

# APPLICATION OF DOMINION ENERGY UTAH

Docket No. 19-057-02

## EVIDENTIARY HEARING

DAY 1

January 15, 2020

### ADVANCED REPORTING SOLUTIONS

801-746-5080 | [office@advancedrep.com](mailto:office@advancedrep.com) | [advancedrep.com](http://advancedrep.com)

**SALT LAKE** | 159 West Broadway, Broadway Lofts, Suite 100 | Salt Lake City, Utah 84101

**PROVO** | 3507 North University Avenue, Suite 350-D | Provo, Utah 84604

**ST. GEORGE** | 20 North Main Street, Suite 301 | St. George, Utah 84770



Evidentiary Hearing Day 1  
January 15, 2020

BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

-o0o-

Application of Dominion ) Docket No: 19-057-02  
Energy Utah to Increase )  
Distribution Rates and )  
Charges and Make Tariff )  
Provisions - Phase II )  
\_\_\_\_\_)

EVIDENTIARY HEARING DAY 1

Taken on Wednesday, January 15, 2020

At 8:58 a.m.

At the Public Service Commission of Utah  
160 East 300 South  
4th Floor  
Salt Lake City, Utah 84111

Reported by: Kimberly A. Harmon, RPR, CSR

ADVANCED REPORTING SOLUTIONS  
(801)691-1000

A P P E A R A N C E S

-o0o-

Commission Chairman Thad LeVar  
Commissioner David Clark  
Commissioner Jordan White

For Dominion Energy Utah:

Cameron L. Sabin, Esq.  
STOEL RIVES  
201 South Main Street  
Suite 1100  
Salt Lake City, Utah 84111  
(801)578-6929  
clsabin@stoel.com

Jenniffer Nelson Clark, Esq.  
DOMINION ENERGY UTAH  
333 South State Street  
Salt Lake City, Utah 84145  
(801)324-5394  
jenniffer.clark@dominionenergy.com

For Division of Public Utilities:

Justin C. Jetter, Esq.  
UTAH ATTORNEY GENERAL'S OFFICE  
160 East 300 South  
5th Floor  
Salt Lake City, Utah 84114  
(801)366-0335  
jjetter@utah.gov

For Office of Consumer Services:

Steven W. Snarr, Esq.  
5975 Pioneer Ridge Circle  
Salt Lake City, Utah 84108  
(801)583-8989  
stevensnarr@hotmail.com

A P P E A R A N C E S (Cont.)

-o0o-

For Federal Executive Agencies:

Major Scott L. Kirk  
Captain Robert J. Friedman  
Utility Law Field Support Center  
AFLOA/JACE-ULFSC  
139 Barnes Drive  
Suite 1  
Tyndall AFB, Florida 32403  
scott.kirk.2@us.af.mil  
robert.friedman.5@us.af.mil

For Utah Association of Energy Users and US Magnesium:

Phillip J. Russell, Esq.  
HATCH, JAMES & DODGE, P.C.  
10 West Broadway  
Suite 400  
Salt Lake City, Utah 84101  
(801)363-6363  
prussell@hjdllaw.com

For American National Gas Council:

Stephen F. Mecham, Esq.  
1180 1st Avenue  
Salt Lake City, Utah 84103  
(385)222-1618  
sfmecham@gmail.com

\* \* \*

I N D E X

-o0o-

AUSTIN SUMMERS	PAGE
Direct Examination By Mr. Sabin	11
Cross-Examination By Mr. Jetter	24
Cross-Examination By Mr. Snarr	28
Cross-Examination By Mr. Russell	50
Cross-Examination By Mr. Mecham	59
Cross-Examination By Captain Friedman	85
Redirect Examination By Mr. Sabin	102
Recross-Examination By Mr. Mecham	116
Further Redirect Examination By Mr. Sabin	124
Cross-Examination By Commissioner Clark	125
Cross-Examination By Chairman LeVar	132
JESSICA IPSON	PAGE
Direct Examination By Ms. Clark	135
Cross-Examination By Mr. Mecham	140
Cross-Examination By Chairman LeVar	144
HOWARD LUBOW	PAGE
Direct Examination By Mr. Jetter	147
Cross-Examination By Mr. Snarr	156
Cross-Examination By Mr. Russell	159
Cross-Examination By Mr. Mecham	173

I N D E X (Cont.)

-o0o-

Cross-Examination By Mr. Sabin	176
Redirect Examination By Mr. Jetter	179
Cross-Examination By Commissioner Clark	181

DOUGLAS WHEELWRIGHT	PAGE
Direct Examination By Mr. Jetter	183
Cross-Examination By Mr. Mecham	188
Cross-Examination By Major Kirk	198
Redirect Examination By Mr. Jetter	200
Cross-Examination By Commissioner Clark	201
Cross-Examination By Commissioner White	203

JAMES DANIEL	PAGE
Direct Examination By Mr. Snarr	205
Cross-Examination By Mr. Russell	213
Cross-Examination By Ms. Clark	220
Redirect Examination By Mr. Snarr	223
Cross-Examination By Commissioner Clark	224

KEVIN HIGGINS	PAGE
Direct Examination By Mr. Russell	226
Cross-Examination By Mr. Mecham	235
Cross-Examination By Major Kirk	246

I N D E X (Cont.)

-oOo-

ROGER SWENSON	PAGE
Direct Examination By Mr. Russell	249
Cross-Examination By Mr. Mecham	254
BRIAN COLLINS	PAGE
Direct Examination By Major Kirk	258
Cross-Examination By Mr. Snarr	268
Redirect Examination By Major Kirk	274
CURTIS CHISHOLM	PAGE
Direct Examination By Mr. Mecham	277
Cross-Examination By Mr. Jetter	281
Cross-Examination By Commissioner Clark	282
Cross-Examination By Chairman LeVar	283
BRUCE OLIVER	PAGE
Direct Examination By Mr. Mecham	285

E X H I B I T S

-o0o-

EXHIBITS ADMITTED	PAGE
DEU Exhibits 4.0 - 4.18, 4.04R - 4.02R, 4.0SR, and 4.01SR	24
DEU Exhibits 5.0, 5.01, and 5.02	136
DPU Exhibits 6.0DIR - 6.7DIR and 6.0SR	149
DPU Exhibits 1.0DIR and 1.0SR	184
OCS Exhibits 4D, 4.1D - 4.3D, 4SR, and 4.1SR - 4.2SR	207
UAE Cross Exhibit 1	217
UAE Exhibits 2.0 - 2.4, 2.0R - 2.2R, and 2.0S	228
US Magnesium Exhibits 1.0, 1.1, and 1.0S	250
FEA Exhibits 2.0, Appendix A, and 4.0	259
OSC Cross Exhibit 1	269
ANGC Exhibits 3 and 3SR	280



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

2 -o0o-

3  
4 CHAIRMAN LEVAR: Good morning. We're here  
5 for a Public Service Commission hearing in docket  
6 19-57-2, Application of Dominion Energy Utah to  
7 Increase Distribution Rates and Charges and Make  
8 Tariff Modifications.

