,228,000 [1] 86:18
$2,906,000 [1] 86:20
$2.24 [1] 253:19
$2.30 [1] 257:14
$2.50 [1] 232:8
$2.76 [1] 253:19
$3 [1] 253:21
$3.65 [1] 254:11
$3.75 [1] 254:13
$33,000 [1] 71:5
$365,000 [3] 172:5 199:19 201:4
$40 [1] 192:17
$40,000 [2] 45:18 45:19
$420,000 [1] 41:9
$460,000 [1] 69:12
$5,000 [1] 17:4
$5.54 [1] 245:18
$600,000 [1] 43:13
$678,000 [1] 86:21
$710,000 [1] 143:1
$8,772,000 [1] 232:7
$800,000 [5] 37:10 37:11 41:13 41:16 41:17
$9,900,018 [1] 232:11

'

'96 [2] 31:4 183:25
'98 [3] 194:1 237:18 257:2
'99 [3] 34:25 194:2 257:2

0

0 [2] 181:1 181:4
0.5 [1] 177:16
0.58 [3] 199:10 200:11 200:13
0058 [1] 199:17

1

1 [39] 4:13 5:4 6:4 18:15 18:17 18:20 18:24 19:5 19:13 19:15 43:11 45:6 45:7 45:8 57:1 57:9 57:10 63:1 105:2 125:9 133:6 152:2 173:1 173:7 178:12 178:13 178:16 179:15 179:18 179:19 179:21 180:7 180:15 181:2 181:5 181:6 219:9 219:15 224:10
1.05 [1] 86:17
1.1 [7] 20:14 20:16 29:16 29:21 130:23 132:4 133:22
1.11 [1] 178:16
1.3 [2] 98:2 98:4
1.65 [1] 75:13
1.7 [1] 43:9
1.77 [1] 130:17
1.9 [1] 31:5
10 [8] 3:4 5:5 6:4 93:22 194:20 245:4 245:6 247:9
10,000 [1] 114:5
10.2 [1] 108:16
10.498 [1] 123:4
10.7 [2] 92:14 141:7
10.8 [1] 108:14
10.88 [1] 24:17
10.9 [2] 126:7 164:18
100 [5] 45:1 45:4 45:5 45:6 99:15
106 [2] 5:9 37:17
107 [2] 5:9 5:9
11 [17] 5:7 64:2 64:4 72:7 73:1 88:20 91:4 178:15 178:23 178:25 179:12 179:13 179:21 179:24 180:18 202:3 222:1
11.024 [1] 123:6
11.2 [5] 92:6 108:5 108:9 112:17 135:14
11.5 [7] 25:19 26:5 108:8 108:9 108:12 135:11 223:3
11.7 [12] 48:8 92:3 103:11 109:16 112:16 118:2 118:3 135:10 135:22 221:12 221:20 224:14
11.7. [1] 221:21
11.71 [1] 222:7
11.75 [2] 221:17 221:23
11.9 [2] 103:11 118:3
110 [1] 212:19
119 [1] 3:19
11th [6] 11:7 142:25 182:18 233:6 238:3 238:11
12 [17] 5:8 20:4 20:7 20:9 20:12 20:22 25:5 37:6 37:7 106:7 107:19 107:21 107:23 194:20 212:3 216:14 222:19
12,000 [1] 114:6
12-and-three [1] 185:10
12.1 [1] 223:11
12.17 [1] 199:9
12.25 [1] 223:19
12.4 [1] 37:2
12.5 [1] 102:13
12.75 [9] 92:16 115:15 115:24 141:4 199:7 218:5 223:24 224:3 224:13
12.9 [6] 124:25 164:5 164:14 223:11 224:2 237:11
1220 [1] 89:11
128 [3] 48:6 172:9 199:15
128.9 [2] 199:3 199:15
1280 [1] 68:14
129 [1] 3:19
13 [14] 5:10 66:17 66:22 93:20 94:9 195:5 202:4 202:13 203:15 204:3 207:20 207:23 208:11 216:14
13.2 [1] 233:9
13.3 [1] 183:1
135 [1] 3:20
136 [2] 3:20 93:21
138 [2] 3:5 3:21
139 [1] 3:5
13th [1] 245:18
14 [15] 5:12 17:25 70:3 91:16 204:21 218:8 218:11 218:12 218:13 218:19 218:20 219:22 220:4 237:7 238:8
14.8 [1] 183:6
140 [1] 22:11
140-million [1] 22:11
141 [1] 3:23
146 [1] 3:23
149 [1] 3:24
15 [17] 3:4 34:12 55:20 62:25 78:15 111:16 112:1 114:6 137:22 203:15 213:5 213:14 218:10 218:18 219:23 241:3 250:6
15.1 [1] 31:12
15.4 [1] 102:14
15.7766 [1] 47:24
15.9 [1] 31:10
151 [1] 4:3
153 [6] 4:21 4:21 4:22 4:22 4:24 4:24
16 [1] 132:4
16th [2] 61:15 211:13
17 [5] 3:9 71:1 132:3 155:12 213:5
17.6 [1] 183:3
18 [5] 86:5 163:17 246:23 248:14 259:9
187 [1] 256:3
19 [11] 4:13 4:13 4:15 4:15 4:16 4:16 86:5 86:8 183:8 212:25 213:10
1926 [1] 113:15
195 [1] 5:11
196 [1] 4:3
1970 [1] 89:23
1970s [1] 210:1
1974 [1] 243:9
1977 [1] 243:9
1980 [2] 142:5 242:14
1980s [4] 111:14 158:14 168:18 244:20
1986 [5] 19:24 28:8 154:21 159:2 159:9
1987 [4] 143:9 143:9 144:1 148:21
1988 [1] 154:23
1990s [8] 243:16 244:9 244:10 244:17 244:19 244:21 245:1 245:13
1991 [1] 123:17
1992 [6] 93:18 121:25 123:19 157:23 158:9 159:11
1995 [1] 242:13
1996 [2] 31:4 245:7
1997 [2] 31:6 245:7
1998 [6] 20:19 31:7 52:12 232:16 232:18 246:10
1999 [10] 20:20 31:8 47:21 231:16 232:5 232:16 232:19 246:12 246:17 257:12
19th [2] 10:20 143:2
1R [1] 199:21

2

2 [34] 4:14 18:15 18:18 18:20 18:24 19:5 19:13 19:15 57:19 57:19 57:24 66:21 95:17 95:17 97:2 125:10 180:8 180:9 187:24 188:8 188:18 193:15 196:21 202:2 202:3 203:14 204:3 229:10 229:13 230:23 231:24 245:10 245:12 257:14
2.122 [1] 37:22
2.4 [1] 43:17
2.5 [1] 31:6
2.8 [2] 35:11 47:7
2.906 [1] 37:22
20 [7] 62:25 155:12 183:21 187:5 217:13 228:11 250:6
20-some [1] 262:11
20.7 [1] 183:20
2000 [61] 1:6 5:10 6:14 20:21 21:5 21:10 23:15 24:25 25:14 29:17 29:19 31:9 35:1 37:23 39:7 47:22 51:5 62:24 67:5 68:5 68:7 68:19 83:24 86:16 97:2 97:7 97:12 97:14 98:1 114:14 140:10 142:2 145:17 149:1 183:25 189:4 189:8 189:20 191:17 191:23 193:13 195:17 219:15 224:10 231:10 232:9 243:22 245:4 245:17 246:19 247:1 247:2 247:15 248:1 248:7 248:19 249:5 249:17 250:3 250:14 259:2
2000-2001 [20] 243:16 243:19 243:21 245:2 245:15 245:25 246:2 249:13 249:17 250:16 250:17 251:16 251:21 251:25 252:15 254:17 254:20 256:19 259:2 259:14
2001 [81] 5:10 10:20 20:22 21:8 21:12 23:12 24:25 25:24 29:3 29:17 31:12 35:1 35:9 37:2 37:5 37:8 37:22 39:25 41:12 43:8 43:11 43:17 45:8 45:20 47:6 47:22 52:16 52:17 53:25 54:3 56:3 61:15 62:25 67:3 67:7 67:9 67:10 67:13 67:17 68:2 68:5 68:8 68:19 68:21 69:1 69:3 69:5 69:14 69:20 69:25 72:14 83:25 84:25 86:19 97:2 140:10 143:3 143:9 144:20 145:17 147:17 149:2 170:9 184:16 189:6 189:8 189:20 191:17 191:24 193:13 195:17 196:23 218:18 219:15 219:24 224:11 231:11 235:8 237:18 248:20 258:16
2001-2010 [4] 5:7 61:12 62:13 62:18
2002 [44] 1:18 6:3 6:8 21:14 24:3 31:15 37:7 51:7 51:8 51:10 54:1 54:3 54:6 54:20 56:1 56:16 64:21 69:6 69:16 69:22 82:3 82:6 83:25 84:25 139:25 142:25 143:2 144:21 147:15 148:24 170:12 189:7 193:25 196:25 197:2 197:24 233:6 239:17 252:20 253:2 253:5 253:18 253:21 266:21
2002-2003 [1] 253:10
2003 [5] 56:4 64:21 69:22 253:19 253:21
2004 [5] 56:4 63:9 64:21 212:23 254:2
2005 [2] 56:4 63:1
2007 [2] 137:2 254:14
2010 [7] 63:1 63:10 64:22 72:15 254:1 254:3 254:12
20th [1] 10:24
21 [4] 57:2 57:8 57:11 57:13
218 [1] 5:12
219 [1] 5:12
21st [1] 11:4
22 [1] 91:5
220 [1] 5:12
223 [1] 95:4

225 [1] 4:4
23 [1] 200:9
234 [1] 4:4
237 [1] 4:5
239 [1] 4:5
241 [1] 4:7
25 [1] 1:18
256 [1] 4:8
25th [3] 6:3 6:7 266:20
260 [1] 4:8
261 [1] 4:9
264 [1] 4:9
27 [2] 44:8 45:19
27th [1] 25:24
28 [1] 84:17
28-32 [1] 14:18
29 [3] 91:1 97:2 185:3
29.4 [2] 115:23 116:15
294 [2] 5:4 5:4
29th [3] 25:13 25:13 97:17
2nd [1] 97:18

3

3 [25] 4:16 18:15 18:18 19:8 19:13 19:15 48:12 51:3 63:3 63:5 68:13 68:15 68:16 76:2 95:17 125:9 125:11 161:5 161:16 164:23 169:18 179:25 224:4 224:11 261:16
3.5 [1] 212:18
3.80 [1] 245:8
30 [5] 185:8 217:13 219:15 247:11 255:13
300 [3] 137:14 246:15 257:1
302 [2] 5:11 5:11
30th [3] 224:11 238:9 245:19
31 [3] 123:17 123:19 211:22
314 [1] 2:13
31st [1] 97:12
32 [1] 89:23
33 [2] 182:22 250:25
34 [2] 182:22 224:13
344 [1] 41:12
35 [1] 35:7
357 [2] 5:6 5:6
36 [1] 250:25
365,000 [1] 172:10
37 [4] 37:10 37:23 38:10 40:2
3:30 [2] 118:16 118:18

4

4 [14] 4:17 78:19 78:20 90:9 90:25 91:15 91:19 111:11 112:4 112:7 132:4 207:11 233:5 233:7
4-and-a-half [1] 132:17
4-and-a-quarter [1] 232:10
4.2 [1] 35:9
4.48 [2] 245:19 245:22
4.5 [1] 132:21
4.57 [1] 245:8
4.75 [4] 103:20 104:15 115:17 130:3
4.8 [2] 31:7 248:1
4.9 [1] 84:6
4.941 [1] 83:18
4.941-million-dollar [1] 83:12
40 [5] 97:1 97:5 97:11 155:3 212:22
40-million [1] 96:24
400 [5] 2:13 2:17 141:20 246:15 257:2
41 [1] 236:2
420,000 [1] 41:7
43 [3] 62:5 216:5 253:6
45 [6] 221:2 221:10 223:21 224:4 224:11 224:13
46 [3] 182:21 182:23 220:10
460 [4] 68:3 68:13 68:15 68:16
460,000 [2] 67:3 69:21
474 [1] 41:12
48.87 [1] 199:13
4887 [1] 199:16
49 [1] 153:19
4:40 [1] 118:17

5

5 [21] 4:19 4:23 17:3 48:15 48:18 76:6 84:1 90:9 91:15 91:20 108:9 110:18 115:22 134:8 163:23 172:20 175:8 181:8 181:13 199:24 211:7
5,442 [1] 63:9
5-year [1] 247:10
5.6 [1] 248:2
50 [3] 3:10 113:17 256:4
500 [1] 183:21
52 [1] 256:4
53 [1] 91:16
58 [1] 200:15
58501 [1] 141:21
58502-0400 [1] 2:14
58502-4092 [1] 2:18
58505-0480 [2] 2:8 2:23
59 [1] 143:10
5:02 [1] 266:20

6

6 [41] 3:3 4:13 4:15 4:16 4:18 4:19 4:20 4:21 4:22 4:24 5:4 5:6 104:16 104:17 109:8 151:18 152:19 152:24 153:5 153:5 153:12 153:13 153:17 155:20 161:7 161:7 164:23 172:4 172:7 175:13 175:14 201:7 207:7 207:9 207:10 216:16 216:18 228:18 236:4 236:6 259:9
6,429,778 [1] 155:18
6.3 [6] 130:18 132:19 133:22 198:24 199:1 200:17
6.37 [1] 19:25
6.4 [1] 31:14
6.99 [1] 95:3
60 [2] 113:18 242:5
600 [3] 2:8 2:23 246:10
61 [1] 3:10
62 [1] 163:5
625 [6] 110:21 134:10 134:11 176:15 181:7 181:10
63 [1] 153:19
64 [1] 5:7
68 [4] 163:3 163:4 163:12 201:1
68.4 [1] 126:4
69-02 [1] 14:20

7

7 [23] 4:22 56:21 109:8 151:18 152:19 152:24 153:5 153:5 153:12 153:13 153:17 153:23 155:11 155:13 155:20 187:5 188:12 213:2 213:3 213:3 229:18 241:22 250:4
7.2 [1] 155:16
7.3 [1] 21:16
7.31 [2] 157:24 158:2
7.327 [1] 83:8
7.68 [1] 95:7
70 [3] 113:18 113:19 212:15
70,000 [1] 143:18
72 [2] 5:7 164:8
73 [4] 3:11 5:7 163:3 163:12
73.6 [1] 126:4
74 [1] 123:4
75 [8] 3:11 102:5 102:10 125:7 125:13 164:21 169:21 171:3
78 [1] 3:12
7th [1] 10:13

8

8 [20] 4:23 57:1 57:8 57:12 57:20 109:8 152:1 152:9 152:13 152:19 153:5 153:12 153:13 153:15 153:17 187:23 187:24 213:2 247:9 253:5
8.6 [1] 208:12
8.62 [2] 94:22 120:6
80 [1] 3:13
800 [2] 246:10 256:25
81 [1] 3:14
83 [1] 3:14
84 [1] 3:15
85 [5] 3:16 99:8 101:22 101:22 102:10
87 [3] 3:16 207:24 208:18
89 [1] 3:18
8:30 [4] 266:7 266:8 266:12 266:15

9

9 [4] 3:3 5:4 48:18 180:8
9.1 [2] 108:15 108:16
9.155 [3] 12:12 21:7 83:4
9.155-million-dollar [1] 83:5
9.2 [1] 21:16
9.22 [11] 92:2 94:21 94:25 95:9 95:16 119:19 119:23 120:6 120:9 121:17 137:9
9.222 [1] 141:6
9.4 [1] 131:22
9.575 [1] 97:21
9.6 [2] 126:6 164:8
9.8 [1] 237:15
9.9 [1] 31:8
9.92 [4] 48:9 119:19 119:25 120:1
9.98 [1] 237:11
90 [5] 81:1 178:17 179:18 179:20 180:8
91 [4] 4:18 4:18 4:19 4:19
920,000 [1] 67:18
924 [1] 40:7
925 [1] 40:7
926 [1] 42:17
94 [2] 104:4 131:15
95 [18] 125:19 162:10 163:10 164:2 164:12 172:23 172:25 173:1 173:5 173:6 175:2 175:9 175:13 175:22 180:13 180:14 180:15 181:6
97 [1] 233:11
98 [3] 162:10 165:1 166:8
9:02 [1] 6:2
9th [2] 10:25 25:22

A

A&G [8] 36:1 36:11 36:25 37:1 37:5 37:9 37:13 40:5
A.m. [1] 6:7
Ability [5] 63:16 144:15 165:7 167:12 244:13
Able [13] 95:16 96:15 107:1 109:11 140:7 140:8 143:12 144:4 145:9 160:3 229:5 238:22 238:24
Absence [4] 65:5 209:12 213:21 235:7
Absolutely [5] 177:19 183:12 226:20 235:19 235:21
Accept [4] 77:1 109:4 220:9 221:3
Acceptable [1] 153:9
Accepted [5] 23:15 23:19 75:12 98:6 220:3
Accepting [1] 70:23
Access [3] 33:23 184:23 184:25
Accomplish [1] 167:7
Accordance [1] 15:18
According [2] 171:4 196:23
Account [13] 38:1 38:18 40:7 40:8 40:11 42:23 53:8 63:4 63:7 128:2 142:20 178:14 237:17
Accountant [2] 7:9 18:8
Accounting [25] 7:10 17:18 18:7 75:12 94:14 94:22 94:24 96:6 120:13 120:15 120:18 121:2 137:17 156:17 156:20 157:2 157:9 173:15 202:20 202:22 203:1 204:19 204:24 205:5 205:9
Accounts [4] 36:19 40:4 40:15 41:15
Accrual [1] 40:10
Accruals [1] 40:12
Accumulated [2] 22:18 22:18
Accurate [3] 65:19 65:21 155:21
Achievable [1] 55:21
Achieve [2] 55:20 229:5
Acquired [2] 93:18 122:9
Acquiring [1] 131:6
Acquisition [4] 120:16 131:18 131:19 132:8
Acquisitions [1] 46:13

Act [2] 14:19 236:9
Action [1] 12:13
Activities [14] 34:3 98:24 98:25 101:25 102:2 102:19 102:25 115:17 117:22 126:21 136:17 212:21 242:15 242:16
Activity [11] 103:5 126:22 126:25 128:14 247:25 248:3 249:3 256:23 257:3 257:7 258:18
Actual [14] 24:19 31:23 32:8 32:12 32:15 34:9 54:21 65:20 104:23 130:22 141:4 143:3 191:24 220:6
Add [11] 10:2 34:25 35:1 35:6 41:11 43:10 47:10 47:14 52:12 114:9 148:19
Added [4] 33:11 39:6 67:4 94:16
Adder [15] 103:7 103:25 110:18 132:14 132:16 132:16 132:25 133:1 133:4 133:7 133:8 133:13 134:1 138:15 200:13
Adders [1] 133:16
Adding [2] 132:13 132:14
Addition [9] 63:3 63:5 93:3 145:15 170:22 195:24 248:17 250:9 252:23
Additional [14] 36:6 36:8 47:10 63:12 67:5 70:13 78:19 78:20 127:9 127:18 137:6 185:8 234:5 255:4
Additions [3] 22:20 47:15 58:23
Address [13] 33:10 89:9 89:11 140:23 141:19 156:11 171:25 191:13 191:14 206:19 214:20 229:23 232:21
Addressed [7] 38:9 82:4 156:5 172:1 176:13 251:24 252:3
Addresses [1] 143:7
Addressing [5] 188:9 194:15 195:19 196:6 243:15
Adequacy [1] 63:15
Adequate [3] 39:19 108:17 209:25
Adequately [1] 39:16
Adjacent [3] 229:24 230:13 230:15
Adjusted [6] 21:1 21:24 47:17 76:4 147:17 244:18
Adjustment [28] 29:9 29:18 29:24 41:8 49:21 67:16 77:3 77:7 80:14 86:9 86:20 97:22 98:6 172:1 172:12 172:14 173:8 174:4 176:15 177:5 180:25 181:7 199:8 199:11 199:18 209:8 209:13 213:22
Adjustment-type [1] 80:14
Adjustments [11] 23:16 24:4 29:3 46:25 47:6 47:18 47:23 142:21 143:7 149:2 173:16
Adjusts [1] 75:19
Administration [4] 154:3 212:20 253:1 253:15
Administrative [9] 6:17 6:19 12:12 14:18 14:21 36:14 36:17 43:22 49:21
Admit [3] 73:1 202:4 202:15
Admitted [5] 19:16 91:20 107:24 153:18 220:5
Admittedly [1] 202:14
Admitting [1] 11:1
Admonition [4] 88:21 139:11 151:6 241:11
Adopt [4] 19:5 90:17 91:10 202:13
Adopted [3] 94:24 145:18 147:25
Advance [4] 5:12 218:17 219:23 255:14
Advancing [1] 67:8
Advantage [7] 127:14 143:14 143:21 147:11 149:19 150:3 206:23
Advantageous [1] 159:1
Advent [1] 140:17
Advertising [1] 36:23
Advice [1] 237:21
Advisor [3] 2:24 7:16 61:1
Advocacy [3] 7:6 7:7 256:8
Advocates [3] 94:1 156:18 174:17
AEP [1] 102:8
Affairs [1] 7:25
Affect [13] 33:6 33:14 33:19 51:24 58:6 58:20 60:2 113:8 128:24 216:21 242:22 252:13 261:17
Affected [4] 59:15 126:24 165:5 245:15
Affecting [3] 84:19 187:6 262:3
Affects [3] 31:20 217:16 258:19
Affiliate [1] 98:19
Affordable [1] 212:1
Afforded [2] 144:6 144:14
Afternoon [2] 96:10 118:15
AGA [8] 242:13 242:14 242:16 242:24 252:10 255:25 256:1 256:11
Agencies [1] 14:19
AGL [1] 108:12
Ago [18] 15:18 21:8 44:18 52:9 76:17 114:6 114:23 147:25 157:7 157:13 164:24 187:13 206:14 208:3 208:7 217:13 257:16 257:17
Agree [37] 14:15 14:16 51:23 53:1 69:20 79:23 85:3 93:23 118:1 134:16 135:6 172:13 177:18 180:4 198:7 201:7 210:9 210:9 217:4 217:20 218:1 218:20 220:2 220:18 220:24 222:5 223:8 224:8 225:9 226:15 227:15 232:15 238:1 239:7 240:3 257:18 260:8
Agreed [6] 12:15 23:22 24:7 48:5 70:1 108:7
Agreeing [3] 58:18 58:22 74:17
Agreement [7] 23:7 47:16 54:20 68:1 153:3 153:4 177:19
Agrees [2] 71:2 239:6
Ahead [13] 9:8 25:14 25:16 26:21 32:25 39:9 39:10 97:4 142:8 149:1 151:22 209:18 241:6
Air [5] 101:3 197:23 247:16 247:22 249:19
Aircraft [2] 38:8 39:24
Airfares [1] 39:23
Airport [3] 118:16 186:24 194:23
Alabama [1] 166:13
Alagasco [1] 166:14
Algebra [1] 177:7
All-electric [1] 164:5
Allegations [1] 11:1
Alleging [2] 10:15 21:6
Allen [2] 1:23 6:20
Alliant [1] 163:11
Allocated [1] 233:16
Allow [8] 13:7 14:1 44:12 127:17 128:5 133:12 133:16 210:7
Allowance [4] 53:8 81:21 98:5 133:5
Allowed [11] 16:19 91:24 108:8 116:24 157:16 186:13 200:25 213:6 213:18 238:15 238:22
Allowing [1] 148:13
Almanac [1] 66:6
Almost [7] 74:5 113:19 156:11 167:15 173:12 189:13 235:23
Alone [2] 126:23 182:3
Alternative [7] 34:18 94:13 115:11 165:19 183:18 185:5 201:21
Alternatives [1] 168:6
Altogether [2] 8:10 210:22
America [3] 61:14 96:25 243:6
American [9] 61:15 72:18 102:9 149:25 170:3 170:25 242:12 251:24 256:1
Amortization [4] 67:16 68:18 69:21 70:1
Amortize [1] 47:8
Amortized [1] 157:2
Amortizes [1] 120:16
Amount [21] 39:22 41:5 45:9 64:12 71:12 85:12 93:4 94:5 94:11 94:15 94:17 97:25 98:3 104:3 159:7 170:8 199:19 239:25 246:22 258:3 262:14
Amounts [1] 194:10
Analyses [1] 242:24
Analysis [8] 40:22 43:12 52:6 74:20 115:12 162:6 218:3 242:12
Analyst [1] 162:22
Analysts [1] 181:22
Analytical [2] 39:13 242:15
Analyzed [1] 87:8
Anecdotally [1] 235:8
Announcing [1] 189:15
Annual [15] 1:6 6:14 12:11 94:4 94:17 99:14 110:16 115:1 132:5 218:21 218:22 219:11 224:9 230:24 248:1
Annualize [1] 104:24
Annually [3] 130:19 132:19 133:3
Anomaly [1] 144:14
Answer [18] 10:25 13:11 15:24 49:25 52:10 85:15 88:4 122:2 135:24 165:24 183:12 202:9 204:7 204:7 206:5 215:14 239:19 260:25
Answered [1] 28:19
Answers [3] 19:2 44:1 90:15
Antelope [1] 67:1
Anticipate [1] 257:9
Anticipating [2] 64:20 109:2
Antitrust [1] 252:11
Anytime [1] 133:23
Anyway [3] 70:23 102:7 261:1
Appeal [1] 14:17
Appealing [1] 14:23
Appear [7] 58:22 87:8 95:22 122:21 152:19 163:21 242:1
Appearance [1] 7:2
Appearances [1] 6:24
Appeared [1] 156:11
Appearing [4] 7:6 7:21 7:23 7:25
Apples-and-oranges [1] 134:3
Application [5] 3:4 10:12 25:23 32:18 134:3
Applications [1] 30:5
Applied [3] 130:4 169:9 200:15
Applies [3] 79:22 114:20 259:13
Apply [11] 22:6 48:13 49:16 104:8 104:14 105:13 132:17 134:1 172:13 173:3 176:16
Applying [1] 106:22
Appreciate [2] 229:6 265:21
Approach [46] 39:1 39:2 39:13 74:20 94:2 94:6 94:13 94:15 94:20 94:22 94:24 95:14 95:24 96:1 96:2 96:6 96:19 113:14 114:18 120:13 120:16 120:22 121:2 156:17 156:20 157:10 157:17 158:3 164:19 172:14 181:15 181:17 182:6 182:7 182:13 183:18 190:24 201:18 202:21 203:6 205:7 205:9 205:10 205:15 213:24 239:8
Approached [1] 247:11
Approaches [3] 109:6 182:20 190:20
Appropriate [20] 12:14 23:8 27:25 51:14 52:2 53:4 68:20 84:2 86:11 93:2 93:11 101:15 108:10 126:17 141:1 141:3 142:22 162:12 164:24 240:19
Appropriates [1] 30:5
Appropriations [1] 39:3
Approve [1] 38:13
April [1] 157:23
Arbitrary [3] 52:10 53:10 86:14
Area [9] 63:5 63:7 110:25 166:18 166:18 171:25 176:12 176:12 230:3
Areas [9] 93:9 93:9 103:13 117:20 148:16 230:4 230:6 242:22 251:8
Argue [4] 53:14 70:20 71:11 81:18
Argued [4] 36:2 36:4 68:

5 106:20
Argues [4] 66:24 67:10 70:5 105:9
Arguing [5] 48:14 84:18 228:13 228:16 228:20
Argument [3] 67:4 68:17 75:14
Arguments [1] 71:14
Arkansas [1] 250:22
Arose [1] 144:13
Arrange [1] 139:4
Arrived [1] 75:11
Art [3] 33:3 53:1 74:10
Article [1] 14:20
Articles [1] 60:7
Arts [2] 90:2 90:3
Aside [1] 189:12
Aspects [1] 196:7
Assertion [2] 64:15 70:20
Asserts [1] 70:11
Assessment [5] 5:7 59:22 61:12 72:14 115:11
Assessments [1] 62:5
Assets [6] 43:9 175:10 207:13 207:18 208:11 233:10
Assigned [2] 71:10 76:24
Associate [1] 154:11
Associated [4] 43:2 132:22 160:10 163:5
Associates [2] 154:10 154:23
Association [4] 150:1 242:12 251:24 256:1
Assume [5] 53:16 56:13 112:9 127:10 129:20
Assuming [2] 64:18 157:3
Assumption [6] 79:8 177:20 177:21 238:18 262:13 262:14
Assurance [1] 112:22
Astronomical [1] 133:19
Atlanta [2] 108:13 166:13
Atmospheric [1] 252:25
Attached [1] 244:1
Attempted [1] 113:12
Attention [2] 97:8 155:10
Attorney [1] 2:17
Attorneys [1] 2:12
Attract [2] 173:21 201:19
Attractive [2] 165:16 165:21
Attributable [2] 246:2 254:20
Attribute [1] 245:24
August [5] 92:5 112:14 135:13 135:14 142:2
Authorized [11] 22:10 24:16 25:19 27:17 28:7 144:2 144:5 147:2 219:11 221:11 223:22
Automatic [1] 81:3
Automobile [1] 38:2
Availability [1] 63:18
Available [18] 51:15 55:14 63:15 148:2 155:15 184:19 185:13 192:11 201:22 201:24 228:6 229:2 247:7 249:1 254:14 260:17 260:20 262:24
Avenue [3] 2:8 2:13 2:23
Average [42] 24:6 34:12 34:20 35:8 45:17 49:17 52:1 64:11 64:12 64:24 97:25 115:5 130:2 132:5 132:6 133:2 144:4 157:23 175:11 177:15 177:16 180:4 180:6 180:11 181:3 181:6 181:24 182:5 183:21 184:19 184:20 189:8 193:9 193:12 197:3 230:24 231:9 231:13 232:8 247:10 250:4 253:7
Avoid [2] 36:6 263:13
AVS [5] 47:8 66:16 67:2 68:9 70:2
Award [1] 137:13
Awarded [1] 80:15
Aware [17] 8:13 31:14 48:24 48:25 76:12 80:11 81:5 96:15 191:17 209:5 209:9 209:13 214:19 235:4 236:13 236:21 239:18
Awful [1] 169:11
Awfully [1] 225:7
Axis [1] 255:13