9 This is the Phase II hearing in this docket.  
10 We also have a public witness hearing scheduled today  
11 at 6:00 p.m.

12 Are there any preliminary matters before we  
13 go to appearances that anyone has?

14 (No response.)

15 CHAIRMAN LEVAR: I'm not seeing any  
16 indication from anyone, so why don't we start with  
17 Dominion for your appearance.

18 MS. CLARK: Thank you.  
19 Jenniffer Nelson Clark, counsel for Dominion Energy.  
20 I have with me Cameron Sabin, who is also counsel for  
21 Dominion Energy.

22 And we have company witnesses,  
23 Austin Summers and Jessica Ipson, with us as well.

24 CHAIRMAN LEVAR: Okay. Thank you.

25 Mr. Jetter?

1 MR. JETTER: Good morning. I'm  
2 Justin Jetter with the Utah Attorney General's  
3 Office. I'm here today representing the Utah  
4 Division of Public Utilities.

5 Seated with me at counsel table is  
6 Douglas Wheelwright for -- witness for the Utah  
7 Division of Public Utilities. The Division will also  
8 call Howard Lubow as a witness at this hearing.

9 Thank you.

10 CHAIRMAN LEVAR: Okay. Thank you.

11 Mr. Snarr?

12 MR. SNARR: Yes, thank you. My name is  
13 Steven Snarr. I'm an assistant attorney general here  
14 representing the Office of Consumer Services today.

15 We do have a witness that we will sponsor,  
16 Mr. Jim Daniel, as supporting our positions.

17 CHAIRMAN LEVAR: Okay. Thank you.

18 Major Kirk?

19 MAJOR KIRK: Good morning. I'm  
20 Major Scott Kirk with the US Air Force on behalf of  
21 the Federal Executive Agencies. Today, with me, I  
22 have Captain Robert Friedman of the United States  
23 Air Force.

24 And today we'll have -- during this hearing  
25 we'll have a witness, Brian Collins, with

1 Brubaker & Associates.

2 CHAIRMAN LEVAR: Thank you.

3 Mr. Mecham?

4 MR. MECHAM: Good morning. Steve Mecham  
5 representing the American Natural Gas Council.

6 And we will be presenting Curtis Chisholm  
7 for ANGC, as well as Bruce Oliver.

8 CHAIRMAN LEVAR: Thank you.

9 Mr. Russell?

10 MR. RUSSELL: Thank you. Phillip Russell on  
11 behalf of the Utah Association of Energy Users and on  
12 behalf of US Magnesium.

13 On behalf of UAE, I will call  
14 Witness Kevin Higgins, and on behalf of US Magnesium,  
15 I will call Mr. Roger Swenson.

16 CHAIRMAN LEVAR: Okay. And I'm just going  
17 to clarify, we had an intervention from Nucor Steel,  
18 but no testimony filed. I'm not seeing anyone from  
19 Nucor Steel looking like they're antici- --  
20 participate in the hearing today, so I'll just  
21 confirm that. And I'm not seeing any indication  
22 otherwise.

23 Any other matters before we go to the first  
24 witness?

25 (No response.)

1 CHAIRMAN LEVAR: I'll just comment, there  
2 is -- there is a small amount of confidential  
3 material here, and as always, we'll tend to rely on  
4 participants, if any questions start to move into any  
5 confidential information, to please jump in and stop  
6 us. And feel free to do that so we can handle that  
7 issue appropriately.

8 And with that, we'll go to Dominion for your  
9 first witness.

10 MR. SABIN: Dominion Energy calls  
11 Austin Summers as our first witness.

12 CHAIRMAN LEVAR: Good morning, Mr. Summers.

13 THE WITNESS: Good morning.

14 CHAIRMAN LEVAR: Do you swear to tell the  
15 truth?

16 THE WITNESS: Yes.

17 CHAIRMAN LEVAR: Thanks.

18  
19 DIRECT EXAMINATION

20 BY MR. SABIN:

21 **Q. Mr. Summers, could you state your full name**  
22 **for the record?**

23 A. My name is Austin Summers.

24 **Q. What is your position with Dominion Energy?**

25 A. I'm a manager of rights and regulation for

1 Dominion Energy.

2 Q. And you have submitted both direct,  
3 rebuttal, and surrebuttal testimony in this matter?

4 A. That's correct.

5 Q. I have that testimony as DEU Exhibits 4.0  
6 through 4.01 -- excuse me, through 4.18. That is  
7 your direct testimony and exhibits.

8 The rebuttal testimony is Exhibit 4.04R with  
9 Exhibits 4.01R through 4.02R.

10 And then for your surrebuttal testimony,  
11 DEU Exhibit 4.0SR with one exhibit, 4.01SR.

12 Is that accurate?

13 A. That sounds correct, yes.

14 Q. And do you have any corrections at this time  
15 to your testimony?

16 A. No.

17 Q. Do you accept your testimony -- or as if  
18 given today, do you accept that as -- for the record  
19 in this matter?

20 A. Yes.

21 Q. Okay. Have you prepared a summary of the  
22 direct rebuttal and surrebuttal points that you make  
23 in your testimony?

24 A. I have.

25 Q. And go ahead and provide that now.

1           A.     Thank you.   And I will be summarizing the  
2 cost of service and rate design this morning.   And I  
3 realize that a lot of times that's not the most  
4 entertaining, but on the bright side, I'm not going  
5 to be covering any pension today, so that's a saving  
6 grace here today.

7                     When I filed my direct testimony, the whole  
8 idea was to fix the interclass subsidies or cost of  
9 service portion now, and then fix the intraclass  
10 subsidy or rate design in the next rate case.   So in  
11 my original testimony, I proposed a three-step  
12 process.

13                    The first step was to implement full cost  
14 rates for all classes in this case.   I don't know  
15 that there's been much dispute on this fact that the  
16 TS class has been under cost and it needs to reach  
17 full cost now.   If gradualism is used to get there, I  
18 think that that is fine as long as it gets to  
19 100 percent before the next rate case.

20                    The second step of that three-step approach  
21 was to stabilize the TS class long enough to do a  
22 thorough analysis.   That stability will come through  
23 a temporary 35,000 dekatherm moratorium.   On page 22  
24 of my direct testimony, I showed a chart.   The chart  
25 shows that growth in the TS class -- we can just turn

1 to that, again, on page 22 of my direct.

2 That chart shows growth over the last decade  
3 from 132 customers in 2010 to 1,093 customers in  
4 2019. The class has been changing so rapidly that no  
5 analysis can be done. We're constantly trying to hit  
6 a moving target. This moratorium isn't meant to be  
7 anticompetitive; it's just trying to get a consistent  
8 set of data to analyze.

9 The third step of that three-step approach  
10 was to fix rate design in the next case. Now, I'd  
11 acknowledge that I've done something maybe unique in  
12 this case. I've pointed out a problem, but I haven't  
13 really proposed an immediate solution. It's  
14 important to consider why that was done.