B

Bachelor [1] 90:1
Bachelor's [2] 154:2 243:3
Backed [2] 94:10 94:11
Background [6] 18:6 89:25 121:8 153:24 154:1 243:2
Bad [6] 77:16 127:4 165:8 165:13 168:7 174:8
Balance [3] 24:2 24:3 24:5
Ball [17] 7:24 8:2 13:14 13:19 38:9 41:3 41:6 42:11 43:5 43:25 56:12 66:24 67:15 70:5 71:5 147:13 234:14
Ball's [8] 39:14 40:18 42:8 56:14 67:4 67:9 68:17 87:10
Ballgame [1] 35:21
Ballpark [3] 157:24 182:11 182:14
Band [3] 245:12 254:3 254:5
Bank [3] 38:2 42:23 96:25
Bankers [1] 172:21
Bar [1] 187:24
Barometer [1] 253:4
Bars [1] 193:20
Base [35] 21:22 22:3 22:9 22:12 22:12 22:17 22:21 22:22 22:23 23:4 23:9 23:11 23:12 23:14 23:16 23:19 23:20 23:22 24:1 24:7 28:12 28:12 48:5 49:17 55:1 55:13 99:9 116:24 116:25 172:9 199:3 199:12 199:13 199:15 205:10
Based [37] 21:25 25:9 32:17 32:19 52:25 60:6 65:14 66:5 66:6 84:1 85:5 103:22 107:5 116:20 118:3 120:8 120:12 120:13 120:15 121:12 139:24 147:15 147:16 156:17 156:20 202:20 205:5 222:21 222:24 226:16 229:2 235:25 247:10 256:8 256:12 260:6 262:17
Baseline [1] 254:25
Bases [1] 95:4
Basic [4] 21:22 73:18 130:14 161:21
Basis [28] 12:2 15:14 30:25 35:12 56:2 69:24 76:20 76:21 86:21 95:5 108:23 109:13 120:5 133:3 137:15 139:20 141:5 142:18 145:17 145:17 145:23 227:20 236:1 248:24 248:25 250:4 250:20 260:17
Battle [1] 133:15
Bearing [1] 136:22
Beat [2] 77:6 228:24
Became [1] 249:6
Become [2] 137:24 210:13
Began [2] 97:9 247:1
Begin [7] 15:9 60:24 119:11 137:24 139:23 195:8 258:8
Beginning [10] 6:24 8:25 24:1 24:2 24:3 24:6 39:25 119:17 256:17 258:24
Begins [1] 220:7
Begun [1] 258:8
Behalf [4] 7:21 142:16 243:10 243:12
Behind [7] 7:11 16:20 113:5 140:3 140:4 176:18 247:10
Believable [1] 114:16
Believes [3] 20:24 140:7 165:4
Bell [1] 46:19
Below [11] 28:21 62:24 71:15 95:6 96:16 105:11 144:1 193:4 210:4 220:16 254:2
Benchmark [7] 20:5 25:6 52:3 54:21 181:16 182:9 182:13
Beneficially [1] 137:5
Beneficiaries [4] 46:1 46:9 46:10 46:11
Benefit [9] 36:21 43:13 43:17 71:24 87:9 114:22 123:13 167:4 219:5
Benefiting [1] 46:2
Benefits [8] 37:16 37:17 37:18 42:16 42:18 43:11 44:7 208:22
Best [21] 50:16 54:21 58:8 149:23 161:4 163:15 164:19 176:16 184:2 185:20 191:1 226:2 227:17 228:6 228:10 228:13 228:17 228:24 235:15 236:1 258:11
Better [14] 63:19 63:21 64:6 72:7 107:16 114:3 127:13 150:5 182:2 208:10 229:3 229:4 235:2 236:6
Betting [1] 109:11
Between [34] 23:8 27:1 32:6 35:23 75:15 83:20 87:20 92:18 92:21 100:9 102:10 103:13 113:10 113:16 123:20 128:9 135:14 160:19 161:4 165:25 176:17 181:4 192:20 199:6 204:25 206:18 230:5 230:15 232:14 243:9 248:11 254:2 257:6 257:13
Beyond [9] 21:14 37:8 51:5 51:10 69:6 83:25 99:11 144:21 254:15
Bid [1] 185:1
Bienniums [1] 30:7
Big [9] 34:16 48:20 82:9 134:4 165:3 168:24 170:16 206:12 264:7
Bigger [1] 103:13
Biggest [2] 158:16 208:1
Bill [5] 25:15 26:20 32:1 39:9 40:24
Binek [127] 2:6 3:4 3:9 3:14 3:16 3:18 3:20 4:3 4:5 4:8 7:1 7:4 7:15 7:17 8:14 8:15 13:2 13:24 15:1 15:2 15:8 15:10 16:8 16:15 16:17 16:18 17:6 17:8 17:13 19:12 19:20 25:16 42:3 44:4 50:2 50:4 54:18 72:9 72:10 72:13 72:14 72:17 81:11 81:12 81:15 82:20 82:21 84:15 87:15 87:17 88:7 88:12 88:25 89:2 89:7 91:13 91:14 91:21 106:1 106:4 106:11 107:17 107:24 107:25 115:10 118:8 118:10 118:13 118:19 136:13 136:15 138:4 138:5 138:20 138:23 138:25 146:12 146:14 151:1 153:9 153:10 153:14 153:15 194:25 195:9 196:11 196:13 196:15 199:23 199:25 200:4 200:6 200:8 208:24 211:8 211:9 213:4 216:10 216:17 216:19 216:20 218:10 218:13 218:14 219:19 219:20 220:6 220:12 221:1 221:18 221:20 221:23 222:3 224:17 224:18 239:12 239:13 239:15 240:9 240:10 255:21 255:22 255:24 259:18 259:20 265:8 265:9
Bismarck [8] 1:18 2:8 2:14 2:18 2:23 6:10 7:21 141:21
Bit [23] 15:12 15:13 22:15 28:18 52:14 55:6 58:4 75:11 82:14 87:4 146:24 155:5 155:6 160:2 170:11 173:12 189:7 189:19 193:4 197:11 198:21 204:1 235:3
Bite [1] 147:4
Bizarre [1] 113:14
Blinders [1] 35:17
Blinsky [10] 8:3 13:14 13:18 144:23 149:18 155:18 191:4 192:7 230:20 239:21
Blinsky's [1] 82:1
Blip [1] 226:12
Blizzard [1] 265:20
Blown [1] 20:6
Board [4] 45:2 45:3 176:18 239:24
Boiler [1] 262:19
Bold [1] 162:5
Bond [5] 114:20 114:20 115:4 121:16 179:7
Bonds [13] 112:25 113:8 113:10 114:3 114:21 137:1 179:12 181:25 182:25 183:4 183:5 233:23 233:24
Bonneville [1] 212:19
Book [63] 105:1 105:7 105:11 105:13 105:14 105:18 105:19 106:21 106:25 107:1 107:6 107:7 107:11 107:11 107:14 108:3 108:10 108:12 108:18 108:19 108:23 109:14 109:14 109:17 115:20 115:23 116:3 116:7 116:7 116:13 116:15 116:20 116:21 117:1 117:1 130:17 151:18 157:10 172:16 173:4 174:19 174:20 174:24 175:12 175:16 175:18 176:4 176:5 184:9 184:14 184:23 186:6 188:1 188:2 188:4 200:16 201:20 209:3 209:14 210:4

213:20 238:17 239:9
Booked [2] 69:1 69:2
Books [9] 38:2 60:11 68:5 95:23 97:6 151:20 159:12 160:11 173:15
Booms [1] 113:23
Borne [1] 14:23
Borrow [3] 174:7 174:8 214:11
Borrowed [1] 97:1
Bottom [6] 49:11 49:24 57:20 62:8 207:12 207:15
Bought [2] 114:12 173:5
Boulevard [2] 2:8 2:23
Bound [2] 146:8 151:17
Box [2] 2:13 80:16
Boxes [1] 27:8
Break [3] 28:23 88:19 119:3
Brief [2] 10:12 19:21
Briefly [5] 89:24 195:14 238:12 243:1 255:8
Bring [1] 73:16
Brings [1] 223:7
Broken [2] 28:25 42:9
Brokers [2] 172:21 175:8
Brought [9] 33:11 74:6 97:8 150:4 205:4 236:8 236:14 262:9 262:12
Brownout [1] 263:13
Budget [1] 78:3
Budgeting [1] 185:17
Build [11] 60:14 159:17 165:22 169:4 185:7 185:14 185:15 186:11 210:2 210:3 234:11
Building [6] 38:3 85:24 158:16 214:13 214:17 234:1
Built [2] 159:23 169:6
Bulk [3] 61:13 125:22 126:13
Bullet [2] 146:24 147:4
Bumped [1] 135:20
Bunch [4] 263:11 263:15 264:18 264:23
Burden [1] 12:7
Business [21] 38:19 39:6 89:8 89:10 99:1 99:4 127:21 127:25 132:8 141:19 147:10 154:3 165:8 165:9 168:13 168:14 169:8 170:23 212:16 261:3 261:4
Businesses [3] 98:17 143:14 143:23
Busts [1] 113:23
Buy [13] 108:24 108:24 114:2 116:4 136:25 166:12 167:1 167:12 169:12 169:14 190:17 190:19 198:11
Buyer [2] 198:2 198:6
Buyers [1] 255:14
Buying [4] 179:16 191:3 251:12 261:3

C

Calculate [4] 29:5 111:4 203:21 203:22
Calculated [15] 34:23 34:25 48:2 76:9 86:15 158:5 158:7 161:23 162:15 202:5 202:11 202:16 205:12 227:16 236:13
Calculates [2] 49:11 130:1
Calculating [7] 40:19 93:6 132:13 158:3 203:5 203:17 204:5
Calculation [14] 5:6 49:24 75:24 79:1 98:13 105:12 110:20 110:24 117:9 117:13 137:18 157:21 158:5 203:2
Calculations [1] 78:23
Calendar [1] 5:9
California [2] 135:15 252:6
Canada [1] 211:22
Cancel [1] 168:21
Cannot [1] 260:11
Capability [4] 29:8 243:23 246:19 248:10
Capacities [1] 47:10
Capacity [13] 8:20 33:18 36:6 36:9 60:3 62:21 62:22 63:5 63:8 129:4 242:10 257:23 262:24
Capital [53] 7:11 21:25 23:17 24:4 24:12 24:19 24:20 24:22 26:7 26:9 26:22 26:24 27:4 27:5 27:9 49:13 60:14 97:11 98:3 104:22 120:3 123:16 123:18 131:21 131:24 131:25 162:15 166:11 166:19 173:11 173:21 173:24 173:25 174:11 174:16 178:15 180:22 185:6 185:16 186:7 186:9 199:5 200:21 200:23 201:19 207:3 215:16 216:21 217:16 234:5 234:10 238:5 239:2
Capitalization [1] 116:9
Capitol [4] 1:17 2:7 2:22 6:10
Capsulizes [2] 32:7 47:5
Capture [1] 103:20
Capturing [1] 77:6
Car [1] 189:14
Care [3] 43:10 46:7 74:24
Carefully [2] 63:13 122:1
Carried [3] 69:19 97:6 159:16
Carriers [1] 41:4
Carry [1] 253:9
Carrying [3] 136:22 157:14 208:5
Carryover [1] 208:8
Case [97] 1:5 9:5 9:11 9:24 10:22 13:11 15:13 15:13 16:3 18:11 19:6 19:24 20:10 23:23 25:17 25:25 26:1 26:4 26:7 26:10 28:4 28:7 28:11 29:19 30:20 30:21 31:10 31:11 32:9 32:18 32:22 37:14 45:4 45:24 49:9 56:6 57:15 58:11 58:13 71:11 73:19 74:4 74:6 74:13 75:15 77:15 78:2 78:4 78:18 83:14 83:24 90:6 90:18 94:21 95:25 105:23 105:25 106:15 106:19 107:20 108:4 108:20 120:24 135:7 137:10 139:2 140:2 140:4 141:9 142:20 147:14 147:22 148:7 149:1 152:21 160:24 163:8 170:15 170:16 170:17 172:5 179:6 199:3 204:23 205:3 205:14 206:24 208:17 210:24 220:17 221:13 222:8 223:5 228:7 250:14 264:7 266:16
Cases [12] 15:15 20:6 24:24 25:2 25:4 25:5 30:6 77:18 133:12 147:5 206:18 245:9
Cash [14] 93:8 93:13 100:3 102:12 103:20 107:5 109:15 110:2 111:7 157:8 217:17 217:17 217:19 217:19
Categories [2] 28:24 29:1
Category [2] 36:18 43:2
Catholic [1] 243:5
Caused [5] 31:16 37:1 37:4 60:9 144:11
Cell [1] 212:16
Cents [15] 172:20 172:23 172:25 173:1 173:5 173:6 175:2 175:8 175:9 175:13 175:22 178:17 179:18 179:20 180:8
CEO [1] 44:25
Certain [2] 95:14 131:19
Certainly [14] 9:23 71:14 100:16 118:24 254:5 254:9 254:24 254:25 256:25 257:15 257:16 258:4 262:18 262:22
Certainty [1] 226:22
Certified [1] 18:8
Chance [3] 65:12 72:8 240:14
Change [15] 31:19 31:20 39:17 45:21 52:14 64:23 66:1 66:8 66:9 75:17 132:2 165:25 169:1 226:5 226:6
Changed [13] 12:11 31:2 42:24 48:23 59:1 83:8 88:4 143:9 145:4 169:13 238:25 239:2 239:3
Changes [4] 59:11 145:16 145:21 226:16
Chapter [1] 14:18
Characterize [1] 83:15
Characterized [2] 56:3 244:10
Charge [2] 12:2 201:8
Charges [4] 11:22 38:2 251:20 251:22
Charles [9] 3:17 4:17 4:19 4:24 7:10 12:23 88:12 89:3 89:10
Chart [11] 20:2 27:15 37:20 54:12 107:20 111:12 111:22 196:24 230:25 231:16 232:6
Charts [1] 129:17
Check [10] 85:3 111:7 111:9 113:11 115:13 157:6 183:10 183:17 220:9 221:4
Checkered [1] 193:17
Checks [3] 93:12 111:2 112:19
Chief [2] 7:5 7:9
Choice [1] 257:22
Choose [1] 50:1
Chooses [1] 42:15
Chose [2] 53:8 233:9
Christian [1] 18:10
Circumstances [3] 122:16 160:2 160:6
City [6] 124:22 125:17 162:10 163:9 164:12 167:7
Claims [3] 33:6 40:13 103:21
Clarify [1] 135:1
Clark [46] 2:4 3:11 3:13 3:16 4:4 8:25 9:22 9:23 10:10 57:11 75:2 75:3 75:6 78:5 78:8 80:7 80:8 80:10 81:7 81:10 85:19 85:20 85:23 86:3 86:4 86:6 87:11 87:14 136:9 136:10 150:11 150:12 150:15 193:14 216:5 234:18 234:20 234:22 236:5 236:23 237:1 264:20 264:22 264:25 265:2 265:3
Class [1] 17:3
Classes [1] 244:3
Classical [1] 111:4
Classification [1] 43:3
Clause [2] 77:7 80:14
Clean [2] 238:24 238:25
Clear [3] 43:6 44:16 246:19
Clearly [4] 108:17 117:23 140:12 147:12
Cleco [5] 102:9 170:4 170:25 223:14 223:15
Climb [1] 22:12
Close [3] 33:9 114:5 114:6
Closed [1] 238:10
Closely [2] 132:22 196:19
Closer [3] 36:12 226:4 226:4
Co [3] 1:5 2:16 2:19
Coal [7] 140:18 193:20 193:21 193:23 195:23 231:6 262:17
Coal-based [1] 262:17
Coal-fired [1] 140:18
Code [1] 14:21
Coin [1] 168:17
Cold [11] 226:9 226:14 245:21 247:21 250:16 250:20 250:21 250:21 250:21 251:3 266:3
Colder [3] 249:22 250:25 251:1
Coldest [3] 247:23 250:19 250:23
Collection [1] 242:20
College [1] 18:10
Colored [2] 188:21 193:18
Column [4] 107:12 108:2 109:5 162:1
Combination [35] 99:17 99:23 100:4 100:5 100:7 100:9 100:10 100:11 100:14 101:10 101:11 101:12 118:4 118:5 124:10 126:2 126:8 127:2 127:14 160:25 162:4 162:25 165:6 168:11 168:22 168:23 169:17 169:19 169:20 202:18 214:25 214:25 215:7 215:11 215:13
Combined [3] 131:21 161:22 246:4
Coming [8] 18:2 43:7 64:13 109:23 110:14 110:15 194:10 260:21
Commencing [1] 6:2
Commensurate [1] 160:13
Comment [6] 74:10 81:17 82:4 118:13 252:12 261:7
Commented [2] 181:14 235:1

Comments [10] 9:2 117:4 131:12 139:18 156:3 186:18 187:8 187:11 194:4 226:20

Commercial [4] 244:4 248:5 256:5 259:17

Commission [95] 1:3 1:17 2:7 2:9 2:22 2:24 3:5 6:9 6:12 6:18 6:21 7:6 7:16 8:22 8:23 9:8 10:14 10:20 11:4 13:6 13:6 13:25 14:12 14:12 14:17 14:20 15:5 17:17 17:20 17:21 17:24 18:2 18:4 19:22 20:4 21:17 22:10 23:21 24:16 24:24 25:18 26:17 26:25 27:11 27:16 27:17 28:24 30:3 31:22 32:3 32:11 34:22 36:15 36:22 38:12 38:17 40:17 44:11 48:1 49:2 49:5 49:7 58:5 58:8 60:8 60:21 60:25 61:1 74:6 74:20 80:20 83:13 83:16 83:24 85:25 111:23 117:5 120:22 127:16 128:5 139:24 142:14 144:2 145:18 148:20 152:1 153:2 203:18 204:22 205:23 209:1 209:24 210:19 213:15 237:22

Commission's [6] 7:9 7:11 21:19 34:18 84:3 152:23

Commissioner [202] 2:3 2:4 2:4 3:10 3:11 3:11 3:12 3:13 3:15 3:19 3:20 3:24 4:4 4:4 4:9 4:9 8:23 8:24 8:25 9:3 9:4 9:14 9:15 9:16 9:21 9:22 9:23 10:9 15:7 19:19 42:21 42:23 54:9 57:11 61:5 61:7 61:9 61:20 61:22 61:25 62:3 63:23 64:1 64:8 66:19 66:23 72:3 72:5 72:6 73:2 73:3 73:6 74:23 75:1 75:2 75:3 75:6 76:16 77:1 78:5 78:7 78:9 78:11 78:13 80:4 80:5 80:6 80:8 80:10 81:7 81:9 85:18 85:20 85:23 86:2 86:3 86:4 86:6 87:11 87:13 88:14 88:17 112:2 112:6 112:11 119:6 128:23 129:12 129:14 129:16 134:21 134:23 134:24 134:25 135:4 136:4 136:8 136:9 136:10 149:5 149:7 149:9 149:11 150:9 150:10 150:11 150:12 150:14 150:24 153:1 155:4 161:9 161:14 171:15 171:18 171:22 176:23 178:18 178:24 179:2 179:4 179:8 179:23 180:3 180:13 180:17 180:20 182:15 183:22 184:4 188:16 188:20 188:23 188:25 189:10 193:14 194:22 195:2 199:22 200:2 200:5 200:7 216:5 221:17 221:19 221:21 221:25 224:22 224:24 225:2 229:13 229:16 229:19 231:19 231:22 231:25 234:15 234:17 234:18 234:20 234:22 234:24 236:5 236:23 236:25 240:13 240:15 241:1 241:5 261:10 261:12 261:15 261:25 263:20 263:22 263:23 263:24 264:2 264:5 264:9 264:10 264:12 264:17 264:19 264:20 264:21 264:22 264:22 264:24 264:25 265:1 265:2 265:3 265:14 265:16 265:22 266:2 266:4 266:7 266:10 266:11 266:12

Commissioners [6] 2:2 3:3 9:2 10:6 19:17 240:13

Commissioners' [1] 24:15

Commissions [8] 80:13 103:18 111:25 130:13 133:16 133:18 210:7 219:14

Committed [1] 63:2

Committee [1] 216:9

Commodity [3] 251:14 251:15 251:21

Common [20] 22:2 49:15 126:9 130:2 161:2 172:15 173:11 173:18 182:5 182:8 183:5 184:24 199:6 199:13 199:14 209:3 209:6 219:12 221:12 223:23

Communications [1] 38:4

Companies [138] 5:8 45:25 46:20 59:16 82:18 93:1 98:12 99:3 99:7 99:11 99:12 99:19 99:21 99:23 99:24 100:2 100:4 100:5 100:11 100:12 100:23 100:24 101:1 101:10 101:13 101:14 101:19 102:6 102:17 102:20 103:1 103:3 103:6 103:9 103:12 103:24 104:19 108:4 108:11 108:17 108:22 109:2 115:16 115:20 115:22 116:22 117:3 117:22 118:1 124:7 124:7 125:2 125:7 125:13 125:16 125:21 126:3 126:8 126:12 131:21 135:21 137:25 148:16 160:20 160:21 161:1 161:1 162:4 162:5 162:8 162:12 162:16 162:23 162:25 163:3 163:25 164:20 164:25 164:25 166:15 166:17 167:5 167:14 167:15 169:9 169:10 169:18 169:20 169:20 169:24 170:18 171:7 175:12 175:19 182:12 183:2 183:6 183:7 183:19 184:12 184:13 184:25 207:14 209:13 210:2 214:22 214:24 214:25 215:6 215:6 215:7 217:1 220:8 220:10 221:2 221:8 221:10 221:11 221:15 222:1 222:5 222:6 222:16 222:17 222:20 223:8 223:9 223:15 223:21 223:22 224:2 224:4 224:11 224:13 237:24 238:23 256:8 256:13

Company [145] 6:14 7:22 25:18 30:17 30:25 31:11 36:3 41:5 43:7 51:23 68:1 71:16 74:18 77:6 77:25 80:23 82:10 82:12 86:21 89:22 93:18 95:15 96:11 96:18 96:20 97:10 97:15 97:24 98:2 98:6 98:18 98:22 99:17 99:18 100:7 100:10 100:14 100:17 100:20 101:11 102:3 104:10 105:17 105:20 110:17 111:21 116:3 116:4 116:5 116:9 117:1 117:15 127:1 127:2 127:14 127:15 130:18 130:20 132:6 132:18 133:23 134:2 135:17 136:25 137:4 137:7 137:11 138:2 139:21 140:7 140:25 141:23 142:4 147:2 154:14 156:22 157:5 157:8 158:21 159:9 162:2 162:3 162:4 162:9 163:8 163:11 164:6 164:7 164:16 165:5 165:6 165:10 165:18 166:3 166:5 166:7 166:8 166:13 166:18 166:23 167:6 167:16 167:21 168:12 168:22 168:23 170:20 171:13 175:5 175:24 176:2 176:6 182:25 184:10 184:20 185:16 185:16 200:16 200:20 201:9 205:25 206:16 208:23 209:5 212:15 212:22 214:16 215:1 215:11 215:13 215:14 220:15 220:16 220:20 220:21 220:25 223:3 223:13 225:11 233:12 233:15 234:4 234:13 239:1 256:14

Company's [12] 27:1 35:15 91:3 96:8 105:6 105:11 127:25 140:11 140:18 140:23 142:13 156:19

Comparable [11] 93:1 98:12 99:13 100:6 127:1 132:23 160:21 170:19 170:20 171:10 245:1

Comparably [1] 87:24

Compare [11] 22:4 35:8 48:10 86:19 103:4 104:3 105:1 126:1 183:4 186:1 244:8

Compared [5] 29:17 116:4 137:21 140:8 175:18

Compares [1] 41:6

Comparing [3] 37:22 121:12 126:10

Comparison [10] 26:17 26:22 26:25 27:11 27:20 121:7 124:7 126:17 133:23 162:13

Comparisons [1] 95:8

Compete [4] 140:18 167:20 230:7 230:12

Competes [1] 186:10

Competition [2] 169:5 216:8

Competitive [6] 95:15 100:16 100:21 143:19 168:5 186:14

Competitors' [1] 262:19

Compiled [1] 218:23

Complainant [3] 6:25 12:8 12:20

Complainant's [1] 13:9

Complaint [11] 6:13 10:15 10:21 10:22 10:23 11:1 11:2 12:13 13:12 14:14 21:6

Complete [5] 98:8 155:21 177:19 210:8 255:17

Completed [1] 243:6

Completely [3] 115:9 174:12 217:4

Completes [1] 186:18

Complicated [1] 177:6

Component [7] 24:9 28:2 103:21 166:1 173:13 199:16 205:16

Components [4] 21:22 23:25 24:21 173:14

Comprised [1] 21:22

Computed [2] 102:13 121:7

Computer [1] 38:4

Computing [1] 93:7

Con [1] 126:3

Concede [1] 44:2

Concedes [1] 202:10

Conceivable [1] 129:1

Conceivably [1] 127:20

Concentration [1] 154:6

Concept [2] 130:15 177:9

Concepts [1] 177:3

Concerned [5] 37:8 45:3 166:23 215:8 217:5

Concerning [5] 12:6 81:17 196:20 215:4 258:14

Concerns [4] 40:21 42:10 44:15 112:21

Concession [1] 203:20

Conclude [1] 55:25

Concluded [3] 42:7 100:5 162:11

Concludes [1] 194:3

Concluding [1] 42:25

Conclusion [4] 140:4 194:12 202:17 238:14

Conclusions [2] 14:13 141:1

Condition [1] 32:22

Conditioning [4] 101:3 247:17 247:22 249:19

Conditions [20] 35:19 55:2 145:4 191:19 243:16 243:17 243:19 244:8 245:25 246:1 249:12 251:7 251:25 253:9 253:13 254:17 255:3 256:18 259:1 260:24

Conduct [1] 39:5

Conducted [3] 103:23 224:9 242:23

Confidence [1] 32:17

Confirm [1] 138:12

Confused [2] 181:11 191:6

Confusing [1] 67:24

Congressional [2] 44:21 44:23

Congressmen [1] 46:3

Consequence [4] 101:10 103:3 105:15 107:7

Conservation [1] 34:3

Consider [7] 21:17 33:4 41:16 160:21 164:4 185:25 200:24

Considerable [2] 93:20 239:25

Considerably [5] 111:20 196:4 226:12 226:13 232:16

Considerate [2] 35:15 35:16

Consideration [7] 21:12 34:9 34:19 47:25 64:17 64:19 145:19

Considered [3] 44:9 63:2 217:14

Considering [3] 43:1 160:5 168:10

Considers [2] 164:14 167:17

Consistent [3] 58:3 143:3 143:16

Consolidated [2] 163:12 164:7

Constraints [1] 33:22

Constructed [1] 257:20

Construction [1] 63:13

Consultant [2] 89:14 154:24

Consulting [3] 89:17 154:10 154:16

Consumed [2] 251:17 260:13

Consumer [1] 143:10

Consumers [2] 244:4 251:12

Consumption [1] 128:12

Contain [2] 152:19 152:24

Contained [4] 19:2 90:14 155:20 219:1

Contains [1] 143:20

Contend [1] 133:4

Contends [1] 109:19

Contention [1] 75:8

Context [3] 204:15 204:15 215:25
Continually [1] 237:25
Continue [13] 140:1 140:14 143:22 147:9 193:6 195:18 197:16 209:23 222:14 252:20 252:23 257:8 266:15
Continued [3] 4:1 5:1 154:15
Continues [5] 46:20 46:21 187:17 189:15 193:3
Continuing [45] 19:20 25:16 42:3 44:4 54:18 54:22 56:17 56:24 57:24 61:22 62:3 64:8 66:23 83:11 86:6 91:21 107:25 115:10 119:24 124:1 124:18 152:12 153:21 155:9 187:3 194:8 195:13 200:8 208:24 211:9 213:4 216:10 216:20 218:14 220:6 221:1 222:3 229:19 231:25 236:5 242:6 253:10 261:25 264:12 265:16
Contract [5] 192:9 192:24 227:21 235:5 255:13
Contractors [1] 242:25
Contracts [7] 33:16 66:12 128:16 169:12 212:18 230:19 239:16
Contrary [1] 70:15
Contrast [1] 253:22
Contributed [2] 195:16 259:6
Contributing [1] 249:11
Contributions [3] 71:1 71:3 71:14
Contributor [1] 71:25
Contributors [1] 212:4
Controllable [2] 38:17 38:25
Convenience [5] 11:13 11:17 11:20 11:25 221:14
Convenient [1] 50:11
Conventional [3] 203:16 204:5 204:20
Conventionally [1] 110:9
Converged [1] 145:3
Convert [1] 212:17
Convince [1] 39:17
Convoluted [2] 55:9 122:13
Cooking [1] 100:16
Cooling [1] 253:1
Coordinate [1] 154:19
Copies [2] 14:7 88:19
Copy [8] 61:21 88:15 188:22 218:20 218:24 261:20 261:22 261:24
Corporate [8] 38:7 39:22 39:24 95:10 95:11 111:13 183:4 183:5
Corporation [3] 18:3 80:20 91:7
Corporations [1] 185:22
Correct [43] 17:22 19:11 48:19 51:9 51:11 51:22 73:19 73:21 73:23 77:12 79:2 79:7 83:7 88:22 90:25 97:3 97:4 97:14 118:21 120:10 124:24 130:11 130:24 151:7 177:21 200:11 200:17 200:18 203:15 204:4 204:10 204:15 205:8 218:24 220:7 223:17 223:18 227:2 232:3 235:14 262:14 263:17 263:19
Corrected [1] 155:16
Correction [2] 155:11 155:19
Corrections [4] 18:23 90:22 91:7 91:9
Correlate [1] 192:3
Correlated [1] 112:20
Correlation [5] 87:20 113:10 192:20 192:25 257:6
Cost [180] 7:11 21:24 22:1 22:1 24:11 24:19 24:20 24:21 26:6 26:9 26:17 26:22 26:24 27:6 27:7 27:9 27:11 27:15 27:18 27:21 27:25 33:21 35:5 36:6 40:9 40:12 48:8 49:13 49:14 67:1 67:6 67:14 67:21 67:22 68:3 69:2 72:2 77:3 92:22 92:25 93:15 93:16 94:3 94:4 94:6 94:8 94:15 94:25 95:3 95:7 95:10 97:10 98:9 103:7 103:23 104:7 104:18 117:13 117:15 117:24 119:18 120:3 120:6 120:23 121:2 121:10 122:7 122:10 122:15 122:25 123:4 123:5 123:13 123:17 123:18 123:23 130:2 130:8 130:9 131:7 131:23 132:5 132:22 133:3 133:8 133:13 133:20 133:20 133:25 134:5 135:20 136:23 137:18 137:23 138:3 138:13 141:5 143:24 145:16 147:6 149:2 156:16 156:19 156:21 156:25 157:11 157:18 157:20 157:23 158:3 158:9 158:10 158:12 158:13 158:23 159:3 159:10 159:11 159:23 160:22 160:22 161:2 162:15 166:10 166:19 172:1 172:12 172:14 173:8 173:11 173:13 173:14 174:4 174:16 176:11 178:15 180:22 182:8 186:7 186:8 199:5 199:6 199:8 199:11 199:18 199:20 200:22 201:9 202:5 202:8 202:11 202:14 202:16 203:5 203:17 203:21 203:23 204:6 205:7 205:17 205:24 206:2 206:11 206:12 206:15 206:21 206:23 209:7 209:13 213:21 214:7 214:8 215:16 216:21 238:5 239:1 251:13 251:14 251:15 251:17
Cost-of-capital [2] 7:11 26:9
Cost-of-equity [1] 138:13
Costs [111] 23:17 24:5 33:21 33:25 36:1 36:9 36:11 36:16 36:21 36:25 37:5 38:25 39:14 39:15 41:13 41:14 42:15 42:15 42:18 43:1 43:10 43:14 43:17 65:14 65:14 67:12 68:6 68:9 68:21 68:22 69:2 69:7 79:14 79:18 87:9 93:5 93:20 93:24 94:7 94:8 94:18 95:16 95:22 96:9 96:12 96:16 96:18 96:21 103:15 103:16 103:16 103:22 104:2 104:12 104:17 104:21 104:23 104:23 105:9 105:10 105:16 109:18 115:18 117:8 120:16 120:17 120:19 122:23 123:15 128:3 128:7 129:18 130:5 130:9 130:20 130:22 136:23 137:14 156:22 156:23 157:1 157:3 157:7 157:16 157:25 158:5 158:6 158:12 159:2 159:13 159:15 160:5 160:9 160:10 160:12 160:15 174:2 175:4 175:15 200:24 205:11 205:12 205:16 206:17 208:6 208:6 209:1 209:12 209:17 209:17 210:7
Council [5] 47:13 61:16 71:4 71:7 72:18
Counsel [3] 7:5 7:7 7:23
Counsel's [1] 153:3
Count [1] 220:8
Country [16] 80:13 82:6 87:23 101:1 128:11 144:15 168:19 237:10 237:23 244:7 248:5 250:24 251:12 252:4 256:2 256:5
Couple [21] 18:4 25:4 49:6 59:17 59:17 73:4 75:4 81:12 90:24 124:20 135:1 153:23 163:15 189:12 191:12 191:16 191:22 224:25 234:20 239:13 261:12
Coupon [1] 136:22
Course [16] 8:21 44:20 58:14 65:6 82:15 98:17 106:17 127:17 140:2 140:25 154:20 180:7 196:2 197:8 197:10 240:23
Courses [2] 154:17 243:7
Court [2] 10:10 63:25
Courtesy [1] 42:11
Courts [1] 173:20
Covered [3] 16:6 40:14 97:13
Covers [1] 219:13
Coy [1] 32:15
Coyote [2] 214:15 214:17
CPI [1] 86:22
Crashed [1] 170:13
Create [2] 145:3 175:10
Created [1] 128:10
Creative [1] 81:6
Credit [4] 98:1 174:5 174:6 174:9
Credits [1] 212:3
Crisis [1] 135:16
Criteria [1] 99:6
Criterion [1] 169:21
Critical [8] 246:7 246:20 249:14 256:19 259:10 259:15 262:19 262:20
Cross [3] 13:25 240:23 241:4
Cross-examination [17] 3:10 3:19 4:3 4:8 13:4 13:25 49:3 50:3 50:21 118:9 118:23 119:12 119:14 195:9 196:14 240:23 255:23
Crucial [2] 173:10 177:24
Crystal [1] 56:12
Cs [1] 162:20
Cubic [2] 253:17 254:12
Curiosity [1] 236:12
Current [16] 43:10 54:25 65:14 95:10 95:18 108:23 108:25 109:9 121:15 121:18 121:20 122:10 160:9 228:5 256:21 259:6
Customer [1] 252:5
Customer's [1] 82:13
Customers [9] 12:3 30:18 31:17 82:10 127:6 128:4 143:18 148:14 169:14
Cuts [1] 79:4
CWK-1R [2] 198:25 199:21
CWK-2R [1] 211:2
CWK-3R [2] 124:8 163:21
CWK-R [1] 124:14