15 If we wait until the next rate case, it  
16 gives time for rates to get to full cost, it gives  
17 time for stabilization to happen in the class, and it  
18 gives time for the -- for a collaborative analysis to  
19 be done by all of the parties. Making a decision now  
20 would be premature and could lead to more problems in  
21 the future.

22 It's my testimony that this three-step  
23 approach that I proposed in my original testimony is  
24 still the best option. Step 1 brings the TS to full  
25 cost now, and I don't think this should be minimized.

1 This is a big deal. This is something that the  
2 company and a lot of the parties in this case have  
3 been trying to do for several rate cases now. So  
4 that is a big deal.

5 Step 2 is the moratorium that stabilizes the  
6 makeup of the TS class. And then over the next three  
7 years, that collaborative analysis, in some form,  
8 will be done with stable data, and progress will be  
9 made on rate design.

10 So stepping away from that three-step  
11 approach a little bit, I wanted to talk a little bit  
12 about splitting the GS and the TS classes. Several  
13 have made recommendations to split the GS class or  
14 the TS class, and my position is that there's not  
15 enough evidence to split the classes now.

16 Now, don't get me wrong. I think that we've  
17 learned a lot during the discovery process in this  
18 case, and it shows the benefit of all the parties  
19 being involved and asking questions. But even after  
20 the discovery process, we still need to wait.  
21 There's not enough analysis that has been done to  
22 make the split.

23 Right now there's one proposal out there  
24 that says we should split the TS class based on the  
25 size of the customer at 35,000 dekatherms. That is



1 one possible way to do it, basing it on size, but we  
2 still don't know if that's the best way. We don't  
3 know if size is the best way.

4 If size is the best way, we don't know that  
5 35,000 dekatherms is the best place to split it. We  
6 don't know if seasonal use would be a better way to  
7 split the class, if demand differences, if commercial  
8 versus industrial would be a better way to split it,  
9 or if even a load factor would be a better way to  
10 split it.

11 We also haven't done any impact-on-customers  
12 analysis. We haven't compared a customer in the GS  
13 class to a customer in the TS class of similar nature  
14 and seeing if they would have similar costs.

15 Now, when discussing this future analysis, I  
16 think it's important to point out that we do need a  
17 collaborative process. We need to do a deep dive  
18 into cost of service and rate design, and the company  
19 is open to any collaborative process as long as  
20 parameters are set that make it productive. And I do  
21 believe that these discussions can be productive.  
22 One thing that will help those discussions be  
23 productive would be having this 35,000 dekatherm  
24 moratorium.

25 As I mentioned earlier, the original

1 proposal has always been to work out the details of  
2 intraclass subsidies in the next case. The changing  
3 rate design or splitting a class is not a simple  
4 change. In the TS class, we've got a unique  
5 situation going on right now because we've had, over  
6 the last decade, really, customers moving into this  
7 class that were firm customers before. They were  
8 firm sales customers. And trying to find a place for  
9 them in the transportation is a fundamentally --  
10 fundamentally new class of customers.

11 To make this analysis and to make this class  
12 and to do it right, we will need to gather data. The  
13 cost of service studies that we used in this general  
14 rate case took my team nearly a year to put together.  
15 We started gathering data in summer of 2018, and  
16 those studies were finished probably May or June of  
17 2019, right before we filed.

18 But once I've got that data, though, we were  
19 able to do a lot with it. In this case, we were able  
20 to do three different cost of service studies during  
21 the discovery process based on data requests. And we  
22 were -- and I wouldn't say that those were easy, but  
23 having that data already gathered makes it so that we  
24 can do more of that analysis.

25 Having the moratorium in place will allow us

1 to gather some data and then be able to analyze that  
2 data without it constantly changing. I'd already  
3 pointed out the chart on page 22 of my direct  
4 testimony that shows growth over the last decade, but  
5 if you look at the last three years, from 2016 to  
6 2019, we grew from 563 customers to 1,093 customers.  
7 That is significant growth. And like I mentioned  
8 before, without a consistent set of data, you're  
9 trying to hit a moving target.

10 It's important to remember, too, that I'm  
11 not proposing that this be a long-term ban. I'm  
12 simply proposing a moratorium until we can get the  
13 class to full cost and we can design accurate rates  
14 for these customers.

15 While I'm on the topic of the moratorium,  
16 this issue has brought allegations that the company  
17 is trying to prevent competition, and this is simply  
18 not true. If rates are set appropriately, it doesn't  
19 matter to the company which class these customers are  
20 in. The ultimate goal that we're trying to follow is  
21 cost causation, and I've used cost-based, consistent,  
22 logical reasons for every component of cost of  
23 service in rate design.

24 Even during the discovery case -- or, sorry,  
25 as part of this case, I've reduced the administrative

1 charge. This leads to a decrease for small  
2 transportation customers. This is not  
3 anticompetitive.

4 I've also made reductions to the TS  
5 allocation of cost by changing allocator 230. I saw  
6 a reasonable proposal to move from a 60/40 weighting  
7 to a 68/32 weighting, and I adopted that change.  
8 This is not anticompetitive.

9 I also agreed to a gradual increase to the  
10 rates, which is also not preventing competition. If  
11 anything, I think that the moratorium protects these  
12 potential TS customers. It's not prudent to have  
13 these customers making a decision now and locking  
14 into a contract with a supplier when their rates or  
15 their rate design or even their rate class could be  
16 changing in the coming years.

17 I have a few additional items that I want to  
18 address. One of those is allocating design day costs  
19 to the IS class. And I discussed this a little bit  
20 in rebuttal, that there needs to be a distinguishing  
21 factor that separates the IS class from the GS and  
22 the FS class. There has to be some distinguishing  
23 factor, otherwise it would be the same as those other  
24 sales rates.

25 The company's proposal to not allocate

1 design day costs is reasonable, and it distinguishes  
2 differences between the interruptible customers and  
3 firm customers. The fact is these customers do get  
4 interrupted. If they're willing to interrupt when  
5 called upon to do so, they should receive a benefit  
6 for that willingness. There's nothing on the record  
7 besides my proposal showing something that would  
8 distinguish the IS class from the other classes.

9 A few other miscellaneous -- just allocator  
10 issues while I'm on the topic of service allocations.  
11 I'm not going to address each one, but I will just  
12 state that every other allocation factor that I  
13 proposed should be used for at least one of four  
14 reasons: First, it has been used consistently  
15 through several rate cases. The second reason would  
16 be that it's a reasonable allocation factor. The  
17 third is that the Commission has decided in prior  
18 cases that the allocation provides a result that is  
19 in the public interest or, fourth, no other solution  
20 has been offered by the other parties.

21 Moving on again, and this is kind of along  
22 those same lines, but it's in the issue of SNG  
23 allocation, where we proposed allocating peak hour  
24 charges to TS customers. This is a charge that was  
25 discussed in the 2017 docket, and those charges are

1 currently -- all of the contract costs for that are  
2 being charged to firm sales customers.

3 That charge, that peak hour charge, should  
4 not be confused with interrupting customers or the  
5 penalties that are associated with interrupting or,  
6 also, the penalties that are associated with any of  
7 the operational flow orders or the holding burns to  
8 schedule quantities. Those are completely different  
9 than what the peak hour charges that we're talking  
10 about here.

11 The penalties that are discussed by  
12 Mr. Oliver are really meant to influence behavior  
13 during one of those situations. If we want those  
14 customers not -- to really interrupt, there's a  
15 penalty out there so that they don't interrupt -- so  
16 that they actually will interrupt.

17 The peak hour, though, happens on a regular  
18 basis, without warning to customers. We have used  
19 that contract every day this winter, and we don't  
20 notify customers when we use it. It's just part of  
21 our ongoing system costs. These costs should be  
22 charged to the transportation customers.

23 I want to move on to the administrative  
24 charge, which is something that the company proposed  
25 to reduce in this docket. We reduced it from \$4,500

1 per year down to \$3,000 per year. Now, the ANGC  
2 argues that this is not a cost-based charge. The  
3 calculations that are shown in DEU Exhibit 4.12 shows  
4 the costs that are included in this cost-based  
5 charge. These are the same calculations that have  
6 been used for the last -- at least the last 15 years.

7 I had discussed in surrebuttal, as did  
8 Mr. Higgins, that a reduction -- that this reduction  
9 to the administrative charge has a larger impact on  
10 the small transportation customers. Not only is this  
11 a reasonable cost-based charge, it's also the only  
12 option that has been proposed on how to calculate  
13 this.

14 Finally, my last issue is timing of signing  
15 up new TS customers. The company files an annual IRP  
16 in June, and I think a lot of people in this room are  
17 familiar with that process. But that IRP includes  
18 RFP decisions on gas purchases, and it also includes  
19 Wexpro drilling plans. Proper planning in the IRP  
20 means that the company needs to know where customers  
21 will be. A lot of components, such as the Wexpro  
22 drilling plan, cannot be adjusted or changed quickly  
23 throughout the year. Once those decisions are made,  
24 it's hard to back out of those or adjust those to  
25 meet changing demand.

1           We are a unique utility because we do need  
2 to do this. As far as I'm aware, there are no other  
3 utilities that have to manage a drilling program.  
4 Therefore, the ANGC proposal to allow customers to  
5 sign up any time of year should be rejected.

6           Mentioned before that, a lot of information  
7 was learned during this case which speaks to the  
8 productive nature of the discovery process and the  
9 input of each of the intervening parties. But while  
10 new lessons were learned, the company's original  
11 proposal to move the TS class to full cost and  
12 address intraclass subsidies or rate design in the  
13 next case is still the best option for the Commission  
14 to consider.

15           Combining the company's original proposal  
16 with the gradual approach to bringing the  
17 transportation class to full cost and a  
18 35,000 dekatherm moratorium provides rates for all  
19 classes that are just, reasonable, and in the public  
20 interest.

21           And that concludes my summary.

22           **Q. Thank you, Mr. Summers.**

23           MR. SABIN: Mr. Summers is available for  
24 cross-examination.

25           CHAIRMAN LEVAR: I don't believe we got his



1 testimony entered.

2 MR. SABIN: Thank you.

3 I now move to admit exhibits --  
4 DEU Exhibits 4.0 through 4.18, which is his direct  
5 testimony and exhibits; DEU Exhibits 4.04R through  
6 4.02R, which are the rebuttal testimony and exhibits;  
7 and then DEU Exhibit 4.0SR with Exhibit 4.01SR. We  
8 move for those to be admitted into the record.

9 CHAIRMAN LEVAR: Please indicate to me if  
10 anyone objects to that motion?

11 (No response.)

12 CHAIRMAN LEVAR: And I'm not seeing any  
13 objection, so the motion is granted.

14 (DEU Exhibits 4.0 - 4.18, 4.04R -  
15 4.02R, 4.0SR, and 4.01SR were  
16 admitted.)

17 MR. SABIN: Thank you.

18 Thanks for the reminder.

19 CHAIRMAN LEVAR: Mr. Jetter?

20 MR. JETTER: Thank you.

21

22 CROSS-EXAMINATION

23 BY MR. JETTER:

24 Q. Good morning, Mr. Summers.

25 A. Good morning.

1 Q. I have a few questions, and I guess I'd like  
2 to start with some questions about the interruptible  
3 service customers.

4 It's an accurate reflection of your  
5 testimony that you've entered into the record  
6 prefiled, as well as your summary this morning, that  
7 the company is recommending that no design day  
8 factors be applied to the rates of the interruptible  
9 service customers; is that correct?

10 A. That's correct. I think there needs to be a  
11 distinguishing factor, and if we start allocating  
12 design day cost to them, their DNG costs would be the  
13 same as any other sales customer.

14 Q. Thank you. And the design day peak  
15 allocation factor is an allocation of investment --  
16 and correct me if I'm wrong on this, but that it's  
17 portions of the high-pressure system and certain  
18 other distribution plant facilities; is that correct?

19 A. Yes, that's correct.

20 Q. Do you recall the last time that DEU  
21 experienced a design peak day on its system?

22 A. A design day that -- I don't recall.

23 Q. And is it accurate, to your knowledge, that  
24 it's been as long as 50 years without one?

25 A. I would have to check on that, but we have

1 interrupted customers. I mean, it doesn't have to be  
2 an exact design day for those interruptions to  
3 happen. We have interrupted customers in recent  
4 years.

5 Q. Okay. And the interruptions to those  
6 customers, were those interruptions based on a flow  
7 capacity in the high-pressure system -- excuse me.  
8 Let me rephrase that to make it a better question.

9 Were those based on a flow capacity  
10 constraint that was not related to a mechanical  
11 failure of some component?

12 A. I'm -- I'd have to go back and familiarize  
13 myself with the specifics of the different events.  
14 I'm not sure I can answer that question. I'd have to  
15 get with our gas supply folks and verify the details  
16 of each of those events.

17 Q. Okay. But you don't have any -- I guess you  
18 don't have any knowledge of an event occurring where  
19 a pipe restriction, for example, on the size was the  
20 cause of a --

21 A. Not that I recall, no.

22 Q. -- cause of interruption?

23 Okay. Thank you.

24 And I think you would agree with me that the  
25 likelihood of an actual occurrence of a design peak

1 **day is unlikely, and that's, you know, essentially by**  
2 **design?**

3 A. I think that we design -- the design day is  
4 something that could happen. I will admit that it  
5 hasn't happened recently, but it's -- it's weather.  
6 I'm not ready to say that it's not ever going to  
7 happen. I think that a design day absolutely could  
8 happen.