D

D.C [1] 89:12
Dakota [62] 1:2 1:18 2:8 2:14 2:18 2:19 2:23 6:11 6:12 7:22 10:14 10:18 11:14 11:17 11:21 11:25 14:21 21:23 24:23 26:19 27:13 29:13 29:20 35:12 41:7 47:8 53:17 71:3 91:25 92:13 96:14 100:19 111:24 126:1 127:5 127:8 127:17 139:22 141:21 141:23 142:13 142:17 143:18 155:14 163:2 165:17 165:23 170:18 170:19 171:10 171:14 171:23 186:12 201:13 202:12 203:18 204:21 215:19 220:15 222:19 236:11 265:17
Dakota's [4] 71:2 142:19 143:8 207:16
Damage [2] 40:13 251:5
Damages [3] 36:21 40:11 41:12
Dangerous [1] 171:22
Data [19] 5:9 58:9 73:17 121:5 123:1 152:16 152:17 161:18 187:13 187:19 187:20 191:4 192:19 208:25 213:16 214:1 238:19 242:19 260:17
Date [7] 25:12 25:23 48:9 54:22 106:16 159:16 220:18
Dated [2] 61:14 218:18
Dates [2] 97:16 255:12
Days [3] 15:18 97:14 187:13
DC [1] 102:12
DCF [26] 93:7 98:13 105:12 106:22 109:25 110:11 111:2 111:3 124:25 126:6 164:4 172:13 173:3 176:15 177:23 177:25 178:4 182:6 182:7 213:19 213:23 218:3 238:13 238:15 238:18 239:8
Deadline [1] 11:6
Deal [8] 15:14 72:7 73:13 78:1 149:24 191:6 227:18 255:15
Dealing [4] 76:17 80:11 98:20 201:17
Death [1] 46:16
Debt [119] 22:1 22:1 26:17 27:6 27:11 27:15 27:18 27:21 27:25 49:14 92:22 93:15 93:17 93:19 93:22 94:3 94:4 94:9 94:16 94:19 94:25 95:3 95:7 95:10 95:16 95:21 96:9 96:11 96:16 96:18 96:21 97:6 98:4 98:5 98:9 113:17 117:8 117:14 117:15 119:18 120:6 120:12 120:15 120:17 120:23 121:2 121:6 121:10 121:22 121:23 121:23 122:8 122:10 122:14 122:17 122:24 122:25 123:13 123:16 123:18 136:17 137:6 137:9 137:13 137:14 137:18 137:21 137:24 138:3 141:5 156:16 156:19 156:21 157:19 157:20 157:22 158:8 158:11 158:13 158:23 159:3 159:6 159:7 159:11 159:13 160:5 160:9 202:5 202:8 202:11 202:14 202:16 203:2 203:6 203:17 203:21 203:23 204:6 205:10 205:17 205:24 206:1 206:10 206:12 206:13 206:21 206:23 206:24 207:3 207:

22 208:10 214:7 214:8 233:14 233:15 233:20 234:9 234:13 234:13
Decade [5] 146:25 193:10 244:3 244:12 245:13
Decades [1] 114:21
December [19] 11:7 25:13 25:13 65:7 97:2 97:12 97:17 123:17 123:19 218:18 219:23 231:10 245:4 245:7 245:21 247:23 250:19 250:23 254:14
Decent [1] 170:7
Decide [9] 45:11 46:11 49:13 49:15 58:5 85:25 101:16 116:23 168:2
Decided [4] 25:3 25:22 49:9 162:8
Decides [2] 49:5 200:20
Decision [14] 14:9 14:16 14:24 70:14 117:8 117:16 117:17 214:24 220:17 227:8 227:16 228:22 229:1 236:1
Decisions [8] 111:11 112:1 117:7 118:7 235:24 238:8 238:10 260:6
Decline [15] 54:22 62:25 82:1 82:2 111:18 137:1 140:16 246:8 246:16 256:21 256:22 256:23 256:24 257:1 257:9
Declined [3] 28:13 189:5 189:6
Declining [4] 28:13 140:5 140:13 197:17
Decrease [5] 53:25 54:3 56:17 82:7 142:15
Decreased [3] 88:1 88:1 257:3
Decreasing [1] 37:1
Dedicated [1] 144:8
Deferred [1] 22:18
Deficiency [4] 139:24 143:1 143:4 147:15
Deficient [1] 63:9
Deficit [1] 247:11
Definition [1] 215:24
Definitive [2] 183:11 186:4
Degree [7] 18:7 18:9 57:3 154:2 154:3 243:3 243:5
Deliver [2] 244:13 256:3
Deliverability [1] 244:11
Delivering [1] 251:14
Delivery [2] 251:17 251:20
Delve [1] 160:2
Demand [60] 35:2 35:4 35:25 36:1 36:5 36:7 36:8 47:9 58:24 63:3 63:6 87:20 88:1 140:21 145:2 145:3 187:18 226:18 230:9 242:19 243:21 243:23 244:14 246:3 246:18 246:18 246:24 247:5 247:14 247:16 247:17 247:21 247:24 248:4 248:18 248:23 249:7 249:15 249:19 249:20 249:24 249:25 250:10 252:18 252:18 252:21 253:2 257:24 258:1 258:2 258:5 258:17 258:19 258:20 259:7 259:12 260:3 260:16 262:2 263:4
Demonstrate [4] 107:4 139:22 140:11 208:25
Demonstrated [1] 117:23
Demonstrates [1] 105:23
Denominator [3] 94:5 94:10 131:17
Denying [1] 11:2
Department [1] 38:6
Dependent [1] 262:16
Depreciation [2] 22:18 47:15
Depress [1] 106:24
Depressions [1] 113:22
Depth [1] 15:22
Deregulation [4] 169:3 215:18 215:19 215:23
Derive [2] 125:13 125:22
Derived [4] 86:10 125:7 125:19 126:4
Deriving [1] 126:12
Describe [5] 22:8 176:17 243:1 243:18 260:10
Described [4] 144:22 207:23 218:3 218:7
Description [3] 4:12 5:3 23:1
Descriptions [1] 40:15
Designated [2] 6:20 162:2
Designed [2] 12:1 173:8
Desires [1] 13:4
Desk [2] 16:20 60:7
Detail [6] 131:8 140:24 145:21 158:25 160:4 192:8
Detailed [1] 23:22
Details [1] 67:24
Deteriorating [1] 22:16
Determination [3] 58:12 142:22 150:6
Determine [4] 57:2 59:7 64:12 73:14
Determined [1] 57:16
Determining [5] 21:18 93:2 99:25 145:19 182:10
Detroit [1] 230:3
Develop [4] 29:10 29:22 30:1 55:19
Developing [2] 69:6 226:15
Differ [1] 177:22
Difference [29] 22:5 32:5 32:5 32:8 35:9 41:8 52:11 65:9 73:13 79:6 92:18 92:21 93:5 100:9 110:23 113:16 113:19 123:19 131:13 176:17 199:5 199:9 204:25 206:12 232:13 240:2 240:4 240:5 240:6
Differences [4] 27:1 35:23 160:19 165:3
Different [23] 15:12 15:13 23:25 36:19 41:4 59:13 94:18 101:20 112:18 112:21 116:2 116:2 116:18 154:17 173:12 182:24 190:25 191:14 191:14 191:20 202:6 237:24 263:15
Differentials [1] 33:22
Differently [2] 169:16 238:4
Differs [1] 116:19
Difficult [7] 57:2 58:10 58:11 59:7 74:11 217:9 239:4
Diligence [1] 58:12
Diller [35] 3:8 4:13 4:15 7:8 12:22 15:25 16:18 16:19 16:25 17:9 17:15 18:14 19:20 25:7 41:20 43:19 50:13 61:2 61:6 61:10 61:18 84:9 85:18 87:14 88:9 88:9 88:10 135:6 137:9 137:19 192:2 222:20 223:4 231:17 261:16
Diller's [9] 13:15 16:6 86:5 95:8 146:25 150:3 187:8 194:4 232:6
Dilute [1] 176:1
Dilution [2] 105:19 175:24
Dimmer [1] 135:18
Dip [1] 28:14
Dipped [1] 28:21
Direct [56] 3:9 3:18 3:23 4:3 4:7 4:13 4:17 4:20 12:16 12:24 13:12 13:24 16:12 17:12 18:17 47:4 56:25 57:4 57:6 57:7 66:18 89:6 90:6 96:23 124:12 125:9 141:16 142:12 142:24 143:20 151:15 152:24 153:19 161:10 161:11 161:12 161:17 163:17 163:18 182:17 182:19 184:25 188:5 202:12 202:18 202:19 202:24 203:7 207:5 207:6 216:14 229:15 233:5 236:2 241:3 241:20
Directed [1] 59:22
Direction [3] 18:21 43:15 128:21
Directly [8] 52:10 98:15 112:20 185:9 204:2 230:7 234:14 242:24
Director [5] 7:9 7:24 17:17 154:11 154:12
Disagree [4] 93:11 101:15 163:7 198:9
Disagreement [7] 76:11 76:12 93:10 101:17 103:13 110:25 134:13
Disagreements [2] 79:25 214:23
Disallow [1] 157:18
Disallowance [1] 205:11
Disallowing [1] 156:18
Disappear [1] 70:8
Disappears [1] 160:11
Discounted [12] 93:8 93:12 93:13 100:3 102:12 103:19 107:5 109:15 110:2 111:7 178:13 178:19
Discounting [1] 179:13
Discounts [1] 103:18
Discrimination [1] 12:4
Discuss [5] 130:3 182:16 187:5 216:15 216:20
Discussed [5] 75:8 114:23 126:25 145:21 195:24
Discussion [4] 3:3 51:17 189:22 197:20
Disincentive [1] 176:9
Dismiss [1] 115:8
Dismissed [1] 11:3
Disposal [1] 39:25
Disprove [1] 239:5
Disputing [1] 67:25
Dissemination [1] 242:20
Distance [1] 251:18
Distinction [1] 222:15
Distributed [3] 14:7 106:14 110:14
Distribution [7] 166:5 166:15 166:17 166:25 167:1 167:14 169:10
Diverse [1] 237:24
Diversification [1] 167:8
Diversified [3] 161:1 166:21 234:8
Diverts [1] 250:11
Divide [4] 45:19 110:12 130:4 178:16
Divided [1] 180:8
Dividend [24] 104:11 109:25 110:3 110:3 110:6 110:7 110:8 110:13 110:19 110:19 176:15 177:5 177:12 177:12 177:16 178:1 178:2 179:17 180:6 180:25 180:25 181:1 181:7 239:23
Dividends [3] 93:7 109:23 177:10
Division [1] 243:13
Docket [2] 91:16 242:5
Docketed [1] 16:10
Dockets [1] 153:19
Document [1] 123:9
Documentation [1] 14:5
Dollar [26] 30:24 45:6 96:25 134:12 172:19 172:20 173:1 173:7 175:3 175:7 175:21 178:6 178:7 178:9 178:12 178:13 178:16 178:22 179:15 179:18 179:20 179:21 180:8 193:12 245:17 252:16
Dollars [76] 20:14 20:21 21:7 22:11 29:17 29:21 30:3 31:5 31:7 31:7 31:10 31:14 35:12 43:9 43:12 43:17 45:1 45:4 45:5 45:8 45:19 47:7 47:24 48:6 48:13 48:15 48:18 48:19 71:17 71:20 74:16 76:2 76:6 78:3 78:16 78:19 78:20 83:5 84:1 84:6 93:21 93:22 97:1 97:6 97:11 99:15 104:16 104:18 104:25 123:4 130:19 134:17 157:15 172:4 175:14 185:9 193:11 193:13 198:24 199:4 199:15 201:1 201:5 228:12 228:18 231:12 232:12 232:13 244:2 244:16 245:4 245:10 245:12 254:2 254:4 254:4
Don [1] 71:5
Don's [1] 39:14
Donald [1] 7:24
Donations [1] 71:6
Done [17] 40:2 46:6 68:2 68:16 76:1 110:10 121:21 122:4 124:3 150:3 191:10 196:17 204:10 208:3 210:8 251:6 264:15
Dot-Coms [1] 59:10
Double [1] 44:16
Douglas [2] 2:16 7:25
DOW [1] 114:4
Down [50] 28:23 28:25 29:16 31:12 32:20 35:11 43:16 46:19 54:5 55:7 73:24 82:16 83:11 106:25 117:15 126:2 137:14 149:22 159:10 160:9 160:12 162:18 166:20 168:1 168:13 170:9 170:11 184:11 185:18 187:16 190:13

193:4 193:25 194:13 195:22 195:23 196:23 206:15 206:17 207:12 207:14 218:2 223:7 226:13 227:2 227:9 227:23 232:25 235:3 263:12
Downturn [2] 145:12 217:22
Downward [5] 22:14 76:4 111:15 245:22 253:11
Dr [58] 92:11 92:14 92:19 93:10 93:23 94:1 96:4 98:7 101:13 101:18 101:20 102:4 102:13 103:7 103:19 104:6 104:14 105:8 105:14 109:18 109:20 110:20 110:21 112:18 113:13 115:11 115:13 117:19 117:20 126:23 130:16 131:15 131:21 133:24 134:16 135:5 150:22 150:25 151:1 151:5 151:17 153:18 153:21 155:7 155:10 187:1 187:3 194:9 194:18 195:13 196:11 203:15 204:3 224:19 224:23 234:19 237:7 240:17
Dramatic [3] 56:17 129:2 252:15
Dramatically [7] 60:2 121:16 140:13 192:21 192:22 198:9 251:16
Drawing [1] 155:9
DRB-2 [3] 40:19 40:25 41:24
Drilling [7] 246:8 246:16 256:21 256:23 257:3 257:7 257:10
Drive [3] 191:21 257:24 258:17
Driven [1] 232:20
Driver [1] 211:23
Driving [4] 65:5 102:20 140:3 249:23
Drop [2] 136:24 160:12
Dropped [2] 135:11 192:5
Dropping [3] 192:20 192:21 193:2
Droughts [1] 33:16
Dual [1] 248:9
Due [5] 58:11 137:2 246:17 247:12 247:19
Dues [2] 47:13 256:12
Duly [6] 6:20 17:10 89:4 141:14 151:13 241:18
Duplication [1] 220:20
Durick [2] 2:12 7:21
During [30] 98:1 109:23 112:1 154:15 154:18 156:9 191:24 193:5 193:22 201:16 217:9 217:9 217:21 217:21 219:14 243:16 243:19 243:21 244:9 244:25 245:1 245:15 245:25 246:1 246:24 249:12 251:2 256:18 259:2 259:2
Dynamic [1] 236:20
Dynamics [1] 194:16

E

Early [15] 136:5 158:14 158:20 168:18 192:8 192:11 214:10 234:2 244:20 247:9 247:12 247:21 249:23 250:18 250:21
Earn [10] 10:17 28:15 144:4 144:6 147:2 178:23 182:12 185:8 185:10 186:5
Earned [11] 28:11 48:11 115:23 144:10 179:21 181:25 183:1 183:15 184:8 184:10 184:10
Earning [6] 108:12 108:14 108:15 108:15 108:17 113:4
Earnings [23] 19:22 20:1 20:8 20:11 20:15 20:22 20:25 21:15 22:6 24:24 47:22 48:3 98:23 98:24 107:12 108:3 109:1 109:2 109:12 110:16 144:1 145:12 145:13
Easier [3] 71:22 71:23 96:7
Easily [1] 109:18
East [7] 2:8 2:13 2:23 109:7 126:3 164:17 230:12
Easy [4] 34:16 37:3 48:21 74:13
Econometric [3] 29:11 29:23 190:20
Economic [15] 29:23 58:6 89:14 89:16 90:3 128:13 128:25 140:20 216:21 217:22 247:19 247:25 248:3 258:7 258:18
Economical [1] 159:21
Economically [2] 140:18 156:22
Economics [5] 90:2 148:4 243:3 243:5 243:7
Economist [1] 60:4
Economists [1] 258:10
Economy [17] 33:17 35:18 52:17 74:11 116:14 145:2 187:11 187:16 195:21 216:22 216:24 217:11 247:25 252:21 253:8 258:11 258:13
Ed [1] 126:3
Edification [1] 75:10
Edison [4] 150:2 154:19 163:12 164:7
Educational [4] 18:6 89:25 154:1 243:2
Effect [15] 34:12 52:16 54:19 55:19 56:15 75:19 88:2 123:20 132:15 134:12 139:25 140:1 140:9 145:13 236:19
Effective [3] 122:23 123:5 156:21
Effectively [4] 21:13 51:4 157:18 248:16
Effects [2] 58:25 236:14
Efficiencies [3] 79:5 147:7 147:19
Efficient [2] 148:1 194:11
Efficiently [4] 143:14 143:22 143:24 147:10
Effort [1] 39:21
Efforts [1] 59:9
EIA [2] 253:15 254:10
Eight [5] 13:17 27:22 78:1 96:16 258:24
Eighties [3] 158:20 214:10 234:2
Either [8] 18:24 71:18 89:21 158:7 198:11 210:12 227:22 242:24
Electric [162] 1:6 6:14 9:1 10:18 12:10 19:24 20:15 21:23 23:6 46:19 61:13 61:16 72:18 91:24 92:12 99:16 99:18 99:21 100:2 100:11 100:12 100:19 100:20 101:1 101:14 101:19 102:9 102:10 103:5 118:5 118:5 124:9 124:11 124:19 124:19 125:6 125:12 125:14 125:20 125:21 125:23 126:5 126:11 126:13 126:18 126:21 126:22 127:5 127:15 128:3 128:3 128:6 128:17 128:19 140:6 140:12 142:15 142:19 142:23 143:8 143:12 143:17 143:18 144:17 145:20 145:23 150:2 154:19 158:17 160:23 161:3 161:24 162:3 162:8 162:11 162:14 162:14 162:21 162:24 163:1 163:4 163:5 163:8 163:10 163:13 163:13 164:3 164:5 164:9 164:13 164:22 165:1 165:5 165:9 165:12 165:22 166:3 166:9 166:18 166:20 166:23 167:11 167:16 167:20 168:5 168:9 168:10 169:7 169:22 169:25 170:3 170:23 170:25 171:3 171:7 171:9 171:13 172:8 172:15 172:19 172:24 172:25 173:2 175:1 175:25 176:8 183:3 183:7 185:6 185:10 186:2 186:11 192:3 192:21 194:11 194:16 207:14 207:16 207:19 208:13 208:17 210:12 213:20 214:24 215:6 215:9 215:16 216:8 218:22 220:15 220:21 222:18 222:18 233:17 233:19 234:2 238:16 244:5 257:18 261:3 261:4 262:17
Electric-only [9] 99:16 99:21 100:2 100:12 101:14 101:19 124:19 127:15 166:3
Electric-related [1] 169:7
Electricity [38] 33:7 51:24 65:6 79:15 101:3 101:4 101:9 128:15 128:16 190:5 190:11 191:3 212:18 225:12 225:13 225:17 225:18 228:1 230:6 230:8 230:9 230:11 230:13 230:18 233:10 233:14 233:20 247:5 247:17 247:18 249:21 250:8 250:11 261:19 262:6 262:15 263:6 263:12
Electrics [1] 125:17
Electrics-only [1] 125:17
Elegant [1] 96:10
Element [1] 144:12
Eliminate [6] 47:9 47:11 166:25 167:13 167:14 167:18
Eliminated [1] 248:16
Elsewhere [1] 100:20
Embedded [6] 95:3 95:7 121:19 122:10 123:15 201:25
Emphasis [1] 186:15
Empirical [6] 208:25 213:16 214:1 238:14 238:19 239:4
Employed [9] 17:19 17:23 18:1 89:15 94:14 142:3 242:9 242:11 242:14
Employee [4] 36:21 43:16 45:18 45:20
Employees [12] 40:13 44:8 44:8 44:9 44:17 44:25 45:2 45:10 45:19 46:18 46:22 242:25
Employers [1] 251:23
Employing [1] 21:19
End [16] 21:10 23:15 30:18 55:23 65:20 75:22 180:5 180:11 180:15 180:15 226:10 238:8 246:11 247:11 258:12 265:4
Ended [1] 168:19
Ending [2] 24:5 24:6
Energy [38] 40:16 40:16 47:13 59:1 60:12 71:3 71:4 71:7 71:19 95:2 99:1 100:15 102:7 106:18 108:16 109:7 126:3 135:16 144:17 145:1 164:17 191:17 211:21 212:14 219:12 230:24 231:4 242:16 242:18 242:18 242:19 242:19 242:22 243:7 247:21 253:14 253:15 254:9
Energy-related [1] 212:14
Engaged [2] 99:5 115:16
Engages [1] 102:3
Enjoy [1] 137:11
Enjoyed [1] 9:24
Enjoying [1] 148:11
Enormous [1] 217:18
Enron [13] 44:23 45:1 45:23 46:2 53:18 59:1 59:4 59:15 59:24 60:1 60:9 135:17 238:3
Ensure [1] 63:14
Entered [1] 239:16
Enterprise [1] 77:4
Enterprises [1] 211:20
Entire [6] 104:8 104:18 134:1 143:13 175:5 197:10
Entirely [1] 158:4
Entities [1] 126:18
Entitled [1] 125:12
Entry [2] 157:10 157:11
Environment [2] 238:24 243:8
Environmental [2] 242:21 247:19
Equal [10] 172:16 173:5 180:9 213:20 223:23 224:5 224:12 238:16 239:9 258:3
Equals [1] 107:7
Equation [2] 249:16 259:12
Equilibrium [1] 244:16
Equipment [2] 38:4 38:20
Equitable [1] 77:20
Equity [67] 20:5 20:13 22:2 25:6 25:20 26:4 26:7 27:7 49:15 91:4 92:3 92:6 92:15 92:25 93:3 93:4 98:15 99:25 103:20 104:9 104:10 105:2 112:20 112:22 113:17 115:11 115:14 115:14 115:20 115:23 116:3 117:18 117:20 117:25 130:18 131:23 131:24 132:8 132:18 133:20 134:1 134:2 135:11 135:14 135:20 138:13 141:4 160:19 160:22 161:2 172:15 173:11 173:18 182:8 183:18 199:6 199:13 199:14 199:16 199:18 200:16 209:2 219:12 221:12 223:23 237:11 237:22
Equivalent [4] 156:18 157:15 190:16 205:11
Equivalents [2] 217:17 217:19
Eric [1] 264:3
Error [1] 220:14
Especially [3] 45:25 140:10 148:15
Espeland [1] 13:19
Essence [1] 251:9
Essentially [16] 13:22 22:7 24:15 44:17 48:5 126:12 157:3 157:14 175:4 176:

9 192:10 199:10 200:20 208:5 209:15 251:12
Established [6] 77:5 99:14 111:23 197:21 213:18 238:15
Establishments [3] 248:5 248:9 256:5
Estimate [9] 52:24 155:15 181:24 182:3 182:8 198:14 226:2 228:25 235:15
Estimated [1] 39:13
Estimates [1] 197:21
Estimator [2] 229:4 235:2
Evaluated [1] 169:16
Event [1] 40:9
Everywhere [1] 250:22
Evidence [13] 12:9 16:11 54:22 58:13 59:3 84:22 123:10 125:3 139:21 140:11 210:11 228:6 238:14
Evidenced [2] 9:7 135:21
Evolutionary [1] 21:4
Ex [1] 44:25
Ex-CEO [1] 44:25
Exacerbated [1] 248:19
Exact [2] 97:16 211:12
Exactly [12] 20:19 43:7 76:8 87:1 95:22 95:24 106:15 191:2 204:16 218:6 230:20 234:3
Examination [54] 3:9 3:10 3:11 3:11 3:12 3:13 3:14 3:14 3:15 3:16 3:18 3:19 3:20 3:20 3:21 3:23 3:23 3:24 4:3 4:4 4:4 4:5 4:7 4:8 4:9 4:9 13:25 17:12 61:8 73:5 75:5 78:12 80:9 81:14 83:1 85:22 87:16 89:6 129:15 135:3 136:14 138:10 141:16 146:18 149:10 151:15 225:1 234:21 237:5 240:23 241:20 259:23 261:14 264:1
Examine [1] 206:1
Examined [5] 17:10 89:4 141:14 151:13 241:18
Example [19] 9:11 39:20 123:2 124:20 126:2 127:3 128:2 128:9 129:5 148:5 158:4 162:9 164:1 179:2 179:3 179:24 226:7 236:10 260:20
Examples [2] 143:20 168:18
Exceed [4] 115:5 115:5 116:13 254:13
Exceeded [1] 244:13
Exceeds [2] 104:18 109:17
Except [3] 44:21 159:14 162:22
Exception [1] 161:20
Exceptionally [2] 184:1 226:9
Excess [9] 21:15 22:5 48:3 48:12 49:11 75:23 76:2 174:20 223:24
Excessive [2] 96:9 117:16
Exchange [2] 5:4 131:12
Exchanged [1] 131:24
Exchanging [2] 131:9 131:11
Excites [1] 102:18
Exclude [3] 36:4 68:20 71:24
Excluded [4] 36:3 36:8 104:22 210:23
Excuse [7] 54:9 130:6 135:5 143:25 171:14 193:14 265:14
Exercise [2] 58:8 58:11
Exhibit [89] 18:17 18:17 18:18 19:8 51:3 53:21 56:21 57:1 57:9 57:10 57:19 57:19 57:22 57:24 63:20 63:22 64:2 64:4 66:21 72:7 73:1 88:15 88:20 96:1 99:19 102:16 105:21 106:7 106:10 106:12 106:14 107:3 107:18 107:19 107:21 107:23 112:4 112:7 124:8 147:1 151:18 151:18 152:1 152:5 152:7 152:9 152:13 153:23 155:10 155:13 161:5 161:7 163:21 163:23 164:23 187:5 187:21 188:3 188:12 195:5 199:21 199:24 200:9 207:4 207:6 207:7 207:8 211:2 211:7 211:12 216:16 216:18 218:8 218:10 218:19 218:20 219:22 220:4 229:12 229:18 231:24 236:4 236:5 237:7 238:8 241:22 244:1 255:10 261:16
Exhibits [30] 4:11 5:2 6:4 16:11 18:15 18:16 18:20 18:24 19:2 19:5 19:13 19:15 19:18 90:9 90:10 90:14 91:15 91:19 124:16 146:4 146:4 146:8 152:1 152:19 153:5 153:12 155:20 161:19 161:22 207:5
Exist [2] 55:2 201:14
Existing [1] 142:23
Exists [2] 66:14 147:14
Expanding [1] 128:14
Expect [8] 64:13 136:18 137:23 170:10 184:15 238:19 254:1 254:3
Expectation [1] 247:4
Expectations [4] 102:21 114:1 114:8 252:22
Expected [6] 62:24 117:23 178:9 212:12 252:19 253:9
Expects [2] 39:23 191:22
Expenditures [1] 127:18
Expense [33] 14:22 29:14 36:18 37:15 37:17 37:21 37:25 38:10 38:13 38:16 38:18 40:4 40:6 40:20 40:22 41:7 42:4 42:7 43:8 44:5 44:12 47:14 47:14 47:17 67:13 68:21 69:1 85:21 86:1 86:7 86:16 86:25 87:6
Expensed [4] 68:19 68:24 68:25 69:25
Expenses [21] 28:6 35:22 36:14 36:22 37:2 37:13 38:6 38:7 40:3 40:5 41:16 41:18 43:3 43:23 49:22 53:7 67:5 67:17 68:10 81:17 81:19
Expensive [1] 137:1
Experience [5] 65:18 153:25 154:8 243:2 254:18
Experienced [3] 82:5 248:7 251:11
Experiencing [4] 59:12 87:22 87:22 259:4
Expert [9] 7:12 26:6 30:4 30:8 59:24 122:7 261:6 262:6 262:9
Expertise [1] 66:4
Experts [5] 64:19 149:25 150:5 254:6 258:7
Explain [10] 30:10 30:12 32:5 37:24 39:15 67:19 123:21 123:25 142:12 255:8
Explained [1] 145:6
Explaining [1] 176:20
Explains [1] 192:18
Explanation [1] 108:1
Explicit [1] 138:15
Exploration [2] 34:4 99:1
Exploring [1] 76:17
Exposure [1] 33:25
Expression [2] 131:23 133:2
Extending [1] 64:22
Extensive [1] 118:23
Extent [8] 90:20 111:25 122:3 192:18 198:8 230:5 249:11 258:6
External [1] 63:17
Extraordinary [2] 23:17 24:4
Extrapolated [1] 82:14
Extreme [5] 245:21 246:5 250:17 252:7 254:20
Extremely [6] 158:19 191:19 243:20 246:17 247:12 250:21

F

Face [3] 168:24 169:2 169:7
Faces [1] 168:4
Facie [1] 10:21
Facilities [9] 128:10 128:17 140:17 144:7 185:8 185:15 210:18 248:10 257:19
Facility [1] 60:15
Fact [46] 14:13 30:6 51:19 51:24 87:25 96:8 96:13 126:15 129:5 131:20 132:4 137:8 157:5 157:12 158:1 159:2 159:14 159:22 166:11 168:1 170:6 172:9 173:9 177:1 177:25 181:5 186:4 186:4 191:15 192:8 195:24 196:24 203:22 204:23 206:18 213:24 217:6 218:2 237:13 237:17 240:17 243:25 244:18 249:14 259:11 260:22
Factor [28] 22:6 48:13 75:9 75:15 75:18 84:15 84:16 110:10 110:19 128:2 134:12 181:1 181:7 189:9 246:7 246:21 247:24 248:18 249:12 249:14 249:15 258:18 259:10 259:11 260:1 262:19 262:20 262:22
Factories [1] 248:4
Factors [39] 33:6 33:14 51:19 51:20 51:24 58:6 58:19 64:17 64:18 84:17 84:20 84:21 140:22 140:24 187:6 191:20 195:16 209:18 216:21 226:19 232:4 232:5 236:10 246:2 246:3 246:3 246:4 247:20 251:19 252:13 254:21 256:18 256:20 259:1 261:17 262:11 262:11 263:1 263:15
Facts [2] 83:14 95:15
Fahn [39] 2:21 3:14 3:21 3:23 4:8 7:13 7:16 60:25 61:3 61:4 82:22 82:23 83:2 84:7 84:8 85:24 129:10 129:11 138:8 138:9 138:11 138:16 146:15 146:17 146:19 149:3 149:4 224:19 224:20 224:21 240:11 240:12 259:21 259:22 259:24 261:8 261:9 265:10 265:11
Failed [1] 147:2
Failure [1] 208:25
Failures [1] 114:10
Fair [6] 48:22 58:4 96:19 96:20 159:7 198:17
Fairly [10] 56:17 101:23 122:1 170:7 176:12 177:6 189:3 193:21 244:15 245:10
Fall [4] 226:7 244:23 247:4 247:9
Fallen [1] 246:20
Falling [2] 140:21 257:4
Falter [1] 74:13
Familiar [5] 61:17 61:23 61:24 67:24 218:14
Famous [2] 181:19 181:21
Far [22] 24:7 24:19 27:21 31:13 36:1 36:11 37:8 39:21 45:3 54:6 65:20 76:8 82:6 85:11 86:13 86:15 108:2 112:12 134:12 148:20 167:25 244:3
Farmers [1] 66:6
FAS [1] 37:17
Fashion [2] 53:17 248:21
Fastest [1] 101:25
Favor [1] 135:10
Favorable [2] 216:25 217:23
Feasibility [1] 206:1
Features [1] 52:18
February [11] 1:18 6:3 6:8 65:7 135:15 143:2 143:9 231:11 251:5 253:5 266:21
Federal [4] 40:15 40:16 111:17 121:14
Fees [1] 38:5
Feet [3] 136:3 253:17 254:12
Fell [3] 144:1 245:19 246:15
Felony [1] 17:3
Felt [3] 209:20 209:22 210:3
FERC [6] 40:8 40:14 40:16 120:20 202:22 203:9
FERC's [1] 203:1
Few [27] 15:17 21:8 28:16 29:15 33:11 44:18 50:23 61:7 65:21 76:16 77:16 78:3 82:16 137:3 139:18 144:10 144:18 144:25 145:11 164:24 169:8 187:10 187:13 197:15 212:13 237:3 237:4
Fields [1] 154:5
Fight [1] 133:15
Figure [15] 54:5 54:15 104:15 121:7 131:25 132:2 132:13 167:3 190:21 197:22 198:24 199:1 200:11 200:16 228:3
Figured [1] 134:19
Figures [3] 54:25 126:6 130:16
File [2] 78:1 78:2
Filed [15] 10:25 12:23 13:12 15:17 15:18 19:24 21:6 23:14 142:24 143:2 151:19 152:21 153:7 233:6 242:2

Filings [2] 203:4 203:5
Fill [1] 177:6
Final [6] 14:15 14:16 114:24 117:4 131:3 134:13
Finally [7] 12:5 34:2 93:5 99:12 140:24 212:15 248:17
Finance [1] 154:22
Financed [4] 199:12 199:14 256:11 256:12
Financial [6] 23:13 95:23 117:11 117:13 137:17 138:2
Financing [4] 96:19 136:17 154:6 158:22
Findings [1] 14:13
Fine [5] 17:4 63:23 119:4 266:8 266:13
Finish [2] 39:11 241:3
Finished [2] 84:3 118:24
Fired [1] 140:18
Firm [2] 89:17 154:10
First [46] 10:5 16:17 17:10 22:13 30:10 31:4 32:4 35:3 48:6 48:10 56:16 62:11 73:10 82:2 82:16 89:4 92:22 95:15 99:7 100:15 104:1 106:10 107:13 114:1 130:8 139:7 141:14 146:9 147:1 151:13 153:21 153:23 156:16 167:25 182:17 196:16 198:23 202:8 211:9 212:10 219:7 219:8 241:18 248:2 252:10 265:17
Fit [1] 99:22
Five [32] 8:4 30:24 39:6 46:19 52:6 52:14 53:8 53:11 58:18 73:24 78:15 81:20 86:8 86:9 86:22 99:21 104:3 104:20 104:24 113:4 130:21 130:23 132:7 147:3 169:4 201:9 211:24 222:4 223:13 241:6 253:6 258:22
Five-million-dollar [1] 30:24
Five-year [1] 147:3
Fixed [2] 113:3 114:19
Flap [1] 60:10
Flat [2] 143:12 193:21
Flatly [2] 105:23 107:4
Floating [2] 103:23 133:25
Flotation [62] 93:5 94:7 94:7 103:7 103:15 103:16 103:22 104:2 104:7 104:12 104:17 104:18 104:21 104:23 105:9 105:10 105:16 109:18 115:18 117:24 129:17 129:18 130:2 130:5 130:8 130:9 130:20 130:22 132:5 132:14 132:15 133:3 133:8 133:13 133:16 133:21 138:14 138:15 172:1 172:12 173:8 174:2 174:4 175:4 175:15 176:11 199:6 199:8 199:11 199:18 200:13 200:24 201:8 201:9 209:1 209:7 209:12 209:12 209:16 209:17 210:7 213:21
Flow [12] 79:20 81:3 93:8 93:13 100:3 102:12 103:20 107:5 109:15 110:2 111:7 205:10
Flow-through [1] 81:3
Flowed [1] 81:1
Fluctuate [1] 251:21
Fluctuated [4] 20:1 28:9 29:15 245:11
Fluctuations [2] 34:14 113:21
Focus [2] 143:16 156:24
Folks [2] 123:24 150:7
Follow-up [1] 78:9
Followed [3] 6:25 12:18 247:20
Following [8] 6:1 13:2 13:6 13:9 85:24 157:5 219:10 252:14
Follows [6] 11:11 17:11 89:5 141:15 151:14 241:19
Followup [1] 234:23
Footnotes [1] 222:23
Force [1] 140:3
Forced [1] 250:2
Forecast [18] 62:24 63:3 63:6 108:25 162:23 189:5 189:6 189:24 190:2 190:14 192:1 195:18 196:5 197:19 198:1 198:6 198:10 252:25
Forecasted [1] 193:6
Forecasters [1] 65:25
Forecasting [5] 29:23 109:23 190:9 190:24 191:7
Forecasts [2] 197:22 198:7
Forevermore [1] 45:20
Forgot [2] 148:10 239:22
Form [2] 156:13 160:15
Formal [1] 11:8
Formula [1] 110:2
Forth [3] 96:4 99:19 248:11
Forthright [1] 48:22
Forums [1] 252:3
Forward [11] 9:12 10:1 34:15 51:13 54:19 55:12 69:19 77:14 173:18 192:1 201:17
Foundation [2] 72:23 107:22
Founded [1] 89:22
Four [25] 8:4 18:4 20:10 20:21 44:19 49:8 49:9 51:20 58:17 73:18 84:17 92:20 129:18 129:19 130:25 133:5 135:6 145:6 147:3 169:4 193:13 212:16 254:2 254:4 256:16
Four-and-a-half-million [1] 20:21
Fourth [4] 2:17 91:1 141:20 253:18
Fox [15] 3:22 13:13 139:9 139:10 139:12 139:19 141:11 141:13 141:20 146:7 146:13 146:16 149:6 149:12 150:18
Fraction [2] 94:3 94:4
Frame [2] 33:8 187:7
France [1] 212:21
Frankly [2] 79:12 208:1
Free [1] 77:3
Front [5] 41:1 45:13 76:10 211:5 211:12
Froze [1] 147:5
Fuel [13] 33:21 77:3 77:7 80:14 128:10 128:12 129:3 212:16 248:4 248:8 248:9 248:12 257:22
Fueled [1] 257:20
Fuels [1] 212:17
Full [5] 20:6 97:5 97:11 167:11 206:5
Full-blown [1] 20:6
Fully [2] 60:5 205:17
Function [2] 251:18 258:1
Fund [1] 43:9
Fundamental [1] 173:20
Fundamentals [1] 248:18
Funded [1] 30:3
Funding [1] 77:24
Funds [4] 30:8 95:11 127:9 181:22
Future [39] 20:19 32:9 32:13 32:18 33:6 33:16 33:19 34:9 34:10 39:13 49:20 51:14 52:25 55:2 55:3 55:13 58:20 60:2 66:12 73:14 78:14 102:21 108:25 109:12 140:8 145:6 147:20 149:15 150:7 160:8 169:3 194:11 226:3 243:17 253:20 254:17 255:2 258:9 261:18
Futures [46] 31:24 65:14 65:16 65:17 65:19 65:25 66:4 66:6 189:23 190:1 190:7 190:9 192:11 195:24 197:18 197:21 225:3 225:4 225:5 225:6 225:7 225:13 225:16 225:18 226:1 226:10 226:13 226:16 226:23 227:4 227:12 227:13 227:21 228:5 228:24 234:25 235:6 235:10 235:13 235:16 235:18 235:19 239:16 255:11 260:4 261:4

G

Gained [1] 208:16
Game [4] 74:8 74:18 77:8 149:14
Gas [181] 5:8 25:17 25:25 33:16 33:18 33:20 34:4 34:4 99:17 100:10 100:21 100:23 100:23 100:25 101:4 101:7 102:7 108:4 108:13 108:14 108:15 118:5 124:10 126:16 126:18 126:24 127:8 127:9 127:13 127:18 127:23 127:23 128:5 128:15 128:20 140:16 145:2 149:25 162:20 163:4 165:2 165:8 165:20 166:5 166:11 166:13 166:15 166:17 166:24 167:1 167:12 167:13 167:17 167:20 168:12 168:14 169:8 169:9 169:10 169:12 169:14 192:2 192:5 192:20 193:2 193:4 193:8 193:10 193:19 195:22 196:19 210:12 215:6 215:9 218:22 220:17 220:20 220:25 223:3 226:11 231:5 231:7 232:1 232:8 232:9 232:17 232:20 235:9 242:12 242:17 243:15 243:18 243:20 243:22 243:24 244:2 244:5 244:13 244:14 244:14 244:18 245:3 245:8 245:11 246:5 246:8 246:9 246:13 246:14 246:18 246:22 246:22 246:24 246:25 247:1 247:5 247:7 247:18 248:4 248:6 248:8 248:11 248:20 248:23 249:2 249:5 249:16 249:20 249:24 250:8 250:10 250:10 250:12 251:5 251:9 251:12 251:13 251:14 251:15 251:17 251:17 251:24 252:1 252:9 252:13 252:14 253:3 253:6 253:11 253:16 253:20 253:24 254:11 254:16 255:13 256:1 256:2 256:3 256:4 256:21 256:22 257:4 257:4 257:6 257:13 257:21 257:22 257:25 258:17 258:19 258:19 259:7 259:12 260:2 260:12 260:13 260:15 262:1 262:10 262:16 262:18
Gas/electric [1] 118:4
Gaske [58] 4:2 13:13 13:17 92:8 92:11 92:14 92:19 93:10 93:23 94:1 98:7 101:13 101:20 102:4 102:13 103:19 104:6 105:14 109:19 110:20 110:21 112:18 113:13 117:20 126:23 130:1 130:16 130:16 131:15 131:22 134:16 144:23 150:23 150:25 151:1 151:3 151:3 151:4 151:5 151:12 151:17 153:21 155:7 155:10 187:1 187:3 194:9 194:18 195:13 196:11 200:14 203:15 204:4 224:19 224:23 234:19 237:8 240:17
Gaske's [12] 96:4 101:18 103:7 104:15 105:8 109:20 115:11 115:13 117:19 125:5 133:24 153:18
GDP [1] 248:1
General [28] 23:1 32:22 34:5 35:18 36:14 36:17 36:22 36:24 43:23 49:21 56:7 59:2 77:21 77:22 113:9 140:4 184:18 187:11 195:21 206:16 230:11 242:17 244:12 244:23 245:11 251:7 254:8 258:10
Generally [6] 75:12 100:2 133:15 193:10 254:2 257:4
Generate [2] 109:12 249:20
Generated [1] 98:23
Generates [1] 212:2
Generating [9] 63:11 67:2 165:22 168:3 168:20 186:11 210:18 210:21 257:23
Generation [17] 33:18 33:22 58:23 59:3 59:10 60:2 60:15 63:2 140:17 140:19 194:11 247:6 247:19 250:8 250:11 257:19 262:24
Geographic [2] 251:2 251:8
George [3] 90:4 154:4 243:8
Georgetown [1] 243:8
Given [14] 54:18 64:22 65:2 71:6 117:10 123:15 182:4 191:5 208:10 218:2 226:1 236:6 237:13 253:8
Glanced [1] 239:24
Glory [1] 72:1
Government [1] 111:13
Grade [1] 99:11
Gradual [1] 111:15
Graduate-level [1] 243:7
Grant [2] 186:14 209:25
Granted [1] 217:23
Graph [5] 187:20 187:21 187:25 193:8 193:18
Great [7] 15:14 73:13 117:18 124:21 125:18 164:11 191:5
Greater [6] 12:9 77:25 169:2 221:12 224:5 224:12
Greatly [1] 206:10
Gress [1] 13:14
Gross [1] 104:20
Group [11] 79:25 162:3 170:2 171:12 207:18 215:2

233:9 233:13 233:25 243:13 261:17
Groups [1] 252:5
Growing [1] 102:1
Grown [1] 31:17
Growth [9] 31:16 58:24 60:2 102:22 110:10 110:18 128:18 128:19 162:23
Guarantee [2] 144:9 235:22
Guaranteed [1] 235:19
Guess [55] 20:13 20:18 32:8 32:17 33:1 34:17 37:4 37:11 38:25 39:8 39:11 39:18 42:9 43:6 45:14 46:12 50:1 52:7 52:9 52:21 53:22 59:14 59:17 59:22 59:24 60:3 65:1 66:4 71:11 72:23 74:22 75:16 79:13 83:9 83:13 84:11 87:10 91:22 101:16 122:11 129:25 146:17 156:4 156:6 163:15 171:25 176:16 180:17 190:2 191:1 194:7 198:2 219:6 227:7 258:23
Guessing [3] 74:8 74:18 149:14
Guesswork [2] 227:3 227:15
Gulf [2] 249:3 260:21
Guy [3] 56:10 56:10 77:4

H

Hah [1] 115:19
Hairs [2] 204:17 204:25
Half [9] 20:21 54:14 56:16 110:12 110:12 110:14 110:16 177:17 192:5
Half-hour [1] 118:25
Halfway [5] 55:9 162:18 181:3 181:4 181:8
Hand [8] 63:24 105:24 147:23 148:2 172:22 175:7 175:25 178:11
Hand-held [2] 147:23 148:2
Handed [1] 18:14
Handicapped [1] 77:23
Handle [1] 150:6
Handling [1] 7:18
Hanging [1] 160:15
Hangover [1] 206:13
Happy [3] 74:16 169:23 186:9
Hard [4] 32:23 130:5 182:2 225:7
Harder [2] 60:9 79:5
Hardly [2] 38:22 131:6
Hate [1] 87:18
Haywire [1] 191:18
Headed [1] 56:8
Hear [6] 9:17 32:2 96:10 96:10 177:1 260:20
Heard [6] 87:3 120:4 136:2 139:11 151:5 155:23
Hearing [18] 1:11 1:23 6:10 6:11 6:21 8:19 9:13 9:17 10:1 11:5 11:8 11:11 12:16 12:18 16:13 84:3 153:3 189:14
Hearings [4] 6:17 10:3 44:21 44:23
Heating [10] 100:17 100:18 100:19 100:20 100:21 100:25 246:24 247:22 249:24 253:1
Heavily [4] 99:4 115:16 242:21 262:16
Heavy [5] 10:7 73:10 74:3 186:15 247:12
Hedge [1] 112:24
Hedging [1] 34:2
Held [4] 11:7 147:23 148:2 246:22
Help [4] 68:22 150:8 221:9 221:14
Helped [1] 148:16
Helpful [1] 49:4
Henry [3] 245:3 255:6 255:11
Herein [1] 6:2
Hesitating [1] 23:3
Hiccup [5] 35:18 52:16 52:19 52:20 56:3
High [61] 20:25 21:18 52:13 62:25 76:14 76:23 87:24 87:24 101:22 102:12 116:15 120:9 121:11 123:14 136:22 137:8 137:13 137:21 140:9 145:2 145:2 145:3 145:3 158:13 158:19 158:23 158:23 159:1 159:3 159:5 159:10 159:15 159:18 159:23 170:22 184:1 186:6 186:17 191:21 192:4 192:12 193:20 195:17 198:12 206:23 208:6 208:6 214:11 231:7 232:1 235:9 245:5 248:6 248:19 250:1 251:10 252:18 252:19 253:5 253:20 263:4
High-level [2] 76:14 76:23
Higher [27] 20:11 24:5 29:20 29:21 84:5 100:2 102:23 107:2 112:15 121:1 123:23 128:19 145:10 148:3 160:7 166:3 184:7 186:7 221:17 221:19 221:21 222:8 227:25 232:2 238:5 250:2 250:15
Highest [2] 161:25 244:3
Highlighted [3] 27:7 221:8 221:15
Highly [2] 117:21 161:1
Hire [2] 30:4 30:8
Historic [2] 76:21 182:24
Historical [2] 116:7 182:6
History [1] 122:9
Hit [4] 77:16 244:2 245:4 245:8
Hmm [3] 62:9 66:23 75:25
Hoberg [186] 1:23 3:4 6:6 6:20 7:13 7:17 8:7 8:11 8:16 8:18 9:14 9:21 10:9 15:3 15:5 15:8 16:8 16:16 16:23 17:6 19:15 19:17 25:7 25:11 41:20 41:25 43:19 43:24 50:4 50:7 50:9 50:13 50:15 50:19 54:11 56:20 57:9 57:12 60:19 60:23 61:4 61:17 62:2 63:19 63:24 64:2 64:6 66:18 66:21 72:5 72:11 72:16 72:20 73:1 75:1 78:7 78:11 80:5 81:9 82:21 84:8 85:17 87:13 88:8 88:16 88:18 88:25 91:12 91:15 91:19 106:2 106:6 106:9 106:13 107:15 107:19 107:23 112:7 118:10 118:21 119:2 119:5 119:7 119:10 119:23 123:7 124:12 129:9 129:12 134:23 136:8 136:12 138:5 138:8 138:16 138:22 138:24 139:1 139:5 139:7 139:10 139:15 146:3 146:11 146:15 149:4 149:9 150:10 150:14 150:17 150:20 150:25 151:2 151:5 151:10 152:4 152:9 152:23 153:8 153:11 153:14 153:17 155:6 161:6 161:8 161:15 163:23 176:20 176:25 186:20 186:23 187:2 188:5 188:12 191:9 194:5 194:19 195:3 195:7 196:10 199:24 207:8 207:10 211:7 213:3 216:16 216:18 218:12 219:18 219:22 220:4 224:18 224:21 229:12 229:15 229:18 231:18 231:21 231:24 234:17 236:4 236:25 239:11 240:10 240:13 240:16 241:7 241:10 241:15 242:4 255:20 259:20 261:9 261:23 263:22 264:9 265:1 265:5 265:8 265:10 265:12 265:25 266:5 266:8 266:14 266:19
Hold [6] 20:19 143:12 154:1 154:3 154:4 243:3
Holding [3] 217:17 217:18 228:7
Honor [1] 118:14
Hope [10] 16:9 25:14 53:16 55:18 66:7 138:1 138:1 181:11 197:15 264:16
Hopefully [1] 221:8
Host [1] 103:18
Hot [5] 44:13 65:24 100:17 247:6 247:20
Hour [1] 192:15
Hours [1] 31:18
Housing [1] 212:2
Hub [3] 245:4 255:6 255:11
Huge [4] 193:23 198:18 208:14 229:25
Hundred [1] 115:21
Hundredth [1] 95:5
Hundredths [1] 222:7
Hung [1] 71:17
Hurry [1] 54:17
Hurt [6] 78:22 79:1 95:18 95:20 101:7 176:7
Hydro [1] 212:4
Hydrogen [1] 212:17

I

Ibbotson [2] 113:13 181:19
IDA [1] 212:1
IDACORP [7] 102:6 102:8 170:3 170:5 170:6 211:3 211:19
IDACORP's [1] 211:20
Idaho [3] 102:6 102:7 102:7
Idea [8] 24:20 77:18 95:24 114:9 149:13 163:7 177:9 184:18
Identification [5] 6:5 64:5 106:8 195:6 218:9
Identified [1] 110:11
Identify [11] 18:15 26:25 33:6 33:13 37:1 37:3 37:13 90:9 92:17 106:12 151:19
Ignore [1] 105:5
Ignored [1] 103:7
Ignores [1] 116:1
II [1] 67:2
Illinois [1] 230:2
Imagine [2] 182:2 237:8
Immediate [1] 110:1
Immediately [2] 139:23 177:13
Impact [11] 29:6 85:11 85:12 163:14 172:5 172:10 178:4 195:21 236:11 236:17 246:16
Implemented [2] 147:21 148:23
Implicit [1] 198:5
Implicitly [1] 197:25
Implies [1] 216:1
Import [1] 63:16
Importance [2] 116:2 116:21
Important [22] 9:5 9:10 9:24 30:19 30:21 44:14 117:2 117:3 119:22 167:25 211:21 239:23 249:15 249:16 259:11 262:22 262:23 263:1 263:2 263:6 263:10 263:18
Importantly [1] 172:11
Impossible [2] 96:17 254:24
Impression [1] 131:8
Imprisonment [1] 17:4
Improve [1] 138:2
In-depth [1] 196:17
Inability [1] 209:2
Inadequacy [1] 63:12
Inadequate [5] 62:13 62:17 62:19 176:10 209:15
Inadvertently [3] 152:7 152:14 205:13
Inappropriate [1] 103:4
Inc [3] 70:10 233:13 243:13
Incentive [14] 77:8 79:4 79:18 79:19 80:25 96:21 117:14 205:25 206:7 206:17 206:22 208:1 208:10 208:21
Incentives [1] 208:14
Incidental [1] 38:7
Inclined [1] 64:23
Include [16] 29:14 47:12 47:12 71:2 71:19 77:2 105:9 105:10 138:13 164:20 164:25 164:25 169:20 169:23 212:13 242:16
Included [16] 24:14 31:11 35:3 35:5 36:10 36:15 38:1 43:12 68:7 68:7 68:10 92:23 102:15 199:20 223:15 223:17
Includes [1] 42:4
Including [8] 69:12 104:10 117:21 131:18 140:14 150:2 154:17 242:18
Inclusion [1] 66:25
Income [25] 22:5 22:19 28:3 28:5 28:9 28:13 28:17 37:19 44:6 45:16 47:1 47:17 47:20 47:24 49:19 49:23 74:3 75:19 76:3 76:18 76:21 207:13 211:21 212:2 236:15
Incomplete [3] 34:1 248:25 249:8
Inconsistent [1] 58:2
Incorporated [2] 89:18 92:15
Incorporates [1] 92:2
Incorrect [4] 202:14 203:24 204:8 204:14
Incorrectly [5] 202:5

202:11 202:16 204:9 204:10
Increase [27] 19:25 22:15 30:4 37:2 37:4 40:2 41:18 79:19 81:19 86:12 87:6 109:3 110:13 110:16 110:19 133:19 143:11 146:20 148:21 176:4 177:13 196:25 197:5 217:18 243:24 248:13 258:3
Increased [13] 31:19 37:21 40:19 66:11 103:19 109:12 110:8 144:16 243:22 243:25 249:18 249:20 258:4
Increases [3] 249:25 250:15 258:2
Increasing [5] 128:25 197:12 247:6 247:16 258:16
Increasingly [1] 247:18
Increment [3] 93:3 128:16 131:20
Incremental [2] 33:20 133:25
Increments [1] 30:25
Incur [1] 139:23
Incurred [12] 67:2 67:7 68:3 69:20 104:19 122:10 122:17 130:20 132:5 157:4 160:6 201:16
Incurring [1] 47:11
Incurs [1] 79:15
Indeed [3] 203:17 203:20 205:4
Independent [5] 60:13 70:9 154:16 182:3 183:10
Index [1] 143:10
Indiana [2] 154:5 230:3
Indicate [4] 24:2 51:2 58:24 96:7
Indicated [12] 8:7 13:20 14:4 23:14 51:18 74:2 80:1 137:20 142:25 217:3 249:5 255:12
Indicates [9] 12:21 24:18 28:7 64:16 143:4 162:21 171:2 202:20 202:21
Indicating [2] 60:8 100:3
Indication [1] 74:12
Indications [1] 226:17
Indicative [1] 170:2
Indifferent [1] 167:22
Individual [2] 166:16 246:4
Industrial [19] 115:20 115:21 116:3 116:5 116:22 117:3 169:13 175:10 175:12 175:19 175:20 175:22 185:24 187:14 187:15 244:4 248:9 258:19 258:19
Industrial-type [1] 185:24
Industry [3] 33:17 60:13 216:8
Inefficiencies [1] 33:24
Infamous [2] 113:13 181:20
Inflated [1] 134:4
Inflating [3] 91:3 91:4 117:23
Inflation [7] 111:19 112:23 112:25 113:1 113:5 178:19 244:18
Inflationary [2] 86:9 86:12
Influence [1] 101:24
Information [33] 4:24 12:6 21:12 23:13 24:13 29:8 33:12 34:1 42:14 51:15 55:14 64:22 83:23 87:5 90:21 143:3 152:24 211:11 242:19 248:23 248:25 249:1 249:2 249:3 249:8 253:15 260:2 260:5 260:7 260:11 260:14 260:19 261:5
Informational [1] 256:9
Informed [3] 122:14 203:18 204:21
Infrastructure [1] 38:5
Initial [9] 90:21 90:25 91:5 99:2 99:19 111:12 112:5 125:8 129:23
Injected [2] 250:12 260:15
Injections [1] 247:3
Injuries [2] 36:20 41:12
Injury [1] 40:11
Input [2] 11:5 11:6
Inquire [1] 124:2
Inquired [1] 97:24
Inquiries [1] 70:12
Insight [1] 177:25
Insofar [1] 53:2
Instance [2] 39:18 75:21
Instances [2] 108:11 210:2
Instead [6] 15:21 21:16 112:16 164:16 245:21 245:23
Institute [2] 150:2 154:19
Institutional [1] 33:24
Instrument [1] 115:7
Insurance [16] 36:20 37:15 40:4 40:6 40:9 40:9 40:12 40:14 40:20 40:22 41:4 41:11 41:13 41:14 42:4 86:25
Insurances [1] 87:6
Integrity [1] 236:9
Intend [2] 15:12 15:24
Intended [1] 205:18
Intercontinental [1] 5:4
Interest [17] 12:10 97:19 111:10 111:14 111:19 112:19 113:1 113:3 121:15 158:18 158:22 159:5 159:19 159:24 180:22 212:3 239:3
Interested [2] 9:19 59:19
Interesting [2] 9:24 45:24
Internal [1] 30:1
Intervenors [2] 8:12 8:13
Intervention [1] 11:6
Introduce [2] 142:15 146:3
Introduced [1] 14:6
Intuition [1] 177:7
Intuitively [1] 181:13
Invest [18] 127:8 165:16 168:2 172:19 172:23 172:24 173:1 175:1 175:9 175:10 175:14 175:21 175:25 178:22 182:5 186:9 215:9 215:11
Invested [1] 209:19
Investigation [3] 121:21 122:2 122:3
Investing [7] 135:18 160:22 161:3 167:10 167:23 168:12 168:14
Investment [23] 10:18 21:23 23:4 24:11 28:16 99:11 115:12 135:19 144:7 168:6 168:7 168:11 169:15 169:22 172:21 181:22 183:18 201:22 201:24 201:25 215:5 215:13 217:23
Investments [10] 168:15 168:20 185:21 185:24 201:21 210:12 215:9 217:1 217:6 217:14
Investor [9] 26:18 27:12 65:17 102:21 105:12 116:11 166:10 166:16 217:21
Investor-owned [2] 26:18 27:12
Investors [17] 106:20 108:22 109:1 109:9 128:1 159:4 166:3 167:3 167:10 170:10 176:6 184:23 184:24 185:14 215:8 216:25 238:3
Investors' [3] 101:24 127:21 127:22
Invests [1] 212:1
Involve [1] 103:17
Involved [4] 9:10 9:12 159:8 242:21
Irrespective [1] 251:16
Isolated [1] 251:8
Issuance [4] 94:8 94:16 95:22 209:19
Issuances [1] 157:22
Issue [49] 14:13 23:11 23:20 27:5 27:6 30:19 44:5 44:13 45:11 58:6 58:10 67:25 73:22 74:11 80:12 93:14 93:16 98:11 103:14 109:22 111:1 122:17 123:3 123:3 123:5 123:24 129:23 131:14 134:6 140:25 156:16 156:25 158:11 160:24 161:4 170:15 170:15 170:16 174:22 174:23 187:9 191:13 196:17 201:2 201:6 206:14 209:6 210:17 252:2
Issued [13] 104:4 104:13 120:18 131:18 158:8 158:13 158:23 209:14 209:18 219:13 234:4 234:9 238:9
Issues [26] 9:10 11:10 27:9 33:10 35:25 49:8 49:9 73:18 73:19 73:20 73:21 98:8 104:8 104:19 121:23 123:22 130:3 135:7 136:21 137:2 141:9 156:2 160:18 196:7 242:18 242:21
Issuing [2] 132:22 209:10
It'll [1] 137:3
Item [3] 42:24 48:6 105:5
Items [3] 38:1 38:9 38:24
Itron [2] 147:23 147:23
Itself [3] 46:7 77:11 95:2

J

January [14] 65:7 84:24 84:25 97:2 97:18 142:24 182:17 187:14 192:10 231:11 233:6 235:9 242:13 251:4
Japan [1] 212:21
Jerry [1] 7:15
Job [1] 46:17
Join [1] 70:14
Joining [1] 70:8
Joint [3] 148:6 148:11 148:13
Journal [1] 190:23
JSG-2 [4] 125:9 125:11 161:5 207:6
JSG-4 [5] 152:2 187:21 188:8 188:17 196:21
Judge [2] 6:19 195:11
Judged [2] 62:13 62:17
Judgment [5] 58:4 58:9 70:24 122:7 122:14
July [1] 225:17
Jump [2] 198:10 198:20
June [4] 25:24 142:5 225:24 242:14
Jurisdictionalize [1] 35:10
Jurisdictionalizes [1] 41:5
Justify [3] 45:12 45:17 45:21

K

Kansas [6] 124:22 125:17 162:9 163:9 164:11 167:7
Keep [9] 35:20 45:2 55:17 68:23 80:23 177:2 206:17 212:5 249:6
Keeping [1] 243:23
Keeps [1] 172:3
Kept [2] 114:13 176:3
Key [10] 44:9 44:16 44:25 45:2 46:18 247:14 250:7 258:25 262:1 262:3
Kicker [2] 115:18 117:25
Kind [34] 20:5 21:4 22:14 30:16 32:15 32:23 39:1 42:20 42:20 42:22 59:19 75:11 76:4 76:13 77:12 77:18 77:20 79:17 80:16 99:4 111:6 128:11 136:4 148:19 149:13 180:21 182:3 182:11 186:1 190:25 198:20 217:25 222:12 236:10
Kinds [5] 23:5 183:14 184:19 185:13 185:23
King [60] 3:17 4:18 4:19 4:24 7:10 12:23 26:11 26:13 28:1 88:13 88:20 89:3 89:10 89:17 96:23 118:14 118:23 119:12 119:16 123:7 129:10 129:13 129:19 135:5 135:5 138:17 138:18 141:2 152:18 155:23 156:3 156:5 156:15 158:6 162:2 162:7 165:4 169:16 171:5 172:3 174:18 175:23 177:18 181:14 182:22 200:17 202:4 202:10 202:15 204:18 205:1 205:5 211:10 214:6 214:23 217:3 223:16 238:1 239:7 240:1
King's [13] 107:19 125:12 156:9 161:19 163:17 184:22 186:19 198:23 199:1 199:25 200:6 203:25 211:1
Knock [1] 136:5
Knowledge [3] 80:17 82:15 167:11
Known [2] 50:24 95:14
Knows [1] 43:7