9 **Q. And you've testified that the interruptible**  
10 **service customers would either interrupt or pay a**  
11 **penalty; is that correct?**

12 A. Yes. If they were called upon to interrupt,  
13 they would either interrupt -- and I think a lot of  
14 interruptible customers do interrupt when they're  
15 asked to do so. If they do not interrupt, there are  
16 sizable penalties for not doing that.

17 **Q. And is it correct that the company, in a**  
18 **daily request to the Division, responded that it**  
19 **didn't keep track of the amount of interruption from**  
20 **certain customers during the last call for**  
21 **interruption? And by that, I mean the gas flow**  
22 **reductions.**

23 A. We do track their gas flow. That's why  
24 these customers -- all of the interruptible customers  
25 have to have specific meter equipment that allows us

1 to track their usage on an hourly basis so we can go  
2 back later and determine if any penalties should be  
3 assessed.

4 **Q. And you have assessed penalties; is that**  
5 **right?**

6 A. Yes, we have.

7 **Q. Because those customers didn't interrupt?**

8 A. Yeah. There were -- there are always some  
9 customers that don't interrupt for one reason or  
10 another. But I think there are also a lot of "good  
11 players," I guess is what I would call it, that when  
12 they're called upon to interrupt, they do that.

13 **Q. Okay. I have no further questions. Thank**  
14 **you.**

15 A. Thank you.

16 CHAIRMAN LEVAR: Mr. Snarr?

17 MR. SNARR: Yes, sir. Yes, thank you.

18

19 CROSS-EXAMINATION

20 BY MR. SNARR:

21 **Q. Good morning, Mr. Summers.**

22 A. Good morning.

23 **Q. I'd like to start off today by focusing on**  
24 **some of the studies the company did following the**  
25 **rate case that was completed back in 2014.**

1 A. Okay.

2 Q. You covered that in your testimony, your  
3 direct testimony, right at the beginning, page 1,  
4 commencing at line 20.

5 You were asked questions about the interim  
6 studies that were required by the partial settlement  
7 of the rate case that was approved by the Commission  
8 in 2014; isn't that correct?

9 A. That's correct.

10 Q. On the next page, you list various topics  
11 that were covered as part of those interim studies;  
12 is that right?

13 A. That's right.

14 Q. And in at least two of the three follow-up  
15 meetings, issues related to the transportation class  
16 of customers being split were discussed; is that  
17 correct?

18 A. Yes, that is correct. Well, let me look at  
19 them.

20 Yes. In the October 21 of 2014, we did  
21 discuss rate design of a split TS class.

22 Q. Okay. I also note that in all three  
23 follow-up meetings, issues related to interruptible  
24 sales or IS service were discussed; isn't that  
25 correct?

1 A. That's correct.

2 Q. Is it also correct to conclude that issues  
3 related to GS customer intraclass rate design were  
4 not the focus of these follow-up meetings or interim  
5 studies?

6 A. Yes, that's correct.

7 Q. Okay. Let me direct your attention to your  
8 surrebuttal testimony at page 2, if you could turn to  
9 that.

10 A. Okay. I'm there.

11 Q. All right. Look at line 42. I'd like you  
12 to read from 42 to 46, the sentences that are in --  
13 partway through line 42.

14 A. Sure. It says: "As I mentioned in my  
15 direct testimony, due to the complexity and history  
16 of the rate classes and design, the goal for this  
17 case was to get each class to a point where it was  
18 paying its cost of service to eliminate interclass  
19 subsidies. The intraclass subsidies should be  
20 eliminated in the next case, after the parties have  
21 had the opportunity to analyze the data and the  
22 customer's paying rates at full cost of service."

23 Q. Notwithstanding that statement, you've done  
24 some tweaking to the GS customer class in your  
25 proposal; is that right?

1           A.     We did propose some -- I would say the  
2 changes that I have proposed for the GS class weren't  
3 based on what we discussed in the interim task force.  
4 The changes that we proposed to the GS class also  
5 don't completely eliminate the intraclass subsidies  
6 in the GS class.  It's just simply a step moving that  
7 direction to reduce the impact in three years when we  
8 make a full change, the rest of the change.

9           **Q.     But the changes to the GS class would**  
10 **largely be a reduction of costs that they would**  
11 **assume because you're going to load the costs over on**  
12 **the transportation customers, isn't it?**

13          A.     So there's two things going on in the GS  
14 class.  So one thing that's happening is we're taking  
15 costs away from the GS class and we're allocating  
16 that to TS class.  That helps to remove the  
17 interclass subsidy.

18                 The other thing that I'm doing in the GS  
19 class -- and I'm sorry if I misunderstood your  
20 question, but I've proposed to reduce the block break  
21 in the GS class.  Right now that block break is at  
22 45 dekatherms, and I'm reducing it down to 30.

23          **Q.     Now, you've not engaged in a collaborative**  
24 **effort to discuss that particular change, have you?**

25          A.     No.



1 Q. All right.

2 A. Just the discovery process that happened  
3 during this case.

4 Q. Which your proposed change was made before  
5 we went through the whole discovery process?

6 A. That's correct.

7 Q. All right.

8 A. That was the company's proposal.

9 Q. All right. Let me now turn to a couple  
10 points on -- related to the transportation rate and  
11 the migration of customers.

12 Could you please refer to the -- your  
13 testimony -- direct testimony, line 631 through 634.

14 A. Okay.

15 Q. Now, you propose a 35,000 dekatherm minimum  
16 use requirement to prevent more small customers  
17 migrating to the highly subsidized TS rate; is that  
18 correct?

19 A. That is correct. And then later on, that  
20 minimum use requirement was changed to a moratorium  
21 in my rebuttal.

22 Q. Now, some of the data that the company has  
23 provided in connection with this -- and I see it with  
24 different labels on it, but one place where we find  
25 information the company has provided is in

1 **ANGC Exhibit 2.01R. It might be what you have in an**  
2 **Exhibit 4.06, page 1 of 2, but I'm -- I get mixed up**  
3 **on the nomenclature of --**

4 A. Who's filed what?

5 **Q. -- who's sponsoring it and for what reason.**

6 MR. SABIN: Sorry. So which one are we  
7 referring to, Steve?

8 MR. SNARR: I can safely tell you it's in  
9 ANGC Exhibit 2.01R, page 1. And if that appears  
10 three or four other places, I apologize for not  
11 giving reference to the others.

12 THE WITNESS: Okay. I have  
13 ANGC Exhibit 2.01R in front of me.

14 BY MR. SNARR:

15 **Q. I'd like to direct you now to line 51 on**  
16 **that page.**

17 A. Okay.

18 **Q. Doesn't that show that the current TS rate**  
19 **paid by the small TS customers recovers more than**  
20 **their allocated cost of service? That is, they're**  
21 **paying -- they're paying a subsidy, not receiving a**  
22 **subsidy; isn't that right?**

23 A. That is right. That -- now --

24 **Q. Okay. Thank you. Now, most parties in this**  
25 **case oppose implementing the 35,000 dekatherm minimum**

1 use provisions as a means to prevent new small  
2 customers migrating to the TS rate; isn't that  
3 correct?

4 A. That's correct.

5 Q. If the Commission agrees with these other  
6 parties and does not approve the 35,000 dekatherm  
7 minimum use provision or any other moratorium on the  
8 migration of small customers, do you have an estimate  
9 of how many additional existing customers would  
10 actually migrate to that TS rate class?

11 A. I have not done an estimate on how many  
12 could migrate.

13 Q. Okay. Thank you. We'll turn to some other  
14 issues now. Let's turn to some of the questions on  
15 the cost allocation issues.

16 In your rebuttal testimony at pages 4 and 5,  
17 you discuss issues raised by Mr. Daniel related to  
18 the allocation of general plant costs and general  
19 plant depreciation as those costs impact customers  
20 using the NGV service; isn't that correct?

21 A. That is correct.

22 Q. Now, do you dispute that there should be  
23 symmetry between the way the general plant costs are  
24 allocated and the way the general plant depreciation  
25 costs should be allocated?

1           A.     I think that the cost of service studies  
2     should be as accurate as possible.  I do.  And just  
3     to give a little bit of background on how these cost  
4     of service allocators came to be and why we use what  
5     we use, after the 2007 general rate case, the company  
6     sat down with representatives from the Division and  
7     the office and went through each individual FERC  
8     account and said, "What is the best way to allocate  
9     this particular FERC account?"

10           And that's the same allocation factors that  
11     the company is using today.  I don't -- I wasn't part  
12     of that study, but -- or part of that process, but  
13     what happened is, as you're going through these,  
14     you're not necessarily looking at saying, "Does this  
15     individual FERC account -- is it actually -- you  
16     know, is it doing the right thing for each individual  
17     class?"

18           It's saying, "What is the best allocation  
19     factor for that as a whole, for that account as a  
20     whole?"

21           So you might have some allocation factors  
22     that allocate not enough costs to the NGV class, but  
23     you have others that will probably allocate more to  
24     the NGV class.

25           But in this case, I think it's reasonable to

1 keep using the allocation that we've used  
2 historically, to keep using the gross plant rather  
3 than the gross general plant that Mr. Daniel  
4 proposed. It's consistent with prior practice, and  
5 it's a reasonable allocation factor.

6 **Q. While I appreciate you suggesting it might**  
7 **be reasonable, or you have an end objective in mind,**  
8 **I really want to just kind of point out -- ask a**  
9 **question.**

10 **General plant costs and general plant**  
11 **depreciation, couldn't we say "birds of a feather**  
12 **ought to flock together," that those two ought to be**  
13 **allocated in some similar way?**

14 A. It's a reasonable allocation. I would think  
15 that Mr. Daniel's allocation has merit.

16 **Q. All right.**

17 A. But I -- I would point out, though, that to  
18 be consistent with past practice and to prevent  
19 the -- the end result of using that allocation factor  
20 is significantly increased cost to the NGV class.

21 **Q. Let's address --**

22 A. If that happens, there's legislation that  
23 allows the company to subsidize that rate, and that's  
24 what would have to happen for that rate to keep  
25 going. So if you used Mr. --

1 Q. You addressed that in your testimony?

2 A. Yeah, I said that in my testimony.

3 Q. Page 5, commencing at line 112.

4 A. Sorry, where was that?

5 Q. Page 5, commencing at line 112.

6 A. That's right.

7 Q. Now, you there address the possibility of  
8 the Commission embracing Mr. Daniel's proposal as it  
9 relates to the allocation of costs between those two  
10 accounts so that they're kind of running together,  
11 but explain that any of those allocations might  
12 affect the NGV service. And if so, then you're going  
13 to get into another situation of allocating back the  
14 effect of the discount that you're giving to NGV;  
15 right?

16 A. That's correct.

17 Q. All right. Wouldn't it be better to  
18 allocate all appropriate costs or the similar  
19 accounts as they ought to be accounted for, and then,  
20 to the extent that discounts are necessary or ought  
21 to be provided, use the statutory authority to  
22 justify such discounts?

23 A. I think it's the same result either way.  
24 What -- the benefit of what I proposed is that I do  
25 have consistency. And I think that for each one of

1 those allocation factors, like I said, you could  
2 probably get into an argument of what way you're --  
3 what is the best way to do that. But I think that it  
4 would provide a similar result.

5 **Q. All right. Let's now move to questions**  
6 **about the interruptible customers. At page 8 of your**  
7 **direct testimony, commencing on line 202, you note**  
8 **that in prior rate cases, the company, at the**  
9 **direction of the Commission, included interruptible**  
10 **customers in allocations to share in costs to be**  
11 **recovered associated with the design day usage of the**  
12 **system; isn't that correct?**

13 A. I'm sorry. Let me get there.

14 **Q. Yeah. Page 8, line 202 is where it starts.**

15 MR. SABIN: Sorry, was that direct?

16 MR. SNARR: Direct testimony.

17 THE WITNESS: Okay. So yes. That was the  
18 quote by the Commission that you described?

19 BY MR. SNARR:

20 **Q. Summarized.**

21 A. Okay.

22 **Q. So in the past, the Commission has directed**  
23 **that interruptible customers share in some allocation**  
24 **of the cost associated with design day usage of the**  
25 **system; right?**

1           A.     That is correct.  That was what happened in  
2     that 2007 docket.  Now, since then, I think things  
3     have changed.  We have interrupted customers since  
4     2007.  I think prior to 2007, that wasn't as common  
5     as it has been recently.  So I think things have  
6     changed, and I think that company's argument is  
7     logical, and so I'm putting it out there for the  
8     Commission to change.

9           Q.     All right.  At lines 207 through 209, you  
10    indicate that in the 2009 rate case, the company  
11    allocated demand costs over and above the average  
12    peak requirements of the firm customers to  
13    interruptible customers.  So you did some to  
14    interruptible customers at that time; right?

15          A.     We did.

16          Q.     And by "firm customers," you're referring to  
17    firm sales customers and those firm transportation  
18    customers; right?

19          A.     I believe I -- I'm sure that -- yes, that's  
20    correct.

21          Q.     All right.  So those who've contracted for  
22    firm service ought to be sharing the cost, but you  
23    say that anybody who's on interruptible service  
24    shouldn't get any of those demand costs?

25          A.     That's correct.



1 Q. All right. Now, there's been a lot of  
2 discussion in this proceeding about the percentage  
3 allocation related to the high-pressure feeder mains,  
4 et cetera, and that's -- the use of a design  
5 day/throughput allocator has been discussed  
6 extensively.

7 Now, is it your understanding that the use  
8 of the design day/throughput allocator affects the  
9 allocation of costs to interruptible customers, or  
10 not?

11 A. For some reason, I can't picture that in my  
12 head. I can't run that through.

13 Q. Isn't it true that for the portion of that  
14 formula that is designed based upon throughput, that  
15 the company would have throughput for all the firm  
16 sales customers, throughput for all of the firm  
17 transportation customers, and throughput for the  
18 interruptible customers as part of package that would  
19 share in the cost based upon throughput? Isn't that  
20 correct?