L

Labeled [3] 53:24 75:23 151:18
Labor [1] 147:5
Lack [2] 44:9 63:17
Lag [3] 76:20 77:11 77:24
Lags [1] 260:18
Laid [2] 15:15 261:16
Large [12] 91:7 104:1 126:13 158:21 172:7 182:25 183:6 192:18 194:10 229:25 248:9 248:10
Last [71] 6:16 10:5 19:24 20:9 20:10 22:9 22:12 24:12 24:16 27:16 27:16 28:2 28:4 28:7 28:16 29:15 35:7 37:20 44:5 47:16 49:6 64:11 64:24 64:25 92:5 95:25 104:2 104:20 104:24 105:22 106:16 107:20 111:21 112:1 112:13 114:4 124:15 130:23 131:3 132:6 135:23 143:9 144:10 144:18 144:25 145:11 146:25 162:19 162:19 174:3 186:16 189:12 189:17 191:16 192:4 193:10 197:17 201:9 207:15 217:19 223:10 226:7 250:24 253:23 254:22 254:25 255:1 258:14 260:13 260:14 260:15
Late [4] 158:14 210:1 214:10 247:8
Lately [1] 10:3
Latest [1] 219:11
Latter [1] 192:5
Law [5] 2:12 2:17 6:19 14:13 17:1
Lawyers [1] 237:3
Lay [1] 16:2
Layoffs [1] 189:15
Lead [2] 63:13 211:18
Leading [1] 174:14
Learned [1] 183:19
Lease [1] 78:15
Least [21] 36:5 39:20 39:24 56:16 66:7 71:22 80:21 82:10 98:7 102:2 102:19 164:21 171:2 171:4 183:9 192:19 193:24 195:10 209:21 210:3 233:25
Leave [3] 118:14 240:7 264:24
Leaves [1] 221:2
Leclede [1] 108:14
Lee [2] 89:18 90:2
Left [8] 8:23 24:22 42:12 154:13 154:22 162:1 167:9 172:23
Left-hand [1] 30:22
Legal [2] 8:1 38:6
Legislators [1] 252:4
Legislature [2] 30:5 216:8
Legislature's [1] 39:2
Legit [1] 87:6
Lein [4] 7:15 71:10 76:24 80:1
Length [1] 33:2
Leo [2] 2:4 8:23
Less [24] 28:6 29:14 65:19 78:25 83:21 100:14 100:18 101:11 105:18 105:18 108:12 165:7 165:21 170:13 181:15 182:13 185:3 189:19 209:3 209:14 224:13 244:19 253:2 253:16
Letter [3] 76:16 77:2 79:24
Level [25] 22:9 23:9 34:14 38:14 39:7 76:14 76:23 77:5 86:16 86:16 120:12 140:5 144:2 144:3 160:12 189:17 193:12 193:25 197:3 244:3 245:23 246:20 246:25 248:14 253:5
Levels [9] 34:4 82:8 144:10 145:15 145:16 150:7 158:19 191:21 250:13
Life [2] 43:1 120:17
Lifting [1] 10:7
Light [9] 12:19 108:13 124:22 125:18 162:10 163:9 164:12 166:13 167:7
Lignite [5] 47:13 71:4 71:6 71:22 71:22
Likely [10] 77:24 145:5 147:15 195:17 211:23 212:22 228:4 228:22 235:16 255:2
Limit [1] 84:6
Limited [9] 63:16 80:17 206:11 217:2 248:22 260:2 260:5 260:10 261:5
Line [43] 27:19 28:6 28:21 48:10 57:2 57:8 57:11 57:12 71:15 90:25 91:1 91:5 95:1 98:1 102:16 102:18 132:3 132:3 137:24 155:12 159:13 168:3 170:5 170:10 177:11 178:5 178:6 183:14 200:9 202:6 204:3 204:21 207:16 211:3 211:10 211:13 213:14 235:3 256:17 257:19 258:24 258:24 259:9
Line's [1] 211:19
Lines [4] 58:17 202:3 203:14 213:5
Link [1] 230:15
List [11] 38:24 41:17 124:9 124:10 126:2 147:8 148:17 221:2 262:3 262:21 262:21
Listed [5] 24:22 51:20 220:10 223:21 262:11
Listen [2] 56:9 56:9
Listing [2] 99:18 124:9
Lists [1] 41:3
Live [1] 43:1
Living [1] 45:15
Load [2] 206:5 258:2
Loaded [1] 206:4
Loan [4] 96:25 97:13 97:16 97:20
Local [3] 252:1 256:2 256:3
Located [4] 171:24 222:5 223:10 250:8
Location [1] 251:19
Lock [6] 112:25 137:8 190:7 206:23 226:24 227:5
Locked [1] 192:12
Logical [1] 125:25
Long-term [18] 27:6 27:15 27:17 27:25 49:14 93:19 122:24 123:14 123:16 136:21 137:21 206:13 227:20 236:19 236:20 252:24 254:9 254:10
Look [51] 9:25 36:12 38:23 41:10 43:15 64:7 72:8 72:12 102:17 106:9 107:9 108:2 108:19 111:9 111:11 114:25 115:2 116:16 122:8 122:16 124:1 125:3 143:22 146:25 147:9 153:15 160:1 162:18 163:16 166:7 168:3 168:4 168:5 169:18 170:14 173:15 177:11 177:15 183:18 185:18 187:11 190:22 196:19 197:3 208:22 213:5 222:23 241:25 254:12 255:10 266:5
Looked [8] 56:13 106:20 121:25 122:1 147:6 182:23 184:9 238:4
Looking [29] 9:12 42:22 42:23 43:20 46:22 54:25 55:12 108:22 124:8 125:20 126:2 148:12 149:1 163:25 165:19 170:18 173:19 177:4 185:12 191:2 200:8 201:18 213:8 216:6 216:25 222:4 235:8 237:7 237:23
Looks [8] 46:5 46:6 46:8 112:10 123:3 188:19 200:22 218:24
Lose [4] 157:14 168:8 169:5 207:24
Losing [3] 113:2 136:20 208:17
Loss [4] 129:4 144:21 209:19 210:14
Losses [1] 40:10
Lost [6] 70:17 70:19 105:3 109:19 169:11 175:5
Louisiana [2] 223:14 252:6
Low [19] 109:4 113:1 115:25 175:18 193:11 209:11 225:14 228:2 237:14 246:14 252:16 252:18 252:18 253:21 257:4 257:8 257:11 257:15 257:16
Lower [29] 20:15 23:14 84:5 102:4 111:16 111:20 116:17 121:17 122:24 126:6 137:7 137:17 158:1 158:10 166:11 184:16 189:7 193:25 194:1 197:11 205:6 205:7 206:2 206:25 228:16 246:11 250:13 255:12 259:7
Lowered [1] 20:20
Lowest [1] 161:25
Lucky [1] 192:23
Lunch [2] 119:1 119:8
Luncheon [3] 118:11 119:3 119:10

M

M-D [1] 98:18
Ma'am [1] 161:13
Machine [1] 42:13
Madison [2] 162:20 163:4
Magic [1] 114:14
Mahowald [6] 13:17 158:24 160:3 206:19 208:4 214:19
Main [2] 174:3 214:12
Maintain [7] 63:15 95:16 96:16 107:1 164:19 174:8 175:23
Maintaining [1] 143:16
Maintenance [12] 36:23 47:9 66:16 67:1 67:7 67:12 67:13 67:21 67:22 68:9 69:2 70:2
Major [8] 28:24 66:16 66:25 141:10 154:5 160:19 187:17 211:23
Majority [1] 210:10
Majoros [1] 89:17
Manage [1] 79:18
Managed [1] 28:15
Management [1] 206:3
Management's [1] 46:7
Managers [1] 45:25
Manner [2] 12:2 46:21
Manufacturers [1] 189:14
Manufacturing [13] 33:17 187:25 189:2 189:18 195:20 196:20 196:22 196:25 197:16 229:9 229:20 230:1 258:15
MAPP [20] 5:10 58:21 62:5 62:12 62:15 62:16 62:17 63:4 63:7 63:12 64:16 70:6 70:22 229:21 229:24 230:7 230:12 230:15 230:16 231:3
MAPP-U.S [5] 62:12 62:16 62:17 63:4 63:7
March [1] 114:14
Margin [4] 51:18 54:12 62:23 229:5
Margins [54] 29:13 29:16 29:20 30:9 31:1 31:5 31:8 31:8 31:9 31:11 31:15 31:16 31:21 31:25 32:14 33:2 33:14 33:19 34:7 34:20 35:1 35:1 35:3 35:7 35:9 35:11 47:7 52:2 52:8 52:13 53:21 53:24 54:1 54:23 56:18 58:20 65:4 74:21 85:5 140:5 140:9 144:17 155:15 187:7 189:24 192:4 192:21 193:1 193:23 193:24 194:12 195:15 195:17 261:18
Mark [4] 63:19 63:21 63:25 106:1
Marked [17] 6:4 14:7 18:15 56:21 64:4 72:8 90:8 106:2 106:7 146:8 151:25 152:4 152:6 152:13 195:5 213:2 218:8
Market [113] 31:24 32:22 33:23 34:1 34:5 34:13 35:19 56:8 59:11 65:16 66:5 82:18 98:21 106:21 106:23 107:1 107:7 107:10 107:10 107:11 107:13 108:19 109:4 109:10 109:17 112:22 116:6 116:12 116:13 116:16 116:25 140:12 140:19 144:13 144:14 144:18 145:10 149:13 168:5 168:25 169:5 170:12 171:8 173:5 174:20 175:12 175:16 175:18 176:1 176:6 190:14 196:18 196:19 197:19 198:9 198:11 198:14 198:15 210:14 225:6 225:13 226:2 226:5 226:16 226:18 226:18 226:23 227:4 227:8 227:13 227:13 227:21 234:25 235:6 235:10 235:13 235:17 235:18 235:19 236:20 239:9 243:15 243:17 243:18 243:20 245:24 246:3 248:18 248:20 248:20 249:5 249:8 249:9 249:12 249:16 250:14 251:7 251:9 251:10 251:10 251:24 252:9 253:13 254:16 255:2 256:18 256:18 259:1 259:1 259:12 260:1 260:4 262:15
Market's [1] 59:12
Market-to-book [4] 107:11 108:19 175:12 175:18
Marketing [1] 246:1
Marketplace [1] 260:12
Markets [16] 32:13 59:1 95:11 145:1 169:13 191:18

192:17 194:16 217:16 242:16 242:17 242:22 249:25 259:17 262:4 262:6
Maryland [1] 243:4
Masked [1] 246:16
Massive [2] 168:20 189:15
Master [2] 90:1 90:3
Master's [2] 154:3 243:4
Matched [1] 202:22
Matches [1] 109:15
Material [2] 71:12 148:18
Materials [1] 23:5
Math [2] 177:6 177:24
Mathematical [1] 114:25
Mathematically [3] 181:12 200:18 240:8
Matter [18] 6:11 6:19 7:18 8:13 11:10 12:22 14:10 16:11 70:25 78:23 85:5 85:6 85:7 100:8 126:9 159:2 159:23 206:18
Mature [1] 136:23
Matured [1] 97:2
Maturity [16] 94:2 94:6 94:20 95:14 120:14 120:22 141:5 158:2 203:6 203:16 204:4 204:20 205:7 205:9 205:15 205:24
Maximum [3] 17:2 17:3 83:17
MBA [1] 154:9
MDU [108] 8:2 10:23 10:23 10:25 13:4 13:10 13:12 15:16 21:6 21:6 23:8 23:18 24:18 27:4 27:20 28:14 28:20 29:5 29:8 30:17 31:4 31:8 31:9 31:13 31:23 32:6 32:9 33:10 35:23 36:9 39:23 41:6 42:15 44:7 47:16 48:14 48:23 54:6 65:9 66:10 68:2 68:5 69:24 70:8 70:11 72:1 77:13 78:14 78:25 79:1 79:3 79:14 92:8 93:1 95:6 95:21 98:18 99:5 99:13 99:25 100:6 100:7 101:11 104:1 104:24 115:24 116:18 116:19 116:20 118:4 118:19 121:10 121:22 122:9 122:21 123:1 128:5 132:23 136:18 146:20 152:25 174:21 190:17 192:19 205:23 207:3 207:17 207:21 208:13 208:20 210:12 210:22 214:10 214:17 214:25 215:2 217:1 224:6 227:19 230:17 233:12 233:24 234:7 234:12 236:13 239:16 243:13 256:14
MDU's [60] 4:20 4:22 4:23 5:5 7:24 8:1 11:12 11:15 11:19 11:24 12:1 12:10 12:25 13:1 19:21 19:24 20:15 21:13 23:15 24:4 26:17 27:11 27:16 27:22 32:9 32:12 32:18 33:5 37:6 39:11 40:19 45:4 47:25 48:2 54:2 54:4 70:14 70:20 70:24 84:23 87:23 91:24 92:12 94:25 97:6 98:15 98:17 103:4 104:2 105:2 120:6 134:9 136:17 137:20 137:23 139:2 192:4 206:23 224:12 266:16
Meals [1] 38:7
Mean [37] 22:21 30:10 30:14 30:23 44:23 45:7 51:8 52:5 56:6 60:12 65:6 69:19 69:24 71:21 71:24 72:1 74:11 79:12 83:17 85:6 113:3 114:6 115:5 115:6 132:3 146:9 165:16 166:19 170:16 184:1 204:13 222:10 226:11 237:4 254:16 256:6 258:5
Meaningful [2] 116:10 116:11
Means [9] 10:4 22:17 43:12 105:16 115:5 115:24 126:17 145:8 255:9
Meant [1] 119:19
Meantime [1] 239:2
Measure [6] 98:15 113:24 114:16 201:21 201:23 250:18
Measured [1] 177:11
Measures [2] 115:2 116:8
Measuring [4] 115:8 160:21 174:2 181:15
Mechanical [2] 109:24 110:9
Mechanism [1] 80:15
Media [1] 252:5
Meet [1] 258:2
Megawatt [2] 31:18 192:14
Megawatt-hours [1] 31:18
Megawatts [2] 63:9 84:24
Member [3] 256:8 256:13 256:14
Members [3] 8:22 13:5 15:5
Membership [1] 38:5
Mention [1] 194:10
Mentioned [12] 117:11 125:17 140:15 141:8 145:7 201:4 203:24 215:17 233:4 233:8 254:22 262:1
Merge [1] 165:11
Mergers [3] 46:13 131:4 131:5
Merges [2] 46:14 165:18
Merging [1] 46:15
Message [1] 42:13
Meter [3] 147:23 148:6 148:11
Method [9] 147:24 203:17 204:5 204:19 204:20 204:24 205:5 213:19 238:13
Methodology [1] 238:18
Mexico [2] 211:23 249:4
Michigan [1] 230:3
Microeconomics [1] 154:7
Microphone [2] 16:22 176:24
Mid [3] 114:12 244:20 248:7
Mid-4-dollar [1] 245:16
Mid-5 [1] 245:16
Middle [4] 180:5 180:16 189:17 263:5
Midwest [5] 70:9 230:2 230:18 231:3 231:6
Might [19] 34:16 39:18 41:14 50:16 74:17 78:2 100:8 113:22 127:7 127:12 150:6 177:12 177:14 198:16 204:13 210:22 227:25 240:18 241:4
Mike [15] 3:8 4:13 4:14 7:8 12:22 16:18 17:9 17:15 45:12 50:16 50:23 50:24 51:2 73:7 84:14
Mild [4] 82:5 246:17 252:24 259:4
Million [92] 12:12 20:14 20:16 20:21 21:7 21:16 21:16 29:17 29:21 30:24 31:5 31:6 31:7 31:9 31:10 31:12 31:14 35:7 35:12 37:22 37:22 43:9 43:11 43:17 45:1 45:4 45:5 45:6 45:6 45:7 45:8 45:18 47:7 47:24 48:6 48:13 48:15 48:18 48:19 65:11 73:24 73:24 74:15 76:2 76:6 78:16 78:19 78:20 83:4 83:18 84:1 84:6 93:21 93:21 94:10 97:1 97:5 97:11 98:2 98:4 99:15 104:16 104:17 104:25 123:4 130:17 130:19 130:23 132:4 132:10 132:19 133:22 133:22 155:16 172:4 172:7 172:9 198:24 199:1 199:4 199:15 201:1 201:8 212:19 228:11 228:18 232:11 232:13 245:4 245:13 256:4 256:4
Mind [11] 39:17 55:17 76:15 79:3 147:18 176:18 182:7 182:12 183:9 206:4 229:4
Minds [2] 24:15 101:24
Mine [2] 118:2 202:6
Minimal [1] 134:14
Mining [1] 185:8
Minnesota [1] 222:6
Minor [2] 90:24 141:9
Minuscule [1] 105:5
Minute [4] 60:20 103:8 106:6 114:23
Minutes [3] 164:24 194:21 241:3
Miscellaneous [1] 36:23
Misheard [2] 119:16 119:19
MISO [2] 70:4 70:14
Misses [1] 174:3
Missing [1] 91:6
Missouri [1] 250:22
Misspeak [1] 171:15
Misspelled [1] 52:23
Mistake [2] 220:19 221:24
Mix [2] 33:23 46:14
MMBtu [5] 244:2 244:16 245:8 245:9 245:10
Mode [1] 79:17
Model [8] 29:11 29:23 176:16 177:23 177:25 178:4 190:14 190:20
Moderated [2] 246:18 251:4
Modest [3] 115:25 244:23 245:6
Moment [5] 114:14 124:6 127:3 139:4 155:10
Monday [2] 6:3 266:20
Money [37] 30:6 30:24 38:20 39:4 42:17 42:25 45:9 71:13 73:22 94:11 105:17 116:8 123:4 123:5 147:20 157:8 157:13 159:8 159:18 168:8 169:11 170:8 174:7 174:8 174:24 175:3 176:7 178:1 178:14 181:5 181:10 184:13 207:23 207:24 214:11 217:11 228:4
Monopoly [1] 21:1
Montana [26] 2:19 7:22 53:17 111:25 126:1 127:5 127:8 127:17 139:22 141:23 142:17 142:19 143:8 155:14 163:2 170:18 170:19 171:10 171:13 171:16 171:19 171:21 171:23 202:12 207:16 236:11
Montana-Dakota [43] 1:5 2:16 2:19 6:13 7:22 10:16 53:17 126:1 126:11 126:16 127:5 127:8 127:17 139:22 141:23 141:24 142:17 145:8 155:14 156:25 158:15 159:12 163:2 165:11 165:20 170:18 170:19 171:10 171:14 171:21 172:18 174:19 175:20 176:7 183:2 183:7 185:5 190:5 202:12 232:6 233:8 236:11 243:12
Montana-Dakota's [3] 142:19 143:8 207:16
Month [5] 56:16 66:8 66:8 79:13 197:17
Month-and-a-half [1] 56:16
Monthly [2] 115:2 260:17
Months [17] 55:18 65:22 76:17 78:1 82:3 82:16 110:15 189:13 197:15 216:22 217:5 226:12 235:11 248:15 252:17 255:13 257:13
Morning [14] 7:19 9:4 44:20 58:4 61:11 155:24 181:20 187:9 189:23 217:3 238:2 239:8 261:16 264:13
Most [42] 5:9 20:9 30:21 51:14 51:14 54:20 54:23 54:24 54:24 55:11 55:11 55:14 100:23 100:25 101:2 102:1 128:11 137:1 156:7 161:18 167:25 184:4 185:22 186:21 189:25 210:6 228:22 235:16 244:10 244:17 245:17 246:10 248:1 249:15 250:7 252:23 257:18 258:10 259:4 259:11 260:22 262:20
Mostly [3] 49:25 94:8 156:9
Move [12] 9:19 26:21 72:6 215:18 215:22 215:24 217:11 241:6 248:24 250:15 254:3 258:4
Moved [3] 51:5 247:22 252:17
Movement [2] 244:22 244:22
Movements [1] 254:5
Moves [1] 230:12
Moving [8] 21:13 24:9 28:2 30:9 35:22 40:4 42:6 54:19
Mulkern [3] 8:1 13:14 13:19
Multiplies [1] 130:17
Multiply [4] 48:10 180:10 199:16 199:17
Municipalities [1] 148:6
Must [6] 63:8 63:12 91:6 152:2 173:21 216:1
Mutual [1] 181:22

N

Name [13] 6:20 7:4 17:14 89:8 89:10 98:19 102:8 141:18 141:20 148:10 233:7 242:7 242:8
Narrow [3] 55:7 244:15 245:12
Nasdaq [1] 114:7
National [11] 33:17 52:

17 189:10 189:11 229:20 230:25 250:4 250:20 251:10 252:2 252:25
Nationally [2] 230:25 246:9
Nationwide [1] 193:9
Natural [30] 33:16 33:18 33:20 108:15 140:16 167:12 167:13 195:22 226:11 231:5 231:7 242:17 243:15 243:18 243:20 249:20 251:9 252:9 253:24 254:16 256:22 257:20 257:22 257:25 258:17 259:7 262:1 262:10 262:16 262:18
Near [12] 32:24 49:20 63:17 65:3 102:2 144:5 145:5 194:11 252:8 253:13 257:1 258:8
Near-term [2] 252:8 253:13
Nearby [1] 230:4
Nearly [3] 63:9 175:14 234:8
Necessarily [2] 55:17 104:12
Necessary [14] 10:17 11:22 13:8 14:2 14:23 15:11 23:4 30:1 67:18 99:3 103:21 142:21 143:7 172:12
Need [36] 14:7 15:20 16:4 16:24 16:25 18:23 21:1 35:1 49:6 49:14 49:18 49:18 49:20 55:22 55:23 73:16 90:23 111:6 117:14 127:17 130:6 141:12 158:21 173:23 173:25 174:7 174:8 174:10 178:5 182:4 182:12 194:22 194:24 201:19 263:6 263:12
Needed [9] 155:12 159:17 172:12 186:24 210:2 210:3 234:4 234:11 238:19
Needs [11] 35:14 40:1 42:25 118:15 145:18 156:22 169:15 186:14 256:8 256:9 256:10
Negative [2] 43:8 43:13
Negligible [1] 110:23
NERC [1] 61:11
Net [24] 22:4 28:3 28:5 28:8 28:13 28:17 29:13 29:16 29:20 31:5 31:14 31:20 35:11 47:1 47:19 47:24 49:19 54:1 76:3 76:21 85:5 209:3 212:4 236:15
Network [1] 229:25
Never [3] 43:15 65:8 235:14
Nevertheless [2] 16:24 202:13
New [31] 21:12 33:11 33:12 33:17 59:3 102:8 103:24 104:7 112:14 123:5 130:2 130:10 131:23 131:24 132:22 133:25 139:24 140:17 143:15 147:11 159:18 165:17 165:22 165:22 168:2 174:22 194:10 201:22 252:6 257:18 257:23
Newer [1] 163:20
News [5] 56:9 59:16 59:17 60:6 150:3
Newspaper [1] 191:16
Next [44] 23:3 24:9 34:24 35:22 42:25 46:1 47:21 55:18 55:20 74:7 78:15 92:24 93:6 110:2 110:6 137:3 146:9 150:20 157:4 162:20 170:12 171:25 176:12 189:18 190:5 190:11 190:15 191:3 191:22 192:9 196:2 197:15 205:14 211:24 225:8 225:14 225:19 227:25 228:5 228:8 228:23 232:9 240:19 261:1
Nice [1] 137:11
Night [1] 44:19
Nine [14] 6:7 8:8 8:9 13:21 27:23 73:23 74:15 134:14 179:7 179:11 231:11 233:5 233:7 257:12
Nineties [2] 114:13 244:12
Nit [2] 110:24 134:15
Nobody [1] 191:22
Nobody's [1] 56:7
Noncore [1] 211:20
None [3] 52:9 59:23 265:7
Nonexistent [1] 206:11
Nonregulated [7] 98:16 98:25 102:19 115:17 117:22 126:20 185:24
Noon [1] 119:9
Normal [18] 66:5 86:16 245:14 245:20 245:20 246:25 247:10 247:16 249:18 249:22 250:5 250:7 250:13 251:1 251:2 253:2 253:2 255:2
Normalize [1] 47:14
Normalized [3] 29:7 29:24 34:14
Normally [3] 203:19 204:22 248:6
North [50] 1:2 1:18 2:8 2:14 2:17 2:18 2:23 6:11 6:12 10:13 10:18 11:14 11:17 11:20 11:25 14:21 21:23 24:23 26:19 27:13 29:13 29:20 35:12 41:7 47:7 61:14 61:15 71:2 71:3 72:17 91:24 92:12 96:14 100:18 141:20 141:21 142:13 143:18 165:17 165:23 171:14 171:23 186:12 201:13 203:18 204:21 215:19 220:14 222:18 265:17
Northern [4] 25:17 106:17 157:25 223:2
Northwest [2] 89:11 108:15
Nos [1] 91:16
Note [4] 10:2 29:12 90:19 124:18
Noted [1] 205:5
Notes [3] 52:23 73:23 135:1
Nothing [11] 88:7 91:2 128:13 138:4 194:17 196:8 228:23 229:3 235:2 238:25 240:9
Nothing's [1] 44:20
Notice [6] 11:5 11:5 11:6 11:11 125:16 221:7
Noticed [1] 220:13
Notion [1] 174:13
November [9] 6:16 11:4 211:13 231:10 245:21 247:23 250:18 250:23 250:25
Nowhere [2] 116:22 257:1
NSP [29] 25:5 25:12 25:25 27:21 27:21 29:7 46:14 95:1 95:24 96:1 105:23 106:5 106:15 106:17 106:17 106:19 107:20 108:4 108:6 117:11 120:12 137:22 204:18 204:23 204:23 205:3 205:12 205:18 222:18
NSP's [1] 96:2
Nuclear [2] 34:2 232:24
Number [56] 28:10 31:17 38:1 44:7 47:16 53:10 54:16 68:4 69:18 73:23 73:24 75:12 83:19 86:19 103:24 103:25 105:3 116:7 116:10 116:11 116:17 119:22 119:25 132:7 133:14 134:8 134:9 137:11 138:13 142:21 154:16 155:11 155:16 155:17 157:11 159:16 169:24 172:4 173:19 177:20 178:25 179:25 180:1 182:9 183:6 183:13 201:4 203:8 205:6 220:8 220:17 224:3 246:9 246:13 246:14 254:20
Number's [1] 103:22
Numbered [2] 53:22 187:22
Numbers [16] 30:22 40:8 47:3 47:8 49:10 121:16 135:13 161:21 161:23 163:20 181:17 184:5 184:17 185:3 190:1 202:6
Numeral [1] 219:8
Numerator [2] 94:3 94:16
Numerous [1] 243:6
Nutshell [1] 118:7
NYMEX [8] 245:3 248:21 253:20 254:12 255:5 255:5 255:11 260:21

O

O'clock [5] 44:20 119:5 119:7 119:8 241:6
O'Connor [1] 89:17
Object [3] 101:18 169:17 169:19
Objected [2] 98:7 163:6
Objection [18] 19:14 72:19 72:20 72:22 72:24 91:17 91:18 91:19 104:5 104:6 107:21 107:22 114:17 114:24 153:14 153:16 219:24 220:2
Objections [1] 114:18
Objective [1] 100:13
Objects [3] 101:13 169:23 170:3
Obligation [1] 209:23
Obligations [1] 207:4
Observe [1] 108:11
Obstacle [1] 127:25
Obtain [1] 144:16
Obviously [1] 101:15
Occupation [2] 17:16 89:13
Occur [6] 56:7 70:13 70:21 181:3 257:4 263:11
Occurred [6] 32:16 122:18 129:6 157:22 189:22 214:9
Occurring [2] 121:22 230:1
Oceanic [1] 252:25
October [11] 10:25 25:22 61:14 190:6 190:15 219:15 224:10 226:10 245:7 245:18 245:19
October's [2] 190:11 191:3
Off-system [14] 29:14 33:1 70:13 74:2 74:8 76:18 80:12 80:24 80:25 84:19 140:6 232:2 232:7 232:17
Offer [8] 19:13 91:14 107:16 107:17 109:14 146:4 153:5 219:20
Offered [1] 91:16
Offering [6] 91:12 130:10 153:5 153:11 219:18 248:12
Offerings [1] 104:13
Office [18] 6:16 36:19 37:10 37:15 37:20 37:21 37:23 37:25 38:4 38:5 38:10 38:16 38:17 40:3 47:14 53:7 86:1 86:7
Officer [2] 1:23 6:22
Officer's [1] 153:3
Official [1] 98:19
Offset [5] 101:8 114:11 165:7 165:14 166:6
Often [6] 101:25 102:2 136:19 217:15 235:6 247:24
Oil [3] 248:8 248:11 248:13
Oklahoma [4] 18:3 18:10 80:20 250:22
Old [2] 93:17 94:9
Olson [1] 154:14
Omitted [3] 151:23 152:8 152:14
Once [7] 35:11 49:9 159:3 187:15 193:9 206:14 254:21
One [126] 8:3 20:15 25:22 26:20 30:8 39:20 42:24 44:19 45:9 46:1 46:3 54:12 56:10 56:11 58:19 67:19 71:23 73:10 75:21 76:20 80:8 82:9 84:20 84:21 85:15 85:20 90:24 95:8 99:16 103:12 107:2 108:21 109:5 109:6 109:7 114:18 114:25 117:9 117:16 119:5 119:6 119:7 119:8 123:11 123:16 123:17 127:1 129:2 129:3 129:17 133:18 134:7 135:23 137:1 137:6 138:9 146:17 147:21 148:5 148:9 151:23 156:4 160:15 160:19 161:17 161:20 161:22 165:3 167:19 167:23 167:25 170:21 172:3 174:17 177:9 177:14 177:14 178:6 178:7 178:22 180:8 186:5 186:25 187:10 188:8 188:23 189:9 189:14 189:25 190:24 193:15 193:17 194:6 194:15 194:22 195:10 195:11 204:14 207:5 207:12 214:12 222:7 222:7 223:15 224:2 230:23 231:18 232:3 232:5 233:2 233:4 233:7 234:23 239:22 240:20 244:12 245:1 252:18 253:3 255:4 256:19 258:18 262:10 263:16 264:10 265:15
One's [1] 71:21
One-one-hundredths [1] 222:7
One-third [6] 66:25 67:21 68:6 68:18 69:7 244:19
Ones [6] 38:8 51:21 126:1 185:19 191:14 195:19
Ongoing [2] 38:13 55:1
Open [1] 98:21
Opened [1] 169:5
Opening [12] 3:3 3:3 3:4 3:5 9:2 15:9 15:11 15:23 16:6 139:18 241:23 241:23
Operate [2] 143:22 143:23
Operates [1] 211:22
Operating [16] 26:19 27:

13 33:21 35:17 46:19 67:9 67:17 68:10 143:13 147:10 207:13 207:13 246:9 246:13 246:15 260:23
Operation [10] 101:7 147:7 163:13 165:2 168:9 200:22 200:23 207:24 207:25 238:16
Operational [2] 251:18 256:9
Operations [65] 1:6 6:14 91:24 92:12 125:6 125:20 125:23 126:5 126:11 126:14 127:10 127:13 127:23 160:23 161:3 161:24 162:11 162:14 162:15 163:6 163:10 164:3 164:9 164:13 164:22 165:2 165:12 165:13 165:21 166:9 166:12 167:11 169:22 169:25 171:1 171:4 172:8 172:16 172:20 172:24 173:2 175:1 175:17 175:20 175:22 176:1 176:8 183:3 183:8 185:7 185:10 201:2 207:17 207:18 207:19 208:19 209:20 210:13 213:20 213:21 215:16 233:17 234:11 239:1 256:11
Operator [2] 70:9 149:19
Operators [1] 247:3
Opinion [9] 51:12 55:10 80:3 120:8 121:12 122:7 128:23 145:22 229:6
Opportunities [12] 143:23 144:13 144:19 144:22 148:12 149:21 198:10 198:18 206:10 206:20 208:8 208:9
Opportunity [4] 43:5 64:7 66:13 144:6
Opposed [1] 131:24
Options [2] 174:25 185:13
Orally [1] 56:15
Order [13] 14:14 25:12 29:9 30:7 49:12 76:4 79:6 122:6 122:13 156:5 159:4 179:15 192:14
Ordered [4] 20:7 25:19 25:24 266:2
Orders [2] 212:20 219:13
Organization [1] 70:10
Original [4] 21:15 27:8 152:20 216:6
Originally [2] 23:14 67:4
Otherwise [4] 109:19 148:15 227:11 250:12
Otter [20] 25:4 25:13 27:20 27:22 29:6 82:10 95:6 121:6 121:13 137:22 157:25 158:4 214:16 220:15 220:16 220:19 220:21 220:25 222:18 223:5
Ought [1] 132:11
Ourselves [1] 149:17
Outages [2] 34:1 263:11
Outlined [1] 147:7
Outlook [3] 252:8 253:14 254:10
Outperform [1] 77:13
Outset [1] 156:6
Outside [5] 36:20 66:3 80:16 210:22 254:5
Outstanding [4] 93:19 97:12 97:25 157:9
Outstrip [1] 58:23
Outstripping [1] 22:19
Overall [16] 16:2 22:16 88:1 92:1 92:23 119:18 120:3 141:6 160:1 175:18 195:21 198:13 207:2 233:15 234:12 250:10
Overearning [1] 21:7
Overemphasis [1] 260:19
Overemphasized [1] 249:2
Overlooked [1] 247:24
Overreaction [1] 249:7
Overrecovery [1] 104:20
Overview [1] 16:2
Overwhelmingly [2] 116:13 171:6
Own [8] 29:10 29:22 75:10 77:9 79:25 166:4 166:16 167:8
Owned [4] 26:18 27:12 165:6 210:22
Owning [2] 39:23 167:17
Owns [2] 167:21 212:15