21 A. I apologize, Mr. Snarr. I'd have to look at  
22 the model to see how to verify that that is the way  
23 that that's allocated.

24 Q. Now, I do have the NARUC manual that  
25 discusses that briefly, but I don't know whether your

1 model follows the manual or doesn't.

2 A. It was not built based on the NARUC manual.

3 Q. So if the NARUC manual says the appropriate  
4 way to do a design day/throughput allocator includes  
5 allocation to interruptible customers through the  
6 throughput component of that, that's at least  
7 irrelevant as to whether or not your company is  
8 actually doing that right now; is that right?

9 A. I think -- well, so let's clarify something,  
10 though, because the 6 -- the -- when you're talking  
11 about allocator 230, that's the one that has the  
12 weighting between the design day and the average  
13 throughput. That's used for a portion.

14 But there are components that are allocated  
15 only by throughput, and those would -- and those  
16 customers would definitely get a portion of those  
17 costs that are allocated by throughput.

18 Q. Okay. Let me back up for a minute. Okay.  
19 Let me just say to the extent that you use allocators  
20 based upon throughput, and I'm going to say to the  
21 extent that the design day/throughput allocator also  
22 relies upon throughput --

23 A. Sure.

24 Q. -- it might be that interruptible customers  
25 are actually receiving a portion, an allocated

1 **portion, of demand-day costs; isn't that correct?**

2 A. I think that if that were the case, I would  
3 take out the design day portion of the costs and only  
4 allocate them the throughput-weighted part of the  
5 costs. So that if I'm saying design -- there's a  
6 weighting of design day and throughput, and there are  
7 some costs that are allocated that way, it would  
8 probably go through just the throughput.

9 **Q. But don't your feeder lines make up part of**  
10 **the system that is contemplated or used on a design**  
11 **day?**

12 A. Sure.

13 **Q. And aren't the costs associated with the**  
14 **whole system being divided up on a design day between**  
15 **those who are using it -- firm -- and between those**  
16 **who use it on a throughput basis?**

17 **Isn't that what the allocator is all about**  
18 **that we are talking about?**

19 A. So again, I -- I wish that I had an answer  
20 for you, but I'm not willing to say -- and I could  
21 check to verify how that's done, but I can't tell you  
22 how --

23 **Q. All right.**

24 A. -- how it is being done.

25 **Q. Appreciating your answer to that question,**

1 let me ask a little different question just for  
2 clarification.

3 Let's put that design day/throughput  
4 allocator aside for a minute. You're stating on  
5 behalf of the company that the interruptible class of  
6 customers should receive no cost allocation as it  
7 relates to designed -- the use of design day  
8 facilities or the demand part of that; isn't that  
9 right?

10 I mean, I'm trying to understand your  
11 testimony.

12 A. Yeah. When I -- and unfortunately, the  
13 testimony doesn't say -- you know, it doesn't detail  
14 out where that 68/32 allocator is used. That's in  
15 part of the electronic model that was filed as  
16 DEU Exhibit 4.18. Unfortunately, I don't have the  
17 electronic model. I could look at it very quickly  
18 and tell you how that's being treated.

19 Q. Put that on the shelf for a minute.

20 A. If you want to talk theoretically, if that's  
21 what you want to do, I'm willing to go --

22 Q. I'm happy to talk -- sorry. I'm happy to  
23 talk theoretically.

24 Let's put the design day allocator on the  
25 shelf.

1 A. Okay.

2 Q. And maybe you can even check and clarify for  
3 us whether there's a component of the throughput  
4 aspect of that allocation that goes to the  
5 interruptible class. But leave that aside.

6 Your testimony is, is that the company  
7 believes that the interruptible customer should not  
8 receive any cost responsibility for the facilities  
9 that are built to run the system. They're basically  
10 going to be there to take advantage of the gaps or  
11 the lower use of the system and help provide some  
12 offset to the costs that are otherwise being incurred  
13 by the firm customers; is that right?

14 A. I think that's right.

15 Q. Okay. Are you aware of any other place  
16 aside from that allocator where you have assigned any  
17 demand costs to the interruptible class?

18 A. No.

19 Q. Now, that is a distinction from what  
20 occurred in 2009, and it's also a distinction from  
21 what the Commission asked in a prior rate case to  
22 include the interruptible customers for some cost  
23 recovery; isn't that correct?

24 A. That's correct.

25 Q. Doesn't this position represent a departure

1 from the past rate design practices that have  
2 occurred for DEU before this commission?

3 A. It does represent a departure from what we  
4 filed in -- from what we were ordered to do in 2007  
5 and then what we actually did in 2009.

6 Q. Okay.

7 A. And as I pointed out earlier, I think that  
8 it's important to change that so that there is a  
9 distinction between those customers.

10 Q. All right.

11 A. Now, in the 2013 case that we filed, that  
12 was settled. So currently there -- the company's  
13 proposal in that case was to not allocate design day  
14 costs to those customers. So that's what was  
15 settled. So currently there are no design day costs  
16 being allocated to those customers.

17 Q. Unless I've found some in the allocator;  
18 right?

19 A. Right.

20 Q. Okay. As a proponent of the change you  
21 described, would you agree that the burden of proof  
22 to show that such a change is necessary in  
23 establishing just and reasonable rates would fall  
24 upon the company?

25 A. I do think that that's the company's

1 responsibility, and that's why we put it out there  
2 and we're saying that this is reasonable. There has  
3 to be some kind of distinguishing difference between  
4 an interruptible customer and a sales customer or a  
5 firm customer; otherwise, there's no point in having  
6 the interruptible class.

7 **Q. Except for you can interrupt them. And**  
8 **that's been the case and -- it has been the case, and**  
9 **you have interrupted.**

10 A. Right. But if the customer is going to have  
11 the willingness to be interrupted, they need to  
12 receive a benefit to that. Otherwise, why would they  
13 want to be an interruptible customer?

14 **Q. Isn't it true that if -- as some demand**  
15 **costs are assigned to the interruptible class, but**  
16 **that you then interrupt them, that the company might**  
17 **be exposed to greater risk to the extent those demand**  
18 **costs are assigned to the interruptible class?**

19 A. I'm sorry. Will you repeat that one?

20 **Q. If there is some portion of demand costs**  
21 **that are assigned to the interruptible class so that**  
22 **their rates are structured with a contemplation that**  
23 **the recovery of those demand costs would require them**  
24 **to be using your system to some degree, isn't your**  
25 **risk in recovering the demand costs somewhat**

1 dependent upon them using your system?

2 And yet, if you interrupt them or cut them  
3 off, wouldn't that tend to cut off a thread of the  
4 revenues that you might be relying on to come in  
5 through that class?

6 A. It's an interesting question.

7 Q. Less risk if you have all the demand charges  
8 settled on your firm customers and your firm  
9 transportation rates; isn't it?