P

P.O. [1] 2:13
Pace [1] 249:7
Page [78] 3:2 45:13 53:20 53:21 57:1 57:8 57:12 57:20 58:16 62:5 62:10 66:17 66:22 70:3 71:1 86:2 90:25 91:4 96:24 112:2 124:15 125:5 125:9 129:18 129:18 129:19 130:1 130:25 132:3 132:4 133:5 134:14 155:12 161:14 161:15 161:16 163:17 170:5 182:16 182:21 182:23 187:5 187:24 188:8 188:10 188:11 188:18 193:15 193:16 196:22 202:2 202:3 203:14 204:3 207:11 212:25 213:10 216:5 219:8 220:7 220:14 222:4 222:17 223:10 223:13 229:8 229:10 229:14 230:23 230:23 233:4 233:7 236:2 241:24 256:16 258:22 259:9 259:25
Pages [10] 51:20 53:22 75:23 84:17 153:23 177:7 216:14 219:10 240:25 241:25
Pagewise [1] 87:1
Paginated [1] 112:9
Paid [4] 45:2 160:9 179:20 244:5
Pan [1] 168:15
Paper [2] 45:13 123:16
Papers [1] 139:4
Paragraph [7] 62:12 70:5 211:18 211:25 212:7 212:10 219:7
Pardon [4] 26:12 171:17 216:17 221:18
Parent [3] 98:17 98:22 234:13
Part [15] 62:11 110:11 152:9 161:18 168:8 190:8 194:12 194:24 200:22 200:23 203:12 206:12 208:13 217:6 227:3
Participate [1] 8:19
Participating [1] 7:14
Particular [17] 20:10 38:8 42:24 43:2 94:21 123:22 125:4 147:5 156:24 163:17 169:14 170:2 189:23 195:19 195:23 242:17 250:18
Particularly [4] 102:21 186:16 249:23 259:16
Parties [6] 6:23 9:7 12:15 16:9 23:23 75:15
Parties' [1] 33:4
Partly [2] 111:17 111:18
Partner [1] 214:17
Parts [3] 244:6 250:5 251:11
Party [2] 14:16 14:23
Party's [1] 32:21
Pass [2] 61:20 61:25
Past [8] 34:20 58:9 82:11 116:9 130:21 137:22 169:10 183:16
Patent [1] 212:16
PATRICK [1] 2:21
Pattern [4] 193:18 193:20 245:14 246:5
Paul [5] 4:6 241:2 241:9 241:17 242:8
Pay [16] 71:7 71:16 72:2 114:2 116:5 136:25 137:3 159:6 159:24 172:20 175:8 179:15 179:18 197:23 198:1 225:5
Paying [1] 251:13
Pays [1] 180:22
PBR [2] 25:4 25:8
Peak [5] 100:24 101:2 245:18 253:22 263:4
Peaked [2] 144:19 189:3
Peaking [1] 82:11
Peaks [1] 77:19
Pearce [140] 2:11 2:12 3:5 3:10 3:15 3:19 3:23 4:3 4:5 4:7 7:18 7:20 7:20 7:21 8:9 8:11 8:16 8:17 13:20 13:23 15:3 15:4 19:14 50:7 50:8 50:11 50:14 50:15 50:18 50:22 54:13 56:20 56:23 56:24 57:10 57:14 57:17 57:24 60:17 60:19 64:7 72:20 72:22 81:16 81:25 84:9 84:10 84:13 85:16 85:17 87:19 88:18 91:17 91:18 107:20 107:22 118:21 118:22 119:4 119:12 119:13 119:15 119:24 124:1 124:14 124:18 129:7 129:9 136:16 138:6 138:7 139:1 139:3 139:7 139:9 139:15 139:17 141:17 146:1 146:5 146:6 146:12 150:15 150:16 150:21 150:22 151:10 151:16 152:6 152:11 152:12 153:2 153:13 153:20 153:21 155:9 161:7 161:11 186:20 186:23 186:25 187:3 188:7 188:11 188:14 191:10 194:5 194:6 194:8 194:17 194:19 195:9 195:11 195:13 196:8 196:10 207:9 219:25 220:1 220:22 220:24 237:1 237:3 237:6 239:10 239:11 240:20 240:22 241:2 241:9 241:15 241:21 242:6 255:19 255:20 261:23 265:6 265:7 266:9 266:18
Peel [1] 117:19
Penalties [4] 35:2 35:5 47:10 47:11
Penalty [6] 17:2 36:1 36:2 36:5 36:7 36:8
Pension [9] 36:21 37:17 42:6 42:15 43:8 43:13 43:16 44:16 87:9
Pensions [3] 37:16 37:16 42:18
People [25] 9:18 44:14 45:23 46:15 46:16 60:10 133:12 150:1 165:17 165:23 172:22 177:2 178:9 181:23 186:12 191:2 194:23 198:1 198:8 198:15 217:5 227:19 235:24 260:3 261:3
People's [1] 226:5
Per [15] 31:18 45:18 45:20 107:10 107:10 107:11 107:12 244:2 245:4 245:8 245:8 245:10 245:12 253:17 254:11
Perceive [1] 166:22
Perceived [1] 112:24
Percent [179] 19:25 20:5 20:7 20:9 20:12 20:23 24:17 25:6 25:19 27:18 37:2 37:6 37:7 37:10 37:23 38:11 39:6 40:2 48:8 48:9 53:8 62:25 63:1 63:1 63:3 63:6 80:23 81:1 81:19 81:20 86:8 86:10 86:22 92:2 92:3 92:6 92:15 92:16 93:22 94:21 94:23 94:25 95:3 95:7 95:9 95:17 95:17 95:17 96:16 97:21 99:8 101:22 101:23 102:5 102:11 102:14 102:14 103:20 104:5 104:15 105:3 108:3 108:5 108:8 108:12 108:14 108:15 108:16 108:16 109:6 109:8 109:16 112:16 112:17 113:4 113:6 115:15 115:17 115:23 115:24 116:15 120:7 121:17 123:5 123:6 124:25 125:6 125:7 125:13 125:19 126:4 126:7 130:3 131:15 131:22 132:1 132:17 133:6 135:11 135:14 135:22 137:9 141:4 141:6 141:7 143:10 157:24 162:10 163:4 163:5 163:10 163:13 164:2 164:5 164:8 164:9 164:12 164:14 164:18 164:21 165:1 166:8 169:21 171:3 178:15 178:23 178:25 179:7 179:11 179:12 179:13 179:22 179:24 179:25 180:18 183:1 183:3 183:6 183:8 183:20 185:3 185:8 199:7 199:9 199:10 199:13 200:11 200:13 200:15 207:17 207:20 207:23 207:24 208:11 208:12 208:18 212:15 212:22 218:5 221:13 222:7 222:7 222:19 223:4 223:19 223:24 224:14 233:10 233:11 246:23 247:10 247:11 248:1 248:2 250:5 250:6 250:25 250:25 253:6
Percentage [12] 20:15 21:25 49:16 79:10 86:13 88:22 91:4 95:5 161:23 169:24 170:22 199:4
Perception [3] 120:8 127:21 127:22
Perceptions [1] 226:5
Perfect [2] 20:18 254:23
Perfectly [1] 160:5
Perform [1] 252:11
Performance [3] 25:9 222:21 222:24
Performance-based [2] 222:21 222:24
Performed [1] 218:4
Perhaps [7] 50:18 60:20 78:18 118:11 122:12 174:23 230:12
Period [38] 55:24 62:14 62:18 97:13 129:2 132:25 143:13 145:1 158:18 159:17 181:25 182:6 183:15 183:25 189:8 189:20 191:25 193:5 193:22 201:16 219:14 222:2

222:9 222:15 224:1 224:7 224:10 224:16 225:25 226:4 226:8 231:14 234:3 238:1 238:7 247:23 257:12 263:4
Periods [3] 231:10 244:9 244:24
Perjury [4] 17:2 139:12 151:6 241:12
Person [1] 65:13
Personal [2] 10:1 77:9
Perspective [1] 172:7
Pertains [1] 104:7
Ph.D [1] 154:15
Ph.D. [1] 154:5
Phenomenon [1] 218:6
Philosophy [4] 76:14 76:19 77:9 80:3
Phrased [1] 122:12
Pick [4] 101:8 197:22 198:3 237:22
Picked [4] 102:5 112:13 122:21 170:1
Pie [1] 79:21
Piece [3] 79:21 109:20 110:1
Pike [1] 149:22
Pinnacle [3] 124:20 125:19 164:2
Pipeline [1] 99:1
Pipelines [1] 169:9
Place [13] 6:9 31:22 32:3 32:11 35:3 59:4 63:21 100:15 161:22 184:3 185:5 186:15 205:20
Places [2] 18:5 59:13
Plains [3] 124:21 125:18 164:11
Plan [6] 5:11 37:19 44:6 44:10 45:16 63:12
Plane's [1] 118:17
Planned [1] 58:23
Planning [1] 138:2
Plans [2] 73:14 104:11
Plant [26] 21:23 22:19 23:4 33:25 36:24 47:15 128:7 158:17 159:18 159:20 159:23 165:17 165:22 165:23 168:3 168:25 169:4 172:25 173:4 173:7 185:14 186:11 214:14 214:15 214:18 263:10
Plants [9] 168:20 169:6 210:3 210:4 212:4 232:24 234:2 234:11 263:12
Play [1] 46:21
Players [1] 198:14
Plays [2] 194:14 230:16
Plug [3] 49:10 49:16 49:22
Plus [2] 180:8 180:8
PLW-1 [2] 244:1 255:10
PM [1] 266:20
Pockets [1] 175:6
Point [45] 4:16 16:1 16:21 18:19 19:9 20:16 44:2 48:14 51:3 55:10 66:1 75:7 75:22 79:23 88:18 95:5 96:5 134:9 147:12 160:8 162:7 173:10 173:24 174:3 174:16 174:18 175:15 181:4 182:4 185:2 189:21 189:25 192:2 206:21 216:11 220:12 226:1 226:20 228:25 229:1 229:2 232:1 254:15 255:15 264:6
Pointed [3] 202:25 203:11 204:9
Points [7] 95:4 132:20 137:15 141:10 167:19 187:10 191:12
Policy [2] 90:4 242:11
Pool [1] 5:5
Poor [3] 122:21 122:22 191:25
Population [1] 128:13
Portfolio [5] 9:1 10:4 166:21 167:2 167:13
Portfolios [1] 215:5
Portion [6] 147:6 156:18 157:18 229:25 233:19 244:20
Portions [2] 191:15 233:11
Portray [1] 262:5
Position [25] 21:15 36:10 37:7 38:15 39:17 42:1 46:24 48:3 48:8 48:18 48:23 76:22 83:4 83:16 89:20 96:6 132:24 139:25 141:22 142:1 142:13 142:18 143:4 143:8 174:10
Positive [1] 43:18
Possibility [4] 167:17 169:3 185:25 215:17
Possible [7] 50:14 96:22 137:15 184:16 233:12 233:18 254:5
Possibly [5] 158:9 194:1 208:2 208:3 208:14
Post [2] 37:17 42:6
Post-retirement [3] 42:16 42:18 43:11
Postage [1] 38:6
Postponing [1] 208:16
Potential [5] 63:11 66:11 234:25 236:10 236:16
Potentially [1] 102:1
Power [55] 4:16 9:11 16:1 16:21 18:18 19:9 25:18 33:23 51:3 60:13 63:16 70:7 75:22 78:16 82:10 85:7 85:7 85:12 102:9 106:18 124:21 124:22 125:17 144:12 145:4 145:9 158:1 162:10 163:9 164:11 164:12 166:13 167:7 170:4 170:13 170:25 190:15 192:9 192:9 192:16 192:24 193:23 196:2 210:19 212:20 214:14 214:16 214:18 220:15 220:16 220:20 220:21 220:25 223:3 235:18
Practice [2] 120:21 120:21
Practices [2] 14:19 14:19
Practicing [1] 80:22
Precipitous [1] 140:16
Predict [4] 32:23 110:17 225:7 235:11
Predicting [1] 33:1
Prediction [2] 226:8 235:23
Predictions [1] 226:17
Predictive [3] 115:7 234:25 235:5
Predictor [1] 229:4
Preexisting [1] 94:9
Prefer [1] 77:4
Preferable [1] 50:9
Preferred [1] 22:2
Prefiled [8] 12:16 13:1 13:15 14:5 56:25 75:9 90:5 90:17
Preliminary [2] 16:5 218:21
Premium [14] 113:8 113:11 113:24 114:16 114:20 115:9 136:24 181:15 181:17 181:24 182:4 182:24 182:25 183:4
Premiums [3] 41:3 115:4 183:15
Prepare [1] 90:5
Prepared [4] 18:21 18:22 90:11 242:23
Preponderance [1] 12:9
Presence [2] 126:24 127:23
Present [21] 2:2 8:20 12:21 13:11 15:22 49:2 69:11 78:3 88:21 138:21 139:2 139:22 140:19 145:5 178:6 178:7 178:12 179:14 180:6 219:10 259:5
Present-value [2] 178:6 178:7
Presentation [9] 4:16 13:10 16:1 16:21 19:9 51:4 75:22 87:3 231:21
Presentations [1] 33:4
Presented [3] 9:8 24:13 105:21
Presenting [1] 18:19
Preside [1] 6:19
President [7] 8:24 89:16 89:21 89:22 141:24 242:11 242:13
Pressure [5] 243:24 246:5 253:11 258:5 258:21
Presumably [1] 123:19
Presume [1] 211:14
Pretty [10] 33:15 37:3 37:11 51:21 65:21 119:21 171:22 175:18 196:19 232:17
Prevents [1] 91:3
Previous [6] 48:12 82:8 123:24 135:9 230:23 244:9
Previously [5] 18:11 151:19 154:25 242:2 254:22
Previously-filed [1] 151:19
Price [85] 31:20 33:6 51:24 85:5 85:8 85:13 87:21 88:1 88:3 107:13 107:14 109:4 109:17 110:3 116:6 140:16 143:10 174:23 178:9 179:14 184:11 185:1 190:4 190:7 190:14 190:22 192:12 192:13 192:17 196:19 198:3 198:17 209:11 225:4 225:5 225:8 225:12 225:16 225:18 226:1 226:11 226:13 226:23 226:24 227:2 227:5 227:22 227:25 228:2 228:8 228:10 228:11 228:12 228:13 228:16 228:16 228:17 228:21 228:23 229:5 231:11 244:2 244:16 244:21 244:25 245:3 245:8 245:11 245:12 245:22 248:12 249:9 252:11 254:10 255:5 255:5 255:15 257:11 257:24 258:1 258:5 258:17 258:20 262:16 262:18
Prices [99] 5:4 33:16 52:24 53:4 58:7 65:20 143:19 145:2 145:3 145:10 170:12 189:24 190:10 190:10 191:5 191:8 192:3 192:3 192:5 192:11 192:20 193:2 193:4 193:5 193:8 193:10 193:11 193:19 193:21 193:21 195:22 195:23 195:25 195:25 196:1 196:3 197:21 197:25 210:4 218:5 228:5 228:24 230:13 230:16 230:24 231:5 231:6 231:7 232:1 232:8 232:9 232:17 232:21 235:9 242:19 243:25 244:15 244:19 245:9 245:15 245:16 246:6 246:14 247:1 247:4 248:6 248:12 248:13 248:14 248:19 250:1 250:2 250:15 251:5 251:11 252:13 252:14 252:16 253:11 253:16 253:20 253:22 253:24 254:1 254:3 254:11 254:13 254:14 254:19 256:22 257:4 257:5 257:7 257:8 257:13 257:15 258:4 259:7 262:10
Prima [1] 10:21
Primarily [3] 12:25 144:12 171:6
Primary [1] 140:3
Principal [5] 93:23 94:5 100:25 101:2 101:17
Principle [3] 45:14 76:8 79:22
Printing [1] 38:6
Printout [1] 51:4
Probability [2] 110:13 180:11
Problem [8] 28:14 56:6 118:24 119:3 135:16 164:20 252:7 261:2
Problems [1] 65:3
Procedural [5] 1:23 6:21 12:15 12:19 14:20
Procedure [10] 12:18 13:22 15:19 93:6 111:8 115:8 203:16 203:19 204:5 204:22
Procedures [1] 15:1
Proceed [3] 15:12 108:1 142:10
Proceeding [22] 7:8 12:6 21:3 23:9 24:12 26:1 34:11 34:21 39:8 84:4 92:9 97:9 139:20 142:17 144:11 155:24 164:16 200:19 201:3 201:6 210:17 223:25
Proceedings [8] 6:1 14:10 14:22 18:12 24:25 111:5 155:1 155:3
Proceeds [2] 105:16 209:3
Process [7] 21:5 81:2 93:7 102:5 172:22 214:12 214:13
Processes [1] 185:17
Procuring [1] 36:6
Produce [3] 212:22 239:9 244:13
Produced [1] 260:13
Producers [1] 60:13
Product [3] 85:9 88:2 236:21
Production [16] 29:14 187:14 187:15 187:25 189:2 189:18 195:20 196:21 196:23 196:25 197:16 229:9 229:20 230:1 243:22 246:19
Products [1] 212:14
Professional [2] 154:8 243:2
Professor [1] 154:22
Profit [5] 21:20 21:21 24:10 28:2 211:23
Profitable [3] 102:1 102:2 212:12
Profitably [1] 208:4

Profits [6] 80:24 103:1 184:14 198:19 212:2 212:22
Programs [1] 34:3
Project [1] 53:3
Projected [4] 58:24 189:18 193:24 197:5
Projecting [2] 65:11 74:21
Projection [3] 65:24 196:24 197:13
Projections [13] 31:23 32:10 32:12 32:19 54:3 54:4 54:7 55:13 252:11 254:10 258:14 258:15 258:16
Projects [3] 185:19 253:16 254:11
Pronounce [1] 223:14
Proof [3] 12:7 70:15 70:20
Properly [1] 67:15
Property [8] 11:12 11:16 11:19 11:24 36:20 40:9 40:11 41:11
Proposal [5] 34:23 35:13 35:19 79:10 105:9
Proposals [1] 12:6
Proposed [7] 63:2 95:24 200:19 205:25 223:24 224:12 224:14
Proposing [3] 95:12 133:24 240:24
Protect [2] 40:10 40:12
Protection [1] 127:24
Prove [1] 239:5
Provide [28] 6:18 10:18 11:23 13:21 19:21 23:6 23:21 26:16 26:24 27:10 34:14 36:13 39:12 42:11 47:19 54:21 59:20 74:19 76:9 79:15 126:18 148:13 182:9 209:1 209:24 210:18 256:7 261:23
Provided [9] 30:3 35:16 38:24 49:25 123:11 152:17 161:20 161:20 203:8
Provider [2] 21:1 212:14
Provides [4] 29:7 159:21 205:23 220:25
Providing [3] 49:7 143:16 200:25
Proviso [1] 153:6
Proxy [11] 31:24 32:13 34:10 69:5 124:7 160:20 171:12 207:14 214:22 223:16 223:17
PSC [5] 4:16 6:25 12:8 12:20 202:13
PSC's [1] 79:19
PU-399-01-186 [1] 1:6
Public [44] 1:3 1:17 2:7 2:22 5:12 6:9 6:12 6:18 7:5 8:22 10:14 11:5 11:6 11:8 11:13 11:20 11:25 12:10 13:5 17:21 18:8 24:13 24:23 90:3 95:11 104:13 130:10 135:17 135:18 142:14 144:5 144:8 154:6 154:17 174:15 209:20 209:23 218:15 218:17 218:23 219:1 219:22 220:13 224:9
Publicly [1] 174:21
Published [1] 242:23
Pumped [2] 115:15 117:20
Punishable [1] 17:3
PUR [1] 237:7
Purchase [1] 225:12
Purchasing [1] 225:17
Pure [1] 238:24
Purely [1] 114:24
Purpose [5] 37:4 52:5 107:3 121:22 243:14
Purposes [10] 34:21 47:10 70:1 93:2 98:12 99:24 157:2 172:4 181:24 228:3
Pursue [1] 57:16
Pursuing [1] 212:20
Pushing [1] 250:9
Put [17] 30:8 50:16 61:15 72:17 116:8 130:9 133:1 136:3 167:1 172:6 185:6 185:9 191:5 205:19 240:24 246:5 265:19
Puts [1] 176:8
Putting [1] 185:6

Q

Quandary [1] 56:5
Quantified [3] 39:16 145:14 236:22
Quantify [1] 39:22
Quantifying [1] 39:13
Quarter [4] 98:23 189:4 248:2 248:3
Quarters [3] 98:24 185:11 253:18
Questioned [2] 45:1 76:25
Questions [70] 10:5 10:5 13:2 13:6 13:7 13:7 13:23 13:24 14:1 14:2 14:25 15:6 19:1 50:23 60:17 60:21 60:25 61:1 61:5 72:4 73:4 75:4 80:6 81:10 81:13 82:20 84:9 84:11 85:18 87:14 88:9 90:13 129:7 129:10 129:13 134:22 136:10 136:16 138:17 138:18 146:1 146:12 146:16 149:5 149:7 150:12 150:15 150:17 191:9 194:7 194:24 196:11 221:9 224:17 224:19 224:20 224:22 234:19 237:2 240:12 240:14 240:15 255:19 255:21 259:19 259:21 261:10 264:18 264:23 265:3
Quibbling [1] 204:1
Quick [1] 73:4
Quickly [3] 219:5 244:24 245:10
Quite [22] 28:17 33:11 52:13 77:17 79:12 100:20 101:22 115:25 115:25 137:15 137:21 159:16 169:8 170:11 181:21 184:15 189:7 189:19 193:4 197:11 204:1 232:12
Quitting [1] 266:6
Quote [4] 51:21 52:15 170:5 211:15
Quotes [1] 174:14
Qwest [2] 165:12 165:18

R

Radio [1] 136:2
Raise [9] 159:18 172:19 172:20 173:1 173:23 173:25 174:11 200:21 234:9
Raised [1] 175:3
Ramble [1] 55:6
Ran [1] 135:13
Randomly [1] 110:13
Range [14] 52:6 102:13 103:10 103:11 223:11 237:16 244:15 245:17 246:11 246:15 252:16 253:19 253:21 257:2
Ranges [1] 237:10
Ranging [2] 237:9 237:18
Rapidly [1] 189:3
Rare [1] 100:19
Rarely [2] 133:14 260:23
Rate [135] 11:15 11:18 11:23 12:1 12:11 18:11 19:24 19:25 20:6 20:10 21:22 21:24 22:3 22:3 22:9 22:11 22:12 22:17 22:21 22:22 22:23 22:25 23:3 23:8 23:11 23:12 23:14 23:16 23:19 23:20 23:22 23:25 24:7 24:12 24:17 24:24 26:1 26:1 28:4 28:7 28:12 28:12 30:4 48:5 48:6 48:9 49:17 76:21 77:15 77:19 83:5 91:22 91:23 92:1 92:11 92:21 92:23 93:2 93:8 93:12 94:17 95:9 95:25 97:19 99:9 102:23 107:5 108:5 108:8 108:10 111:2 111:4 111:10 112:13 112:15 113:1 113:4 113:5 116:23 116:24 116:25 127:20 128:18 128:19 133:12 137:7 137:10 141:1 141:3 141:6 142:15 146:20 148:21 154:19 154:25 157:16 163:8 163:19 164:7 165:4 166:4 167:6 167:9 167:16 172:9 173:3 176:10 181:16 183:10 199:3 199:12 199:13 199:15 200:25 201:18 203:2 203:3 203:4 205:14 206:18 206:24 206:25 208:10 208:17 209:15 209:25 213:7 213:18 221:11 223:5 223:19 223:23 238:15 238:22 248:1
Rate-of [1] 111:10
Rate-of-return [2] 106:20 217:7
Ratemaking [5] 44:12 47:13 55:22 69:25 81:2
Ratepayers [10] 46:10 71:7 71:25 77:20 78:22 81:1 96:8 96:19 159:22 236:17
Rates [60] 11:22 20:16 20:20 21:18 33:20 34:10 34:11 45:21 51:13 55:1 55:12 55:18 55:19 55:23 69:6 74:15 77:5 77:15 78:18 79:14 93:13 100:2 100:4 102:12 103:9 110:23 111:10 111:14 111:19 111:21 111:22 112:19 121:15 121:18 121:20 136:22 139:24 142:19 142:23 143:8 143:12 145:20 145:23 147:5 158:19 158:22 159:5 159:19 162:14 162:24 163:1 171:13 174:15 191:21 192:1 210:19 214:11 217:1 219:11 239:3
Rather [12] 15:24 34:24 50:12 55:9 85:6 106:21 110:9 113:14 123:18 126:1 185:6 244:23
Rating [3] 174:6 174:7 174:9
Ratings [1] 99:12
Ratio [4] 27:4 27:5 107:12 175:18
Rationalize [1] 123:25
Ratios [2] 107:1 108:20
Reached [2] 14:9 193:5
Reacquisition [12] 120:17 136:23 156:25 157:1 157:3 157:6 157:16 158:12 159:15 160:8 160:10 160:15
Reacting [2] 149:20 263:9
Reaction [1] 260:22
Read [17] 9:9 32:2 60:7 62:7 91:6 92:7 135:1 142:8 153:22 204:2 209:21 211:18 211:25 212:8 213:6 213:15 219:7
Reading [9] 9:24 33:5 42:8 63:20 147:23 148:6 148:11 191:16 212:6
Reads [1] 91:2
Ready [2] 139:2 147:11
Real [21] 104:5 104:6 105:17 114:16 132:5 148:18 158:11 163:14 190:10 190:14 191:8 195:25 248:20 248:22 248:24 249:1 260:2 260:5 260:6 261:5 263:6
Real-time [8] 248:20 248:22 248:24 249:1 260:2 260:5 260:6 261:5
Realize [4] 59:23 114:8 190:3 197:4
Realized [1] 55:8
Really [54] 16:25 23:19 28:11 28:14 49:8 59:21 60:12 61:19 65:9 65:24 98:22 110:24 113:2 115:25 117:6 118:6 131:5 134:4 134:15 149:20 149:22 156:21 158:13 159:12 159:17 160:17 160:23 165:24 166:10 167:22 168:24 169:19 170:16 173:14 174:21 175:2 177:7 182:7 184:24 185:2 186:7 192:7 194:15 195:12 207:2 209:19 217:16 227:13 236:18 240:2 240:3 261:6 262:6 263:4
Reason [28] 38:10 53:19 59:25 65:2 98:16 100:22 105:8 108:21 122:22 124:2 126:15 126:21 127:4 128:11 137:6 137:16 150:4 156:19 172:11 178:20 181:7 186:5 202:21 203:7 210:13 217:7 234:9 237:25
Reasonable [24] 10:17 11:18 11:23 12:3 28:15 38:13 40:3 53:3 53:11 54:24 55:11 74:21 141:3 143:19 144:7 150:6 160:5 164:15 170:1 173:22 173:24 173:25 174:11 183:11
Reasonableness [4] 142:23 145:20 157:20 214:7
Reasonably [2] 99:13 171:12
Reasoned [1] 122:7
Reasons [18] 44:11 65:1 92:17 92:20 96:11 100:13 104:1 111:19 117:10 126:25 140:14 140:15 144:21 145:6 167:24 171:11 214:12 252:12
Rebound [1] 258:13
Rebuttal [53] 4:14 4:19 12:17 12:24 13:16 15:16 16:12 18:18 21:11 23:11 23:17 33:9 44:6 47:4 57:20 57:23 57:25 58:16 66:20 70:4 83:10 86:5 90:6 90:19 92:7 102:15 109:20 124:13 124:15 124:16 129:20 129:22 131:2 152:15 152:20 156:10 163:20 163:22 163:23 188:5 188:6 199:25 200:3 200:4 202:10 202:19 203:14 204:3 211:2 212:25 213:1 231:22 258:23
Rebutting [1] 106:17
Recaptured [1] 104:17

Recaptures [1] 109:18
Receive [3] 44:8 178:9 178:11
Received [10] 6:17 10:14 21:8 72:25 90:1 97:9 131:3 178:1 178:2 178:6
Receives [1] 105:17
Receiving [1] 154:9
Recent [20] 5:9 20:25 31:2 34:13 34:13 36:25 51:14 54:21 55:14 58:25 110:3 170:8 183:20 184:5 184:20 216:22 217:4 218:5 244:6 257:23
Recess [11] 60:20 60:22 60:24 118:12 119:9 119:11 194:20 195:4 195:8 266:14 266:19
Recessed [1] 266:20
Recession [14] 56:10 73:11 73:12 73:15 128:22 128:24 135:25 140:20 187:12 187:13 189:16 195:22 216:23 216:24
Recessionary [1] 129:1
Recessions [2] 113:23 217:10
Recognize [2] 173:9 176:11
Recognized [1] 95:22
Recognizing [1] 52:17
Recollection [1] 240:1
Recommend [7] 34:6 38:12 86:1 92:12 94:22 103:11 118:3
Recommendation [8] 27:1 64:23 81:19 81:22 81:23 84:1 92:18 142:14
Recommendations [1] 64:10
Recommended [8] 92:5 92:21 108:5 185:11 199:7 221:13 222:8 224:5
Recommending [7] 35:13 51:25 64:10 91:22 91:23 92:1 112:16
Recommends [2] 92:14 202:13
Record [35] 6:2 6:6 6:24 14:8 16:10 16:13 17:14 25:7 40:5 41:21 42:9 43:20 53:15 56:15 60:23 63:21 73:8 85:25 86:11 89:9 139:5 139:6 139:21 142:9 153:18 176:21 195:3 202:25 219:7 229:2 238:10 242:4 247:23 250:19 250:23
Recorded [4] 14:11 68:4 71:15 147:22
Records [1] 60:11
Recover [7] 127:18 128:6 156:23 156:23 157:1 205:10 205:17
Recovered [4] 93:24 93:25 94:12 94:17
Recovering [1] 10:16
Recovery [4] 104:22 132:10 134:4 258:8
Recross-examination [4] 3:15 4:5 84:12 239:14
Recurrence [1] 254:23
Red [4] 27:19 28:6 28:21 38:8
Redirect [9] 3:14 3:16 3:20 4:5 81:11 81:14 87:16 136:14 237:5
Redo [1] 55:8
Reduce [24] 12:11 20:16 35:11 47:6 67:17 74:15 76:5 83:17 83:18 83:19 96:11 96:18 96:21 118:6 138:3 142:19 143:24 145:23 176:5 176:8 206:10 206:21 215:12 215:15
Reduced [7] 21:14 48:17 78:18 98:3 144:20 247:3 259:6
Reduces [3] 67:13 167:23 215:15
Reducing [2] 120:6 247:7
Reduction [8] 67:10 73:23 76:5 83:6 83:6 83:13 95:13 246:13
Refer [9] 17:20 57:18 75:20 181:18 193:20 202:2 211:1 222:17 254:22
Reference [8] 40:23 57:7 96:24 171:23 196:21 198:25 212:24 213:9
Referred [8] 16:13 52:16 81:25 164:1 181:20 222:20 229:10 255:4
Referring [6] 54:2 54:10 54:11 123:8 123:10 176:4
Refers [3] 62:19 62:19 155:14
Refinance [10] 137:4 137:12 158:25 159:1 160:14 206:24 207:22 233:9 233:13 233:19
Refinanced [4] 122:9 137:14 159:9 159:11
Refinancing [5] 124:3 124:5 136:24 206:1 208:6
Refinancings [1] 122:17
Reflect [14] 23:13 24:4 41:22 47:18 48:7 51:12 67:15 79:14 99:4 156:20 157:12 218:6 231:8 231:8
Reflected [6] 98:5 148:7 148:25 167:5 178:8 244:1
Reflecting [1] 143:2
Reflects [11] 53:24 60:12 95:14 96:8 137:13 158:2 177:20 218:4 218:4 226:2 231:9
Reformers [1] 212:17
Refresh [1] 24:14
Refunded [4] 122:23 122:24 122:25 123:23
Refunding [5] 93:17 122:1 122:23 123:13 123:20
Refunds [1] 80:15
Regard [8] 14:14 27:9 34:6 88:22 98:9 139:11 151:6 158:11
Regarding [9] 6:13 142:13 142:22 189:23 203:3 203:4 241:12 248:23 260:2
Region [6] 62:12 62:16 62:17 229:21 231:4 262:24
Regional [3] 5:11 63:15 70:10
Regions [4] 229:24 230:14 230:15 251:2
Regular [1] 26:1
Regularly [1] 189:5
Regulated [31] 20:25 22:5 28:3 28:5 28:8 28:17 47:1 47:20 47:24 49:19 76:3 98:23 99:4 99:9 101:21 102:11 103:4 107:6 116:20 125:14 126:16 126:24 127:23 144:3 144:5 171:3 171:7 175:25 217:2 219:12 251:20
Regulation [10] 21:20 21:21 24:10 25:10 28:3 33:24 126:19 203:3 222:21 222:25
Regulations [7] 34:2 99:10 202:23 203:1 203:4 203:9 203:12
Regulator [1] 228:21
Regulators [3] 103:1 116:23 252:5
Regulatory [11] 7:24 36:22 40:17 76:14 76:20 77:11 77:24 206:16 210:6 219:14 236:1
Reinbold [49] 2:4 3:11 3:20 3:24 4:9 8:23 9:15 9:16 72:7 73:2 73:3 73:6 74:23 75:2 128:23 134:24 134:25 135:4 136:4 136:9 149:9 149:11 150:9 150:11 150:24 155:4 161:14 171:15 171:18 171:22 240:14 240:15 241:1 263:23 263:24 264:2 264:5 264:10 264:12 264:19 264:21 264:24 265:2 265:14 265:16 265:22 266:4 266:11 266:12
Reinvestment [1] 104:11
Reject [1] 103:25
Relate [1] 229:21
Related [6] 70:6 84:11 160:18 169:7 212:14 242:18
Relates [1] 93:16
Relation [2] 58:19 116:2
Relationship [1] 201:13
Relative [7] 114:22 133:20 195:23 248:12 257:11 257:15 257:17
Relatively [8] 100:19 217:14 230:4 245:6 245:12 246:25 248:6 250:1
Relax [1] 136:3
Relevance [2] 72:24 186:3
Relevant [9] 12:5 35:20 117:3 162:17 164:4 164:15 185:4 185:12 220:2
Reliability [7] 5:7 61:12 61:13 61:16 72:14 72:18 72:24
Reliable [3] 143:17 196:4 209:24
Reliance [3] 31:23 32:4 32:12
Relief [2] 248:13 248:15
Relies [1] 32:9
Rely [2] 58:9 83:14
Relying [2] 32:8 58:13
Remain [4] 35:14 37:14 46:23 254:2
Remained [1] 244:15
Remaining [6] 35:23 35:25 103:9 103:12 223:8 223:9
Remains [6] 42:2 73:9 81:23 96:13 252:21 253:4
Remember [6] 40:23 46:3 46:3 87:2 97:16 106:15
Remembers [2] 158:17 158:18
Rents [1] 36:23
Repaid [1] 97:17
Repeat [1] 254:17
Repeated [2] 133:23 156:10
Replace [1] 163:11
Replaced [1] 164:6
Replaces [1] 164:16
Reply [1] 120:25
Report [13] 1:6 6:15 61:11 61:23 62:1 64:16 121:15 121:25 219:23 220:13 222:4 237:7 237:9
Reported [12] 19:22 24:11 24:18 27:15 28:4 31:5 31:6 31:7 31:8 31:9 47:22 67:11
Reporter [3] 10:10 63:25 218:11
Reports [9] 5:12 59:17 64:20 211:3 218:15 218:18 218:23 219:2 224:9
Represent [4] 256:2 256:3 256:6 263:16
Representative [2] 171:12 255:2
Represents [5] 41:9 44:16 54:4 145:24 198:13
Repurchased [1] 93:17
Repurchasing [1] 94:9
Request [5] 4:23 6:17 39:2 152:16 152:17
Requesting [1] 95:6
Require [4] 80:22 166:3 167:10 203:1
Required [13] 17:1 22:4 24:10 48:7 49:18 58:5 80:23 86:20 105:13 164:14 164:17 165:4 167:6
Requires [2] 36:12 180:22
Reruns [1] 44:21
Resale [46] 29:1 30:9 30:11 30:15 30:16 30:18 30:19 31:6 31:25 32:14 33:14 33:19 34:7 35:9 47:6 49:22 51:17 52:2 52:8 52:12 53:21 53:24 54:11 54:23 56:18 58:20 65:4 74:22 82:2 82:7 82:18 84:24 87:24 170:7 170:9 170:11 170:17 170:21 171:8 187:6 195:15 196:16 196:18 227:20 261:18 262:4
Research [3] 154:11 154:12 242:23
Researched [1] 60:5
Reserve [5] 40:10 40:12 62:23 111:18 121:15
Reset [1] 77:15
Residences [1] 256:4
Residential [2] 244:4 259:16
Resource [2] 62:4 63:18
Resources [23] 29:12 30:1 59:7 59:8 59:9 59:13 60:8 63:13 63:14 108:13 174:21 190:17 207:3 207:17 207:21 208:13 208:20 215:2 233:13 233:25 234:7 234:12 243:13
Respect [10] 93:14 98:11 103:14 109:22 111:2 117:7 167:15 186:13 251:5 259:16
Respective [1] 93:12
Respectively [3] 92:25 126:4 251:1
Respects [1] 169:1
Respond [7] 12:25 13:1 15:20 59:12 73:16 156:2 156:14

Responded [1] 98:2
Respondent [1] 6:25
Responding [1] 214:5
Response [13] 13:15 76:15 81:16 84:14 121:5 125:8 152:17 156:9 184:22 195:14 202:24 247:6 258:21
Responses [1] 70:11
Responsible [3] 48:21 123:14 242:15
Rest [6] 37:11 84:3 96:13 109:8 138:22 138:23
Rests [1] 3:5
Result [17] 12:2 12:13 70:8 87:25 99:2 104:14 109:16 110:22 114:15 134:13 173:3 193:22 209:11 243:24 244:14 246:14 247:8
Resulted [4] 19:25 209:2 248:8 249:9
Resulting [6] 34:11 76:7 123:23 138:13 140:21 141:6
Results [22] 21:8 28:4 31:23 32:9 32:12 32:16 34:9 34:13 54:21 67:9 67:11 75:19 102:23 133:19 134:3 162:16 163:14 163:16 191:24 218:25 219:10 238:8
Resume [1] 112:9
Retail [6] 29:1 29:4 29:6 29:10 210:18 210:23
Retired [2] 123:3 123:3
Retirement [2] 37:18 42:7
Retreat [1] 252:14
Retreated [1] 245:9
Return [139] 10:17 11:15 11:19 11:23 20:5 20:13 21:9 21:24 22:3 22:3 24:10 24:17 25:6 25:19 26:3 26:7 28:15 28:15 28:20 48:7 48:9 48:11 48:12 49:15 49:16 49:17 56:4 76:1 91:22 91:23 92:2 92:11 92:14 92:15 92:21 92:23 93:3 93:4 93:8 93:13 94:18 98:15 99:9 99:25 100:3 100:4 102:12 102:24 103:10 103:20 105:13 106:21 106:22 107:5 107:13 108:5 108:8 108:10 108:18 108:23 108:25 109:8 109:9 109:14 109:14 109:15 110:1 110:23 111:2 111:4 111:11 111:21 111:22 112:13 112:15 112:22 115:14 115:15 115:20 115:24 116:3 116:12 116:24 117:11 117:18 117:21 117:24 120:15 124:25 127:21 137:9 141:1 141:4 141:7 144:5 144:7 144:10 147:2 157:16 160:18 163:19 164:4 164:8 164:14 164:17 165:4 166:4 167:6 167:10 167:16 173:4 173:18 176:10 180:18 181:16 183:11 185:9 185:20 186:1 186:13 199:18 201:1 201:18 201:21 201:23 203:2 205:24 209:2 209:16 209:25 213:7 213:18 219:12 221:12 223:23 237:10 237:22 238:15 238:23
Return-to-book [1] 115:20
Returned [3] 92:3 92:5 117:25
Returns [21] 20:7 101:12 109:4 112:20 113:10 113:16 113:17 117:2 145:13 183:19 183:20 184:8 184:19 184:23 185:13 185:23 186:5 186:6 186:15 201:20 237:23
Revenue [30] 10:16 12:11 29:2 49:10 65:12 70:5 75:23 83:6 83:12 83:17 83:18 83:19 99:8 101:21 102:11 125:13 125:19 126:5 126:13 137:13 139:23 142:25 143:4 147:15 161:24 162:11 164:13 164:21 165:1 171:3
Revenues [30] 28:6 28:23 29:4 29:13 31:18 47:12 48:15 64:11 64:13 70:16 70:18 70:18 70:21 76:5 76:7 79:19 99:14 125:6 125:22 144:16 163:5 163:10 164:3 164:9 166:9 169:25 170:23 207:13 208:12 232:2
Reverse [2] 128:20 128:25
Review [1] 24:24
Reviewed [3] 14:11 40:18 218:25
Revising [1] 217:7
Revision [2] 92:4 135:21
Richardton [1] 148:9
Rid [2] 117:24 208:8
Ridiculous [3] 113:25 114:15 174:13
Rights [2] 14:17 14:18
Rigs [6] 246:9 246:10 246:13 246:15 256:25 260:23
Rise [3] 144:11 247:2 252:15
Risen [1] 143:10
Rising [1] 189:3
Risk [39] 100:9 100:12 101:5 113:8 113:11 113:24 114:16 114:19 114:22 115:3 115:8 126:9 126:22 126:23 127:22 162:13 165:24 166:22 166:24 166:25 167:13 167:18 167:23 168:8 168:9 168:11 168:14 169:7 181:14 181:17 182:3 182:24 185:20 215:18 217:24 217:25 227:17 227:22 236:10
Riskier [1] 102:24
Risks [8] 33:21 166:6 168:4 168:24 169:2 215:12 215:15 217:2
Risky [3] 100:14 101:11 217:14
Rita [1] 8:1
Robust [1] 248:21
Rocketing [1] 245:23
ROE [10] 48:8 221:13 222:6 222:8 223:4 223:24 224:4 224:5 224:13 224:14
ROEs [3] 223:11 224:12 224:13
Role [2] 194:14 263:2
Rolled [2] 166:5 177:4
Roman [1] 219:8
Roof [1] 113:2
Room [5] 6:10 8:5 9:6 33:4 44:14
Roughly [3] 244:16 248:14 257:13
Round [1] 33:13
Rounding [1] 105:4
Row [1] 257:13
RTO [1] 70:4
Rules [1] 14:20
Run [8] 49:23 53:17 53:18 114:9 114:10 114:11 136:18 235:8
Running [1] 247:9

S

S&P [1] 183:21
Safe [1] 143:17
Safety [1] 34:2
Salaries [3] 36:19 37:9 37:9
Sale [2] 171:8 212:19
Sales [69] 5:5 9:11 29:1 29:1 29:6 29:10 29:15 29:23 30:9 30:11 30:14 30:16 30:17 31:6 31:25 32:14 33:1 34:6 34:20 47:6 49:22 51:17 52:2 54:23 65:3 66:11 70:13 74:3 74:8 74:22 76:19 78:16 79:6 80:12 80:24 80:25 82:2 82:7 82:13 82:15 84:19 87:23 87:24 127:5 140:6 140:6 140:10 140:13 144:17 145:15 149:19 170:7 170:8 170:9 170:11 170:17 170:21 171:8 171:9 187:6 195:15 196:16 196:18 210:16 210:21 227:20 232:2 232:7 232:17
Sanity [2] 111:6 111:9
Sat [1] 111:5
Satisfies [2] 74:24 246:23
Saturday [1] 42:12
Save [1] 147:19
Savings [4] 39:22 70:12 76:7 208:18
Saw [8] 95:7 114:4 239:24 245:1 253:22 254:19 257:1 257:17
Scale [1] 201:12
Scared [1] 46:16
Scenario [2] 207:22 254:23
Schedule [35] 12:16 12:19 40:19 40:24 41:3 41:19 47:2 47:12 70:6 70:22 111:11 112:4 125:5 125:9 125:11 151:23 152:2 152:14 161:5 161:16 164:23 169:18 187:24 188:8 188:18 193:15 196:21 207:11 207:12 229:9 229:10 229:13 230:23 233:5 233:7
Scheduled [3] 6:9 11:7 11:8
Schedules [1] 12:1
Schiffman [5] 13:18 144:24 194:15 230:14 232:21
School [1] 154:14
Schulz [2] 2:16 7:25
Science [3] 33:3 53:1 74:10
Season [3] 243:17 246:24 253:10
Seated [2] 88:20 151:2
Second [9] 57:22 92:24 160:17 178:5 183:17 189:21 246:21 248:2 253:17
Section [1] 62:20
Sector [1] 187:16
Security [3] 37:19 44:6 45:16
See [50] 9:16 19:23 20:8 23:2 27:3 28:8 28:16 30:22 35:17 37:5 42:24 43:16 52:12 64:13 65:3 67:23 74:21 75:8 76:3 77:5 95:4 102:18 109:5 111:12 111:15 115:19 133:4 136:12 147:1 148:4 159:12 162:9 162:18 164:22 173:16 178:4 182:14 189:1 189:7 190:23 192:19 193:17 193:19 207:18 216:4 238:23 246:9 254:13 260:21 264:6
Seeing [3] 43:5 191:2 260:5
Seem [1] 125:25
Selected [2] 5:8 101:12
Selecting [1] 99:7
Selection [4] 93:1 98:12 101:18 118:1
Selections [1] 99:16
Sell [18] 98:21 105:11 105:14 145:9 190:5 190:6 190:6 190:11 193:23 196:1 198:11 209:3 225:5 227:20 227:21 228:1 230:6 235:18
Seller [2] 198:3 198:6
Sellers [1] 255:14
Selling [9] 65:6 82:18 103:17 104:7 105:6 144:12 191:3 192:18 230:7
Sells [2] 98:18 133:18
Sense [9] 36:7 55:24 126:10 126:10 127:10 143:15 149:17 191:4 195:25
Sentence [2] 213:6 213:15
Sentences [2] 62:4 62:7
Separate [4] 146:7 152:5 152:7 188:3
Separately [1] 168:13
September [9] 10:13 10:20 10:24 197:24 219:15 224:11 238:3 238:9 238:11
Series [2] 51:20 99:6
Serious [4] 30:23 30:23 246:8 256:20
Serve [5] 6:21 17:17 127:11 165:17 165:23
Served [3] 10:22 10:23 11:4
Service [44] 1:3 1:17 2:7 2:22 6:9 6:12 6:18 7:5 8:22 10:14 10:19 11:13 11:16 11:20 11:24 12:10 13:5 17:21 21:1 22:19 23:5 23:6 24:23 35:6 38:2 38:3 70:6 125:14 126:19 127:24 142:14 143:17 144:8 148:14 148:16 159:20 159:22 173:13 173:14 199:20 209:23 209:24 210:23 251:25
Services [5] 36:20 101:4 126:17 212:15 256:7
Session [1] 24:14
Sessions [2] 11:5 11:7
Set [17] 15:19 16:21 24:17 26:4 53:15 79:10 96:3 99:6 99:19 101:21 102:4 102:4 111:21 144:2 160:18 238:22 238:22
Sets [3] 173:4 173:5 210:19
Setting [12] 55:17 76:22 137:6 162:13 162:14 162:24 163:1 171:13 173:11 174:15 181:16 192:1
Settlement [1] 108:6
Settlements [1] 20:6
Seven [7] 14:7 27:22 103:9 113:5 220:14 222:17 223:8
Seventh [1] 223:13
Seventies [2] 158:14 214:10
Several [19] 62:4 108:

11 115:21 141:9 146:24 147:25 154:11 158:15 167:24 174:3 174:14 174:25 177:3 177:6 186:16 187:11 210:1 252:17 255:5
Severe [2] 246:12 260:23
Severely [1] 63:16
Shall [1] 134:8
Share [13] 47:13 71:2 71:3 71:19 107:10 107:11 107:11 107:12 108:24 116:5 207:2 253:12 254:6
Shareholders [1] 96:20
Shares [6] 105:15 105:20 108:24 109:10 131:17 131:18
Sharp [1] 82:2
Sharply [1] 140:5
Sheet [1] 53:24
Sheets [4] 5:12 123:15 218:17 219:23
Shift [3] 128:15 128:20 129:2
Shifts [1] 128:9
Ship [1] 45:3
Shirt [1] 169:6
Shocking [1] 95:23
Shoot [1] 260:22
Short [8] 60:24 114:9 114:10 114:11 144:25 195:8 240:24 253:22
Short-run [2] 114:10 114:11
Short-term [3] 114:1 252:11 253:14
Shortages [1] 64:21
Shot [1] 245:22
Show [24] 6:6 12:8 12:12 34:22 48:1 54:5 56:17 69:17 84:23 90:8 105:24 106:23 112:13 123:1 137:19 141:3 151:17 157:22 218:17 218:19 220:15 220:16 241:22 244:21
Showed [3] 37:20 82:1 258:15
Showing [4] 53:21 124:9 152:12 187:25
Shown [5] 97:11 140:3 155:16 161:18 187:19
Shows [24] 20:3 23:24 31:3 34:25 47:21 54:22 56:19 60:6 84:22 96:2 123:16 123:17 125:5 155:16 207:12 207:15 207:16 224:11 229:20 231:5 231:6 231:17 232:6 255:11
Shrink [1] 187:17
Shrinking [3] 187:16 216:23 216:24
Shutting [1] 232:25
Side [22] 7:16 24:22 30:22 48:4 50:17 85:21 101:9 127:19 128:6 128:19 128:20 136:19 136:20 235:9 246:7 246:21 247:14 249:15 252:21 256:20 259:12 262:2
Sides [3] 15:15 68:1 168:17
Signed [1] 192:24
Significance [1] 115:6
Significant [12] 45:9 74:4 95:12 95:13 101:23 127:9 143:11 145:12 147:6 168:18 249:9 260:18
Significantly [8] 20:11 126:6 144:16 144:20 170:10 243:22 247:15 259:6
Signified [1] 27:19
Signing [1] 169:11
Similar [3] 53:18 59:18 190:24
Similarly [2] 164:10 253:19
Simple [3] 117:8 157:10 177:8
Simply [12] 28:5 29:11 58:9 75:18 85:6 85:12 105:5 113:3 121:11 153:22 238:17 240:8
Simultaneously [1] 191:20
Singfield [2] 113:14 181:19
Single [1] 144:12
Sinking [1] 45:3
SISP [4] 37:18 44:12 44:16 46:2
Sit [3] 168:1 168:13 185:18
Site [1] 61:11
Sitting [1] 190:13
Situation [10] 59:4 59:23 59:25 60:1 87:19 118:20 214:9 252:17 252:19 253:4
Situations [1] 133:11
Six [16] 13:13 55:18 58:18 65:11 96:24 110:15 132:10 132:11 188:8 193:15 193:17 223:9 229:10 229:14 230:23 259:25
Size [3] 99:13 183:2 183:7
Slashed [1] 193:20
Sleeping [1] 44:19
Slide [16] 19:23 23:3 23:24 24:1 27:3 31:3 32:7 34:25 37:5 39:11 43:23 47:21 48:12 87:2 137:19 147:1
Slides [5] 18:19 19:9 49:6 54:16 95:9
Slight [1] 75:17
Slightly [1] 31:12
Slower [1] 128:18
Sluggish [2] 252:22 258:11
Small [10] 105:3 134:7 134:11 176:12 183:1 204:11 219:8 219:9 240:5 240:6
Smaller [2] 79:21 169:24
Smart [1] 167:3
Smith [1] 10:10
Smooth [1] 34:13
Snavely [1] 89:17
Softly [1] 177:3
Software [1] 38:20
Sold [13] 84:24 85:7 85:12 93:18 104:4 104:9 104:10 105:15 114:13 192:9 230:11 230:17 262:15
Sole [1] 84:16
Solely [1] 120:8
Solid [1] 27:19
Someone [2] 66:2 225:5
Sometimes [4] 144:1 144:3 192:3 225:11
Somewhat [3] 38:16 77:23 135:18
Somewhere [4] 41:15 53:23 83:20 175:14
Soon [2] 208:2 208:14
Sorry [19] 22:1 25:23 26:21 30:12 32:1 41:20 55:5 57:19 57:25 62:16 63:8 94:7 96:3 123:9 147:16 166:14 188:1 188:2 193:16
Sort [3] 114:19 206:3 236:19
Sorted [2] 161:23 161:25
Sound [1] 42:9
Sounds [4] 30:16 32:15 149:12 172:7
Source [4] 129:3 187:17 211:21 249:24
Sources [1] 128:10
South [4] 103:2 111:24 250:6 250:9
Southern [3] 162:9 166:8 167:6
Space [1] 100:25
Spark [1] 34:3
Spark-spreads [1] 34:3
Speaking [1] 46:21
Specific [7] 86:23 92:17 123:2 124:2 228:20 251:8 255:12
Specifically [5] 86:8 209:6 238:7 238:8 239:8
Specify [1] 203:5
Speculate [1] 262:7
Speculating [1] 205:21
Speculation [2] 248:25 249:7
Spell [1] 52:22
Spend [4] 16:5 38:19 38:22 173:7
Spending [1] 45:17
Spent [6] 157:8 157:13 157:15 174:2 175:3 239:25
Spike [1] 245:5
Spiked [1] 193:12
Spikes [2] 244:25 245:7
Spin [1] 165:20
Spiral [1] 22:14
Spite [1] 143:11
Split [1] 210:10
Splitting [2] 204:17 204:24
Spoken [1] 252:4
Sponsored [1] 142:16
Spot [1] 216:6
Spread [3] 101:5 147:3 157:11
Spreads [1] 34:3
Spring [2] 246:12 247:1
Staff [58] 2:9 3:5 4:16 6:12 7:7 7:16 8:1 10:15 10:21 10:23 12:8 12:13 12:21 12:24 15:19 20:24 21:14 23:8 23:12 27:2 27:4 27:24 29:3 29:22 32:6 35:10 35:14 35:24 36:2 39:17 44:2 48:17 49:23 50:1 57:15 67:8 67:12 70:15 71:2 71:10 75:23 76:22 76:24 77:14 77:23 79:22 83:4 83:4 138:20 142:20 143:4 143:7 145:18 203:18 204:22 221:13 222:8 224:14
Staff's [16] 21:11 23:19 26:9 31:10 31:11 36:10 38:15 39:1 46:25 47:5 48:7 48:20 67:5 70:12 139:25 142:14
Stages [1] 212:12
Stand [7] 126:22 141:11 156:15 182:2 264:13 266:14 266:19
Standard [3] 99:22 111:3 120:18
Standpoint [1] 15:16
Stands [4] 37:18 40:16 102:8 108:13
Star [1] 112:14
Start [8] 6:23 12:20 15:25 60:21 71:23 168:25 212:12 217:17
Start-up [1] 212:12
Started [10] 9:20 21:5 24:15 83:4 83:20 135:12 148:8 168:21 171:20 202:9
Starting [1] 213:14
Starts [2] 187:4 213:6
State [24] 1:2 1:17 2:7 2:22 6:10 17:2 17:14 26:19 59:18 80:20 89:8 89:24 97:1 129:25 130:1 141:18 158:10 204:18 216:22 219:12 219:14 242:7 258:25 259:10
State-regulated [1] 219:12
Statement [14] 3:4 3:5 15:9 15:11 16:5 60:5 97:10 139:18 176:3 213:17 214:1 215:4 218:21 259:13
Statements [1] 3:3
States [9] 25:18 80:18 106:18 140:20 157:25 191:18 211:22 223:3 259:5
Stating [2] 46:5 82:15
Station [1] 67:2
Statistical [1] 115:6
Statistically [1] 235:5
Stay [3] 38:11 192:4 198:16
Stayed [3] 148:20 158:19 193:21
Steadily [1] 189:5
Steady [1] 212:4
Steeped [1] 77:9
Step [1] 35:11
Stephanie [1] 10:10
Stephen [4] 4:2 92:8 150:22 151:12
Stick [1] 21:21
Still [17] 28:14 45:9 52:13 69:21 76:22 77:3 80:22 101:23 108:20 132:10 159:10 159:20 160:14 166:22 168:24 171:2 212:11
Stipulate [2] 72:23 220:23
Stock [46] 22:2 93:4 98:18 98:21 103:17 103:24 104:3 104:8 104:12 104:19 105:6 105:11 105:14 106:25 112:22 113:10 114:22 130:2 130:10 131:6 131:9 131:11 131:12 132:23 132:24 166:12 166:17 167:4 174:22 174:23 178:8 179:16 182:5 184:11 185:1 185:2 190:17 209:3 209:4 209:6 209:10 209:11 209:14 210:4 217:25 218:5
Stockholder [1] 71:17
Stockholders [7] 46:11 95:19 95:21 175:6 175:11 184:10 184:11
Stocks [16] 112:24 113:8

114:2 114:12 166:25 167:1 167:12 167:17 181:25 183:1 183:5 184:25 217:12 217:12 217:22 217:24
Stop [2] 204:17 260:23
Stopped [1] 171:21
Stops [1] 177:22
Storage [15] 34:4 246:22 246:23 246:25 247:2 247:3 247:8 247:8 247:13 249:2 250:12 250:13 253:3 253:6 260:15
Storm [4] 249:3 254:23 260:21 260:24
Straight [1] 53:15
Straightforward [1] 34:24
Stranded [6] 33:25 128:4 128:6 128:10 128:17 210:13
Streams [1] 70:5
Street [4] 2:17 89:11 141:21 190:22
Strenuously [3] 53:14 81:18 169:17
Stretch [1] 30:7
Strong [5] 59:25 145:2 247:25 248:3 248:4
Strongly [2] 101:13 189:25
Structure [3] 98:3 98:4 207:3
Struggle [1] 149:17
Struggling [2] 45:10 249:6
Studied [4] 99:24 100:1 215:21 215:25
Studies [1] 235:4
Study [7] 123:13 181:19 181:20 196:17 217:8 236:21 239:5
Studying [1] 216:3
Sub [1] 73:20
Subject [5] 13:3 85:3 174:15 220:9 221:3
Submitted [3] 9:25 92:4 155:2
Subscribe [1] 149:12
Subscriptions [1] 38:3
Subsequent [1] 154:9
Subsequently [2] 108:7 122:18
Subsidiaries [2] 212:5 212:11
Subsidiary [2] 98:20 211:22
Substantial [3] 53:25 128:3 184:14
Substantially [1] 243:25
Subtraction [1] 105:16
Success [1] 127:25
Successes [1] 114:11
Successor [1] 124:22
Sudden [1] 193:24
Suddenly [3] 158:18 165:21 166:20
Sufficient [4] 99:13 173:21 173:23 219:17
Suggest [4] 34:18 40:2 153:4 255:1
Suggested [3] 39:7 127:7 137:10
Suggesting [5] 34:17 53:16 83:5 84:5 235:25
Suggestions [2] 77:1 79:24
Suggests [2] 36:9 253:1
Sum [1] 196:5
Summarize [8] 24:11 28:3 31:1 35:23 46:25 153:24 195:14 224:8
Summarized [1] 48:11
Summary [14] 3:4 10:12 15:22 15:24 19:21 23:22 28:12 36:13 47:19 142:6 145:24 146:7 182:20 218:21
Summer [20] 62:23 63:9 65:24 101:2 101:8 192:10 225:15 245:17 246:12 247:2 247:7 247:9 247:15 247:20 249:17 249:18 250:3 250:11 250:14 263:5
Sunday [1] 42:12
Supersedes [1] 90:20
Supervisor [1] 242:24
Supplemental [4] 37:19 44:5 45:15 109:21
Supplier [1] 33:23
Supplies [16] 23:5 33:18 36:19 37:10 37:15 37:21 37:23 37:25 38:5 38:10 38:16 38:18 40:3 47:14 53:7 243:25
Supply [20] 37:21 86:1 86:7 226:18 242:18 246:2 246:7 246:21 248:17 248:23 249:6 252:18 252:19 253:4 256:19 258:1 258:3 258:21 260:3 260:16
Support [4] 147:24 213:17 238:14 238:19
Supports [2] 187:20 214:1
Suppose [4] 38:18 79:15 127:3 127:6
Surged [1] 246:18
Surplus [2] 244:11 253:9
Surprise [2] 237:8 237:15
Surprised [1] 237:14
Surrebuttal [53] 4:22 12:17 13:1 13:16 15:17 15:20 16:12 23:18 33:9 33:12 36:3 36:9 39:12 40:18 47:5 48:1 56:14 56:21 92:7 143:1 151:24 152:10 152:20 152:25 153:19 155:13 155:17 156:7 156:12 156:14 157:21 170:4 172:2 174:13 176:13 186:22 187:4 188:7 188:13 193:7 194:9 200:3 202:3 213:1 213:11 229:16 241:24 242:2 256:16 258:22 258:24 258:25 259:9
Surrogate [2] 99:3 101:15
Surrounding [1] 59:1
Survey [10] 103:23 210:8 218:22 219:1 219:11 219:13 220:6 220:14 222:10 224:9
Susan [2] 2:3 8:24
Susan's [1] 42:21
Suspect [1] 134:15
Suspense [1] 265:4
Swear [1] 16:24
Switched [4] 127:7 128:4 247:21 248:10
Switching [1] 248:8
Sworn [13] 17:5 17:10 19:6 88:24 89:4 90:18 91:10 139:14 141:14 151:9 151:13 241:14 241:18
Symmetry [1] 44:10
System [16] 29:14 33:1 63:12 67:3 70:7 70:9 70:13 74:2 74:8 76:18 79:6 80:12 80:24 80:25 84:19 232:2
System-wide [1] 67:3
Systems [1] 61:14

T

Table [5] 5:4 7:10 7:23 8:2 171:1
Tail [18] 25:5 25:13 27:20 29:6 82:10 121:6 121:13 137:22 157:25 158:4 214:16 220:15 220:16 220:19 220:21 220:25 222:18 223:5
Tail's [2] 27:22 95:6
Talks [5] 86:6 170:6 170:6 211:3 230:14
Tanked [2] 114:7 192:17
Tape [1] 14:11
Tape-recorded [1] 14:11
Taught [1] 154:16
Tax [8] 22:6 47:17 48:13 49:23 75:9 75:17 76:7 212:2
Taxes [2] 22:19 75:19
Techniques [2] 53:3 190:25
Technologies [1] 59:9
Technology [5] 143:15 143:21 147:11 148:2 148:3
Telecommunication [1] 148:15
Telecommunications [1] 212:13
Telephone [2] 10:3 165:13
Temperatures [1] 251:4
Temporarily [1] 144:16
Temporary [3] 129:4 245:18 254:4
Ten [19] 27:18 36:18 52:7 52:9 53:11 53:12 53:14 58:16 60:20 80:23 81:18 99:22 99:23 109:6 231:12 240:25 241:25 244:2 251:2
Ten-minute [1] 60:20
Tend [1] 250:15
Tended [2] 244:21 244:23
Tender [2] 50:2 118:9
Tends [2] 248:24 249:1
Term [16] 22:1 30:11 30:14 32:24 63:17 65:3 65:9 96:25 102:2 192:24 244:11 252:8 253:13 253:25 254:9 257:11
Termed [1] 23:16
Terms [13] 105:17 159:24 173:22 174:11 178:8 185:12 199:4 199:5 200:25 201:15 206:22 235:14 260:16
Territorial [1] 236:8
Territories [1] 252:1
Territory [3] 127:24 166:16 210:23
Terry [2] 8:3 149:18
Test [26] 21:2 21:5 21:12 21:13 22:9 22:12 27:16 27:17 29:19 31:24 32:13 47:23 51:5 54:19 67:6 67:20 68:6 68:8 68:8 69:17 83:24 83:25 147:16 147:16 148:24 237:18
Test-year [3] 21:12 32:13 47:23
Testified [23] 17:11 18:11 32:21 32:21 52:24 58:3 67:14 71:4 80:19 86:14 89:5 120:5 120:11 121:3 126:7 141:2 141:15 151:14 154:25 155:2 172:17 196:20 241:19
Testifies [1] 153:6
Testify [3] 16:20 107:15 139:19
Testifying [4] 27:24 80:2 243:10 243:12
Testimonies [2] 48:1 90:11
Testimony [196] 4:13 4:14 4:17 4:19 4:21 4:22 9:7 9:25 12:17 12:24 13:1 13:13 13:16 13:16 13:21 14:5 15:14 15:17 15:20 15:23 16:7 18:17 18:18 18:20 19:6 21:11 21:13 23:12 23:18 23:18 26:6 33:5 33:15 35:4 35:16 35:20 36:3 36:10 38:9 39:12 39:14 42:8 44:6 47:4 47:4 47:5 51:2 52:1 53:7 56:14 56:19 57:1 57:20 57:23 57:25 58:17 66:16 66:18 66:20 67:10 70:4 73:25 74:1 75:9 82:1 84:23 87:2 87:10 90:5 90:6 90:17 90:18 90:20 90:21 90:23 90:25 91:5 91:10 92:4 92:8 96:4 96:23 97:23 99:2 99:20 102:15 109:21 111:12 112:5 119:17 120:7 120:25 125:4 125:8 129:19 129:20 129:22 129:24 131:2 131:13 132:21 140:24 141:2 142:7 142:12 142:16 142:24 143:1 143:6 143:20 144:22 145:25 147:8 147:13 147:13 151:20 151:24 152:15 152:20 152:21 153:7 155:3 155:17 155:20 155:23 156:8 156:10 156:12 156:14 157:21 161:10 161:11 161:12 161:18 163:17 163:18 163:20 163:22 163:24 166:1 170:4 172:2 174:13 182:17 182:20 183:25 186:19 186:22 187:4 187:8 192:13 193:8 194:4 194:9 196:6 199:1 200:1 202:3 202:10 202:12 202:18 202:19 202:19 202:24 203:7 203:13 203:14 203:25 204:3 204:18 207:5 211:2 213:1 214:5 216:6 216:13 216:14 229:17 231:23 232:22 233:6 236:3 236:8 236:15 241:24 241:25 242:2 243:14 244:2 255:17 256:17 258:23 258:25 259:10 259:25 260:1
Tests [1] 173:20
That'll [4] 12:18 49:19 55:19 172:6
Thayer [1] 2:13
Theirs [1] 158:1
Themselves [2] 80:24 184:13
Theoretical [5] 32:18 55:22 69:24 76:23 213:23
Theory [8] 77:11 77:21 77:22 109:25 126:8 206:16 239:5 239:6
Thereabouts [1] 48:16
Thereafter [3] 13:5 32:24 49:20
Thereby [1] 248:12
Therefore [7] 67:12 67:18 70:19 109:3 130:21 167:

21 228:17
Thereof [1] 147:8
They've [11] 28:10 33:11 87:8 169:6 169:11 174:2 175:4 175:4 185:1 186:17 209:18
Thing's [1] 46:18
Thinking [4] 59:14 65:8 114:3 216:2
Thinks [3] 46:15 101:14 177:23
Third [8] 48:10 53:23 54:13 189:3 220:7 223:2 253:17 266:16
Thoroughly [1] 181:11
Thousand [2] 253:17 254:11
Three [36] 20:10 21:22 22:13 28:25 34:20 35:7 35:8 47:9 52:1 52:5 64:11 64:24 67:16 68:3 68:24 69:20 70:1 75:22 92:24 97:14 98:24 102:5 102:17 102:20 103:6 117:7 117:21 117:22 130:1 150:4 162:19 162:19 170:2 184:5 211:24 256:17
Three-and-a-half [1] 132:1
Three-quarters [1] 98:24
Three-year [5] 35:8 52:1 67:16 69:20 70:1
Threshold [4] 99:14 101:20 101:22 102:4
Threw [2] 164:6 164:10
Throughout [7] 87:22 158:20 189:6 248:5 252:20 256:5 259:4
Throw [1] 163:8
Thrown [1] 162:16
TIA [2] 236:9 236:14
Tied [4] 86:22 86:24 116:25 229:24
Tight [5] 243:20 249:6 249:9 250:1 251:10
Timing [9] 121:23 122:20 122:22 136:17 136:19 177:10 177:16 180:5 181:8
Tiny [1] 93:5
Titled [1] 72:12
Today [58] 6:22 7:6 8:13 8:19 8:21 10:1 10:11 11:9 12:7 12:18 13:21 14:6 14:10 15:1 16:14 17:1 19:1 26:16 78:23 83:21 83:22 90:14 90:18 136:5 150:5 159:13 160:14 168:24 169:2 178:1 179:15 179:18 179:20 190:3 190:7 190:12 190:18 190:19 193:3 225:4 225:6 225:16 226:25 227:16 227:18 228:1 228:15 228:18 234:8 235:21 241:2 241:8 257:15 259:13 260:12 262:9 262:12 264:15
Today's [1] 226:23
Together [7] 30:8 177:4 191:5 191:20 198:4 229:24 254:21
Tomorrow [7] 225:8 227:2 240:18 264:13 266:6 266:12 266:15
Tony [2] 2:4 8:24
Took [4] 64:18 125:4 135:18 199:8
Top [2] 39:6 58:17
Topic [1] 62:20
Total [24] 30:25 31:11 35:6 36:25 37:6 41:4 67:14 68:3 68:12 86:21 93:21 94:5 104:2 105:1 128:12 128:12 132:17 153:12 200:15 200:16 201:5 201:8 207:17 208:22
Totaling [2] 67:3 71:5
Tougher [1] 87:4
Toward [2] 58:17 215:22
Towards [5] 75:21 161:17 207:12 207:15 215:18
Town [1] 148:9
Towns [1] 148:8
Trace [1] 113:16
Traces [1] 111:13
Traded [2] 174:21 248:20
Trading [1] 190:23
Traditionally [1] 230:17
Transaction [4] 196:1 198:8 227:6 235:17
Transactional [1] 33:21
Transcribed [1] 14:11
Transcribing [1] 14:22
Transcript [2] 1:10 264:7
Translate [1] 232:1
Translated [1] 248:3
Translates [1] 145:11
Translating [1] 236:16
Transmission [5] 33:22 33:23 70:10 168:3 229:25
Transmitted [1] 70:7
Transportation [2] 33:20 154:18
Traumatically [1] 198:17
Travel [1] 38:7
Treasury [1] 182:25
Treat [1] 93:16
Treatises [1] 174:14
Treatment [2] 77:20 120:18
Trenching [1] 148:13
Trend [3] 22:16 111:10 111:15
Trends [1] 55:14
Triangle [1] 193:18
Trick [1] 122:20
Tried [2] 33:13 118:6
Trinity [1] 154:21
Trip [1] 265:17
Tripled [1] 248:14
Trouble [3] 44:18 79:16 243:23
True [33] 52:4 55:15 55:16 78:21 78:24 79:14 82:17 83:10 85:14 100:16 100:18 107:4 114:21 133:20 155:21 157:18 165:9 167:16 167:24 170:24 180:23 184:24 193:3 200:15 205:3 210:16 213:24 216:24 224:15 240:8 244:6 259:3 259:8
True-up [1] 79:14
Truly [1] 191:22
Trusted [1] 70:24
Try [6] 53:3 77:6 79:5 149:23 168:1 241:7
Trying [16] 35:15 45:11 48:21 52:24 55:1 60:15 74:19 80:16 106:23 135:24 148:21 149:19 161:2 190:13 198:3 228:3
Turn [7] 50:12 161:5 163:16 175:13 218:2 235:14 249:19
Turnaround [1] 33:9
Turned [1] 68:17
Turning [4] 56:24 68:11 124:6 238:12
Turns [1] 179:16
Twice [1] 245:5
Two [56] 12:21 13:10 22:13 26:18 27:12 30:7 44:19 48:10 68:25 82:3 84:10 84:11 85:9 96:14 99:16 100:13 100:15 112:18 113:5 114:17 117:6 117:20 121:12 123:15 123:20 125:16 151:20 160:20 161:22 165:14 165:25 187:24 188:10 188:11 188:18 190:19 193:11 193:11 194:6 196:22 222:5 222:6 222:16 222:17 224:2 226:12 229:10 229:14 232:14 244:16 250:24 251:3 251:13 252:16 254:4 257:17
Two-dollar [1] 252:16
Two-thirds [5] 67:11 67:14 67:20 68:20 69:9
Type [7] 74:3 79:11 80:14 99:9 148:22 169:15 185:24
Types [1] 76:18
Typically [1] 121:1
Typos [1] 90:24

U

U.S [5] 62:12 62:16 62:17 63:4 63:7
U.S. [3] 230:24 231:4 253:15
Ultimately [1] 239:3
Unable [1] 44:2
Unaffected [1] 132:7
Unanimity [1] 254:9
Unbiased [2] 198:13 235:15
Uncanny [1] 235:23
Uncertainties [2] 33:25 34:8
Uncertainty [6] 34:5 63:4 63:6 191:7 217:10 250:14
Unchangeable [1] 114:19
Unchanged [2] 42:2 46:24
Uncomfortable [1] 45:22
Under [18] 14:18 14:19 18:21 28:10 37:16 62:4 62:5 66:24 94:5 122:16 124:18 126:19 160:6 201:20 202:8 220:14 233:6 256:25
Underearn [1] 28:20
Underground [1] 246:23
Underlined [3] 62:4 62:9 62:12
Underlying [1] 238:17
Underneath [1] 162:1
Underpinning [1] 213:23
Understandable [1] 60:10
Understated [1] 131:16
Understood [4] 53:6 120:7 161:4 214:13
Underwriters' [2] 103:17 130:13
Unfair [2] 105:4 198:18
Unfortunately [1] 217:12
Uniform [1] 251:3
Unit [2] 67:2 212:13
United [3] 140:20 191:18 259:5
Units [3] 210:21 212:19 262:19
Universal [1] 252:7
University [10] 90:3 90:4 154:2 154:4 154:5 154:22 243:4 243:5 243:8 243:9
Unknown [1] 149:16
Unless [4] 41:22 106:24 182:6 264:17
Unlikely [1] 254:24
Unlimited [1] 59:8
Unreasonable [2] 53:13 122:15
Unreasonably [2] 120:9 121:11
Unrebutted [1] 240:7
Unregulated [9] 101:24 102:25 103:2 171:1 171:9 200:21 200:23 201:1 212:3
Unresolved [1] 37:14
Unsure [1] 56:8
Unthinkable [1] 117:12
Unusual [7] 52:18 101:5 145:1 191:19 193:5 246:4 251:3
Unusually [2] 140:9 259:3
Unwilling [1] 79:23
Up [93] 15:19 16:21 28:17 31:18 33:11 37:6 37:9 37:10 38:10 39:11 39:15 41:4 41:11 41:17 43:6 44:19 50:5 50:10 55:23 65:20 71:17 75:20 79:6 79:14 86:18 99:6 101:8 102:5 115:14 115:15 117:20 121:23 123:1 123:23 128:18 129:23 131:25 132:18 135:20 136:3 137:2 147:12 148:19 155:4 155:6 159:5 161:2 164:10 168:19 169:5 172:14 173:15 178:25 179:1 179:14 180:5 180:11 180:15 180:15 185:1 190:13 190:21 190:22 191:2 193:12 196:5 203:8 205:4 205:6 212:12 226:11 226:12 227:3 227:9 227:22 228:8 230:18 232:10 235:8 236:8 236:14 239:24 239:24 243:23 249:23 250:9 251:15 257:24 258:17 258:20 260:22 264:25 266:3
Upcoming [4] 184:15 189:19 189:24 195:18
Update [3] 5:10 42:15 143:2
Updated [5] 23:12 68:8 68:21 69:18 163:19
Upgrades [2] 38:20 38:21
Upper [3] 230:2 230:18 231:3
Upward [8] 86:8 92:4 244:21 244:22 246:5 258:4 258:5 258:20
Upwards [1] 245:23
Useful [5] 11:12 11:12

11:16 11:19 11:24
Uses [3] 100:15 203:19 250:8
Utilities [58] 1:5 2:16 2:19 5:8 5:12 6:13 7:22 10:16 26:18 27:12 53:17 95:1 96:14 96:15 98:18 100:6 102:7 102:10 109:11 116:19 116:19 116:21 117:2 121:13 124:10 124:11 124:19 126:16 135:19 139:23 141:23 141:24 144:15 154:6 154:17 158:10 160:7 168:18 209:9 218:15 218:18 218:22 218:23 219:1 219:13 219:23 220:13 224:9 230:5 232:6 233:8 238:4 238:6 243:13 244:5 252:1 256:2 256:3
Utilities' [1] 126:11
Utility [29] 10:19 82:12 103:24 107:6 116:4 118:4 118:5 132:23 135:20 144:3 144:6 144:8 160:23 161:3 165:17 165:22 166:20 174:15 207:14 207:16 208:13 209:20 217:6 217:11 217:12 217:22 217:24 234:11 262:17
Utilization [1] 129:4

V

Vagaries [1] 191:7
Valley [1] 67:1
Valleys [1] 77:19
Valuable [1] 178:2
Valuation [1] 190:21
Value [101] 11:12 93:6 102:16 102:18 104:8 105:1 105:2 105:7 105:11 105:14 105:18 105:19 105:19 106:21 106:21 106:23 106:25 107:1 107:2 107:6 107:7 107:8 107:10 107:11 108:3 108:10 108:12 108:18 108:23 109:10 109:14 109:17 115:23 116:7 116:7 116:12 116:14 116:15 116:16 116:20 116:21 116:25 117:1 117:2 130:18 131:17 132:18 157:14 170:5 170:10 172:15 172:16 173:4 173:5 173:6 174:19 174:20 174:20 174:24 175:2 175:5 175:6 175:11 175:12 175:16 175:17 175:23 176:2 176:4 176:5 176:6 176:8 178:1 178:6 178:7 178:12 178:14 178:17 180:7 180:23 181:5 181:9 184:9 184:23 199:11 201:20 209:4 209:14 210:5 211:3 211:10 211:13 211:18 213:19 213:20 235:1 235:5 238:16 238:17 239:9 239:9
Values [4] 105:13 116:13 184:14 186:6
Valve [2] 248:13 248:15
Variable [5] 247:14 259:1 259:15 262:1 262:3
Variables [3] 32:19 51:19 52:25
Variations [6] 112:23 113:7 114:25 115:1 115:2 115:4
Varied [1] 212:21
Varies [1] 182:24
Variety [2] 140:13 181:23
Various [5] 111:2 173:17 195:16 251:18 252:3
Vary [3] 112:21 114:22 251:19
Vast [1] 125:22
Vehicles [1] 135:19
Ventures [1] 103:2
Verbal [1] 43:20
Verifies [1] 86:11
Verify [1] 87:5
Versa [1] 215:10
Versus [1] 133:22
Vice [4] 89:21 215:10 242:11 242:13
View [5] 135:18 145:22 240:17 253:12 254:6
Virginia [1] 154:2
Virtually [7] 103:10 104:11 128:8 164:5 235:13 235:22 239:6
Virtue [1] 127:12
Vision [1] 20:18
Volatile [2] 76:18 80:12
Volatility [1] 249:10
Volume [5] 1:12 134:2 246:24 247:7 253:3
Volumes [3] 31:18 31:20 247:8

W

Wait [3] 78:2 146:6 146:8
Waited [2] 227:24 227:24
Waiting [1] 87:10
Wall [1] 190:22
Wants [1] 130:11
War [1] 59:9
Warm [6] 87:21 87:25 101:6 101:8 250:3 259:3
Warmer [5] 245:20 247:16 249:18 250:5 250:6
Warning [1] 45:24
Warrants [1] 34:9
Wash [3] 113:20 113:21 114:15
Washington [6] 89:11 90:2 90:4 154:4 243:9 252:6
Watch [3] 59:16 63:13 150:3
Watched [1] 60:6
Watching [1] 44:22
Water [1] 100:17
Wayne [4] 3:22 139:9 141:13 141:20
Ways [6] 76:17 80:11 143:13 147:10 163:15 182:24
Weather [35] 29:6 29:7 29:24 33:19 65:25 66:5 82:5 84:15 84:16 85:11 85:14 87:18 87:21 87:25 100:23 101:5 226:14 226:17 245:14 245:20 246:17 247:15 249:3 249:11 249:14 252:24 253:8 259:3 259:10 259:15 262:2 263:3 263:7 263:9 266:3
Weather's [1] 84:18
Web [1] 61:10
Week [10] 131:3 189:13 225:8 225:15 225:19 227:25 228:8 260:13 260:14 260:15
Weekend [1] 42:12
Weeks [4] 21:8 44:18 250:24 251:3
Wefald [104] 2:3 3:10 3:12 3:19 4:4 4:9 8:24 8:25 9:3 9:4 9:15 15:7 19:19 42:21 54:9 61:5 61:7 61:9 61:20 61:22 61:25 62:3 63:23 64:1 64:8 66:19 66:23 72:3 72:6 76:16 78:9 78:11 78:13 80:4 80:6 86:2 88:14 88:17 112:2 112:6 112:11 119:6 129:13 129:14 129:16 134:21 134:24 149:5 149:7 153:1 161:9 176:23 178:18 178:24 179:2 179:4 179:8 179:23 180:3 180:13 180:17 180:20 182:15 183:22 184:4 188:16 188:20 188:23 188:25 189:10 194:22 195:2 199:22 200:2 200:5 200:7 221:17 221:19 221:21 221:25 224:22 224:24 225:2 229:13 229:16 229:19 231:19 231:22 231:25 234:15 234:18 234:24 241:5 261:10 261:12 261:15 261:25 263:20 263:23 264:17 264:22 266:2 266:7 266:10
Wefald's [2] 42:23 77:1
Weight [4] 12:9 54:24 184:3 191:6
Weighted [2] 21:24 24:20
Weird [1] 44:24
Weiss [1] 264:3
Welcome [1] 150:19
Wellhead [4] 244:14 246:14 253:16 254:11
West [5] 124:21 125:19 164:2 250:6 250:9
Whatnot [1] 185:20
Whole [20] 56:5 56:6 103:18 110:24 130:17 132:8 134:2 160:17 207:20 211:25 212:7 212:8 212:10 231:8 231:14 234:4 237:10 261:17 263:11 264:23
Wholesale [19] 9:11 64:11 64:13 65:12 66:11 78:16 140:5 140:12 140:19 144:13 144:18 145:4 145:10 145:15 149:13 150:7 210:16 210:21 211:21
Wide [1] 67:3
Wildly [1] 183:14
Wilkinson [16] 4:6 13:18 144:23 240:24 241:2 241:8 241:9 241:10 241:17 241:22 242:8 255:21 255:25 265:6 265:13 266:1
William [4] 2:6 2:11 7:4 7:20
Willing [6] 35:10 71:16 79:9 109:3 198:1 255:15
Wind [1] 128:18
Windfall [1] 137:12
Winning [1] 136:19
Winter [35] 65:5 65:8 82:7 82:11 82:12 101:6 226:9 243:17 243:19 243:21 244:9 244:24 245:2 245:15 245:25 246:1 247:12 247:21 249:12 249:17 249:22 249:23 250:16 250:17 250:18 251:25 252:15 253:10 253:23 254:19 254:22 254:25 255:1 256:19 259:4
Winter-peaking [1] 82:11
Winters [1] 244:20
Wintertime [1] 100:24
Wisconsin [4] 108:16 223:10 224:1 230:2
Wish [5] 15:9 45:7 45:8 45:8 153:24
Wishes [1] 8:19
Withdrawals [1] 247:13
Withdrawn [1] 246:22
Witness [101] 7:4 7:12 16:17 17:5 25:9 25:12 26:10 26:14 26:15 41:24 42:1 43:22 43:25 50:3 50:5 54:15 57:15 57:22 61:19 61:24 66:22 73:7 88:11 88:23 88:24 92:8 106:5 106:14 106:20 112:4 112:8 112:12 118:9 118:17 118:20 123:9 124:17 136:6 138:19 139:8 139:13 139:14 146:2 146:9 146:10 149:8 150:19 150:20 151:4 151:8 151:9 153:6 155:8 161:12 161:16 163:25 171:17 171:20 171:24 176:22 177:2 178:21 179:1 179:3 179:6 179:10 180:1 180:4 180:14 180:19 180:21 182:19 182:23 183:24 184:7 186:21 186:24 188:6 188:9 188:15 188:18 188:21 188:24 189:1 189:11 191:11 193:16 207:11 216:7 222:1 230:21 236:7 239:19 239:20 240:20 241:13 241:14 258:14 261:11 265:24 266:16
Witnesses [31] 3:7 8:3 8:4 8:5 8:8 12:22 13:3 13:8 13:10 13:13 13:17 13:21 14:3 15:19 15:21 17:1 30:4 33:12 84:4 123:12 138:20 140:23 142:16 143:6 145:7 145:14 145:21 147:14 191:13 196:6 229:22
Witnesses' [2] 4:20 4:22
Wonder [1] 184:5
Wondering [4] 235:4 236:12 260:3 260:9
Word [9] 52:19 91:1 91:1 91:6 131:22 203:24 204:14 204:15 221:6
Words [4] 39:15 54:25 114:2 190:4
Works [1] 181:13
Worksheet [1] 49:8
Worried [1] 60:11
Worry [1] 174:6
Worth [10] 20:14 41:13 41:16 41:17 43:13 134:18 172:25 176:14 178:7 216:1
Wound [1] 123:23
Write [3] 64:19 168:19 176:18
Write-up [1] 211:19
Writeups [2] 102:16 102:18
Written [2] 9:25 156:13
Wrote [2] 59:15 157:6
Wyoming [1] 111:24

X

Xcel [3] 95:2 106:18 121:13

Y

Year [128] 5:9 6:8 6:14 6:16 20:1 20:1 21:2 21:5 21:10 21:12 21:14 22:9 22:12 23:15 27:16 27:17 29:19 31:4 31:9 31:24 32:13 35:8 42:24 47:23 51:5 52:1 52:12 52:17 54:19 64:25 65:11 67:6 67:16 67:20 68:6 68:8 68:9 69:17 69:20 70:1 78:17 82:8 83:24 83:25 95:25 97:7 97:14 98:1 104:16 104:25 105:22 106:16 109:23 110:14 110:15 113:6 113:7 113:7 113:21 113:21 114:3

114:4 114:6 115:3 115:3 127:4 127:6 132:6 144:20 145:17 145:17 147:3 147:16 147:17 148:24 154:13 157:4 157:4 157:5 157:11 165:13 165:14 170:12 177:14 177:17 178:2 178:12 179:15 179:17 179:19 180:7 180:16 181:4 181:9 184:15 185:18 189:4 189:17 189:19 189:25 192:4 192:6 192:8 192:10 192:12 192:16 192:25 195:18 196:2 197:11 209:7 217:19 228:5 228:12 228:19 228:23 231:8 231:9 231:14 232:8 232:9 232:9 235:10 247:12 252:23 253:7 257:16 258:12

Year's [7] 93:7 107:20 110:2 110:6 110:6 110:8 219:13

Year-end [2] 21:10 23:15

Year-to-year [1] 113:21

Years [91] 17:4 17:25 18:4 20:11 22:13 22:16 24:19 24:25 28:10 28:17 29:15 31:2 34:12 34:21 35:8 36:25 38:19 38:21 47:9 50:25 52:8 52:9 52:14 55:20 64:11 64:14 64:24 68:25 68:25 77:13 77:16 78:3 78:14 78:15 89:23 104:3 104:20 104:24 111:17 112:1 113:19 113:20 115:22 130:21 130:23 132:7 137:3 137:11 137:22 140:10 143:25 143:25 144:11 144:18 144:25 145:11 147:25 154:11 157:7 157:12 157:13 159:16 165:8 165:8 169:4 170:8 174:3 177:11 177:17 183:20 183:23 184:2 184:5 184:21 186:17 191:16 191:23 201:10 206:14 208:3 208:7 210:6 211:24 212:13 217:13 232:14 237:18 244:6 245:6 257:17 257:23

Yellow [1] 221:15

Yield [25] 94:2 94:6 94:18 94:20 95:13 109:25 110:4 110:20 120:13 120:22 121:1 141:5 158:2 176:15 177:5 179:12 203:6 203:16 204:4 204:19 205:7 205:8 205:15 205:24 239:23

Yield-to [1] 205:8

Yield-to-maturity [6] 120:22 203:6 203:16 205:7 205:15 205:24

Yielded [1] 21:9

Yields [9] 94:21 94:22 95:11 95:18 114:20 115:3 115:4 121:16 179:7

York [1] 252:6

Yourself [1] 165:15

Yourselves [1] 116:23

Z

Zero [1] 177:13

Ziggles [1] 111:15

Zinder [2] 154:10 154:23

Public Service Commission
State of North Dakota

COMMISSIONERS

Susan E. Wefald, President
Leo M. Reinbold
Anthony T. Clark

Executive Secretary
Jon H. Mielke

600 E Boulevard Ave. Dept. 408
Bismarck, North Dakota 58505-0480
web: www.psc.state.nd.us
e-mail: sab@oracle.psc.state.nd.us
TDD 800-366-6888
Fax 701-328-2410
Phone 701-328-2400

December 20, 2001

Duard Weyrauch
224 Winther St
Ray ND 58849

RE: Case No. PU-399-01-186

Dear Mr. Weyrauch:

Thank you for your recent letter concerning MDU electric bills. Your letter has been filed in the Public Input file for this case, and copies have been provided to the Commissioners.

We appreciate your interest. The formal hearing on this matter has been scheduled for February 25, 2002 in the Commission Hearing Room on the 12th Floor of the Capitol Building. You are welcome to attend. A copy of the Notice of Hearing is enclosed.

Also enclosed is a sheet put together by the Commission explaining the fluctuation in natural gas costs.

Sincerely,

Sharon Helbling
Public Utilities Division

Sdh

Enclosure

Scott, Sandi L. 01-186

From: Lein, Jerry R.
Sent: Tuesday, April 30, 2002 11:12 AM
To: Comm; PUD; Legal
Subject: MDU rate reduction comments

Mr. Jim Neumiller from Bismarck 223-3323 called concerning the MDU electric rate reduction. Mr. Neumiller is a small stockholder (150 shares) and customer and has experienced decline in stock value greater than any savings in his bills.- down at least 3 or 4 points since decision was announced.

Helbling, Sharon D.

From: Bauske, Shelly A.
Sent: Thursday, March 28, 2002 3:22 PM
To: Helbling, Sharon D.
Subject: FW: Over charges

-----Original Message-----
From: Bev Maki [mailto:bmaki@mckenzieelectric.com]
Sent: Thursday, March 28, 2002 2:01 PM
To: ndpsc@oracle.psc.state.nd.us
Subject: Over charges

I urge the psc to recover the over 9 million mdu has overcharged it's consumers ! They should also be required to pay back any interest money earned off this 9 million. I believe,you know as well as all us consumers do ,that this is not the first time and definitely not the last that they will over charge there consumers. Just a couple years ago the psc attemped to investigate mdu on more overcharges but run short of funds. As a commisioner of the psc you have to wonder how many millions mdu has stolen from it's consumers? We are not talking peanuts here but millions of dollars! One way to put a stop to these overcharges would be to slap healthy fines on mdu. This could serve two purpose. One it could put some integrity back in to the psc that has been lost and at the same time make mdu think twice about trying to steal millions from it's consumers. I also hope if the psc is really serious about protecting the consumers i urge you to seek more funding from the state so you will be able to investigate mdu any year anytime and notify mdu there overcharges are not acceptable to this commision. How much longer will it take to recover this 9 million dollars? When is the next hearing on this matter taking place and what's taking so long?Please e-mail me a csamuel@ruggedwest.com on these matters. Thank You for your time!
Curtis Samuelson

RECEIVED
DEC 17 2001
ND PUBLIC SERVICE COMMISSION
PUBLIC UTILITIES DIVISION

Ray, No. Dak.
Dec. 13 - 2001

Regarding M.D.U. rate structure:

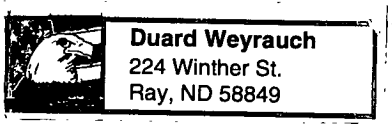
I have no problem with my electric bill. However if MDU would like to share a little of that windfall they got last winter I wouldn't mind.

We run a lot of appliances in our house for less than $1.25 per day. No complaints.

If you want to see high rates go to Southern California. You will be glad to return to old No. Dak.

As for deregulation? - No - No - No. Look what happend in western Montana + some other states. Washington for one. Thanks for listening.

Duard Weyrauch
224 Winther St.
Ray, No. Dak., 58849



C. Comm
Legal
Pud

RECEIVED
DEC 18 2001
ND PUBLIC SERVICE COMMISSION
PUBLIC UTILITIES DIVISION

Ray, N. D.
12-17-01

Dear sirs & ladies,

Enclosed is copies of my last 2 MDU bills. On the third line on residential gas the minus on Nov. bill was $1.069 per dekatherm

On Dec. it was $0.141

This appears to me to be a $.93 raise in price of gas. when the stock market reports natural gas prices dropping.

I'm an old retired truck driver and I hauled propane out of Signal - Amerada Hess gas plant starting back in 1959 so its not to hard to find out that the price they are getting hasn't gone up lately.

I guess when MDU buys from the co. they own they can set their own price, huh?

Maybe this fuss over their electric rates is just a smoke screen for their gas prices.

Thanks for listening
Duard Weyrauch
224 Winther St
Ray, N. D., 58849

Whats your feeling on this?
Please reply Thank you

C. Comm
Legal
Pld

ACCOUNT / NAME / SERVICE ADDRESS		BILLING DATE / CURRENT BILL / DUE DATE
ACCOUNT	219033 23	
NAME	WEYRAUCH, [illegible]ARD	11-15-01
SERVICE ADDRESS	224 WINTHER ST RAY ND 58849	12-07-01

TYPE OF SERVICE	READING DATE	NO DAYS	METER READING PRESENT	METER READING PREVIOUS	DIFFERENCE KWH-MCF	BILLING FACTOR FOR	BILLING FACTOR MULTIPLIER	USAGE KWH-KW-DK	AMOUNT
RE	11/13	29	29136	28832	304			304	23.91
RG	11/13	29	648.3	634.3	14.0	TF	.9813	13.7	52.06

APPLICABLE STATE AND LOCAL TAXES	1.04
TOTAL UTILITY BILLING	77.01
MINIMUM AMOUNT DUE FOR OTHER SERVICES (SEE BELOW)	9.95

		BASE RATE =	3.50	
304	KWH AT	$.070840 =	21.54	
304	KWH AT	$.003720-=	1.13-	23.91
		BASE RATE =	6.50	
5.0	DK AT	$4.681000 =	23.41	
8.7	DK AT	$4.230000 =	36.80	
13.7	DK AT	$1.069000-=	14.65-	52.06

THANK YOU FOR YOUR RECENT PAYMENT(S) OF $ 72.98

ACCOUNT / NAME / SERVICE ADDRESS		BILLING DATE / CURRENT BILL / DUE DATE
ACCOUNT	219033 23	
NAME	WEYRAUCH, DUARD	12-14-01
SERVICE ADDRESS	224 WINTHER ST RAY ND 58849	01-05-02

TYPE OF SERVICE	READING DATE	NO DAYS	METER READING PRESENT	METER READING PREVIOUS	DIFFERENCE KWH-MCF	BILLING FACTOR FOR	BILLING FACTOR MULTIPLIER	USAGE KWH-KW-DK	AMOUNT
RE	12/12	29	29444	29136	308			308	24.24
RG	12/12	29	669.4	648.3	21.1	TF	.9643	20.3	91.77

APPLICABLE STATE AND LOCAL TAXES	1.84
TOTAL UTILITY BILLING	117.85
MINIMUM AMOUNT DUE FOR OTHER SERVICES (SEE BELOW)	9.95

		BASE RATE =	3.50	
308	KWH AT	$.070840 =	21.82	
308	KWH AT	$.003500-=	1.08-	24.24
		BASE RATE =	6.50	
5.0	DK AT	$4.681000 =	23.41	
15.3	DK AT	$4.230000 =	64.72	
20.3	DK AT	$.141000-=	2.86-	91.77

THANK YOU FOR YOUR RECENT PAYMENT(S) OF $ 86.96

Scott, Sandi L.

From: Helbling, Sharon D.
Sent: Monday, December 17, 2001 9:03 AM
To: Comm; Legal; PUD
Subject: FW: MDU Profits/gas pricing

-----Original Message-----
From: Bauske, Shelly A.
Sent: Monday, December 17, 2001 9:02 AM
To: Helbling, Sharon D.
Subject: FW: MDU Profits/gas pricing

-----Original Message-----
From: C. Robinson [mailto:opt1@dia.net]
Sent: Friday, December 14, 2001 12:29 PM
To: sab@oracle.psc.state.nd.us
Subject: MDU Profits/gas pricing

To whom it may concern:

I regret I was unable to attend your recent IVN forum on MDU and your staff's recent revelation MDU's profits may be out of line.
All I can say is "it is about time someone held MDU accountable for their actions!" It is my belief you need to set a certain profit margin and require them to stay within the set limit. The problem I see is since MDU's diversification you need to look at their total company profits and not specifically those related to gas. Look at the company as a whole and set a limit on their total profit on an annual basis. 5% would be a reasonable amount in my opinion. If they show a loss they should be permitted to only pass along the costs which would bring in enough to cover the 5% profit margin, no more. Once again I think you must look at the whole company including all subsidiaries! In fact they should have to seek your approval prior to expanding their operation as anything they do is essentially on the backs of the consumer who has no other choice for services!!

Thank you for this opportunity to provide input!

Charlie Robinson
PO Box 855
Williston

HARD COPY OF Video Cassette-disk-tapes

DOCKET SEQUENCE NO. _____

EXHIBIT _____

CASE NO. PU-399-01-186

ON FILE IN

STATE ARCHIVES

CONTROL NUMBER: 80051