10 A. Yeah, which I think is all the more reason  
11 not to allocate them any of those costs. If they're  
12 not contributing to those costs while they're  
13 interrupted, then those costs should be placed on  
14 firm sales customers where I can collect the revenue.

15 Q. Let's turn to that design day/throughput  
16 allocator with a few more questions. I understand  
17 your caveat on my earlier questions and your answers.

18 Page 6 of your rebuttal testimony, you  
19 comment on Mr. Lubow's use of the term "peak day" to  
20 mean highest sendout day, as distinguished from the  
21 company's use of that term, which really means the  
22 design peak day.

23 Do you recall that discussion?

24 A. I recall that discussion, yes.

25 Q. You note that because the company bills its



1 customers on a monthly basis, daily use of the  
2 company's system by customer class is really not data  
3 that's available to you; is that right?

4 A. That's right.

5 Q. Isn't it true that the company can determine  
6 and measure when it has encountered a highest sendout  
7 day?

8 A. We can determine when we have had a high  
9 sendout day in the winter. We can determine that  
10 pretty easily, but it's -- and I can tell you how  
11 much of that is for the transportation class.

12 Q. Okay.

13 A. And I can tell you how much of that is for  
14 the TBF class for that day.

15 Q. Okay.

16 A. Because on that day, I can gather detailed  
17 information for those customers.

18 Q. Right.

19 A. Now, I cannot split out what is for the GS  
20 class and what is for the FS class --

21 Q. Okay.

22 A. -- because those customers don't have daily  
23 meter reading.

24 Q. Right. Isn't it true that the company's  
25 design peak day is only an estimate, and that as

1 such, that event really hasn't ever occurred, and you  
2 haven't ever measured it, and you don't even know  
3 what the transportation customers used on the design  
4 day? It's all an estimate?

5 A. The design day is based on an estimate, and  
6 that estimate has been tested, I'd say fairly  
7 rigorously, in recent dockets. There was a 2017  
8 docket that discussed the peak hour charges, and the  
9 design day was very, very rigorously analyzed and  
10 determined to be reasonable.

11 Q. Sure. Analyzed and determined -- excuse me.  
12 Analyzed, determined to be reasonable, but  
13 in terms of what happened on an actual design day and  
14 what amount of transportation -- firm -- was  
15 provided, what amount of firm sales was provided in  
16 aggregate, and whether there was any interruptible  
17 customers served at all on that day, you don't know?

18 A. No.

19 Q. Right.

20 MR. SNARR: That concludes my questions.

21 CHAIRMAN LEVAR: Okay. Thank you,

22 Mr. Snarr.

23 I'll think we'll go to Mr. Russell next.

24  
25 ///

1 CROSS-EXAMINATION

2 BY MR. RUSSELL:

3 Q. Good morning, Mr. Summers.

4 A. Good morning, Mr. Russell.

5 Q. I have a few questions to touch on some of  
6 the topics that you identified in your testimony  
7 summary, and I want to start with this allocation  
8 factor 230. It's discussed quite a bit in some of  
9 the testimony, but I haven't really heard a clear  
10 discussion of it yet today, so I think it might be a  
11 little bit useful.

12 That allocation factor seeks to allocate  
13 costs of feeder lines, intermediate high-pressure  
14 mains, compression stations, measuring and regulating  
15 equipment; right?

16 A. That is correct.

17 Q. Okay. And it is appropriate -- there are  
18 different ways to allocate those costs that are  
19 deemed to be appropriate in various proceedings;  
20 right?

21 A. Yeah. I think that there are -- as pointed  
22 out in this case, there are a lot of different ways  
23 to do this.

24 Q. Right. And for instance, you could allocate  
25 them based entirely on a design day peak factor, as

1 the witness for the FEA has done here; right?

2 A. You could.

3 Q. Okay. And you can allocate those costs with  
4 some portion of the costs being allocated based on  
5 usage at that design peak and some portion of the  
6 costs being allocated on the average use; right?

7 A. Right.

8 Q. And that's what the company has done?

9 A. That is correct.

10 Q. Okay. And using that hybrid factor, as the  
11 company does, allocates costs both based on how the  
12 system is designed and in how it is used; right?

13 A. That is correct.

14 Q. Okay. And that -- the volumetric component  
15 of that allocation factor does distribute fixed costs  
16 through the volumetric rates; right?

17 A. Yes.

18 Q. Including to interruptible customers; right?

19 A. I think that's -- again, I think that's the  
20 same question that Mr. Snarr was asking me, and I'd  
21 have to look at that allocator 230 just to make sure.  
22 I believe it does allocate some of that cost to  
23 interruptible.

24 Q. Now, the company started with a 60/40  
25 weighting proposal in this docket; right?

1 A. That is correct.

2 Q. 60 percent of that allocation factor would  
3 be design day, and 40 percent would be throughput;  
4 correct?

5 A. That's correct.

6 Q. The allocation -- in fact, do you know what  
7 the allocation factor is that is in rates currently,  
8 based on the 2013 settled case?

9 A. Yes. The 2013 case was settled using a  
10 similar approach to what I've agreed to here, and it  
11 is currently set at a 67/33 weight.

12 Q. Okay. And do you recall what that was based  
13 on?

14 A. It was based on the proposal -- it was the  
15 same method that UAE proposed and ANGC proposed in  
16 their direct testimony. I think some have called it  
17 the "peak average method," but it's the same method  
18 that I've agreed to here.

19 Q. And that is -- just to spell that out, that  
20 is allocating design day and throughput based on a  
21 system load factor; right?

22 A. That's correct.

23 Q. And you have indicated in your testimony  
24 that you have agreed to that -- that weighting  
25 because you believe it carries the most analytical

1 **weight; is that right?**

2 A. That's right. As far as the proposals that  
3 we're putting in this case, it was the only one that  
4 seemed to have backing behind it.

5 **Q. Okay. Do you recall where the 60/40**  
6 **weighting comes from?**

7 A. Yeah. I can give you a little history on  
8 that. The 60/40 weighting has been used pretty  
9 consistently by the company. There's always some --  
10 I don't know -- people like to fight over this one, I  
11 think, a lot because there's a lot of costs that get  
12 allocated using this allocation factor.

13 So typically, parties would come in and  
14 propose something closer to a 70/30 weighting. That  
15 usually comes from, typically, industrial customers  
16 that use -- that have a higher load factor, so  
17 they're using their energy more consistently  
18 throughout the year.

19 I would say the advocates and the smaller  
20 customers would usually propose something smaller,  
21 closer to a 50/50 weighting, like we've seen in this  
22 case. So when the company was doing its allocations,  
23 it kind of looked at it and said 60/40 is the middle  
24 ground. And that seemed reasonable, and that's  
25 what I -- that was used in history.

1           Now, in this case, the -- I agreed to this  
2 new weighting using the average and peak method just  
3 because it made sense. I mean, there's logic behind  
4 it, and I think it's a reasonable allocation factor  
5 to use.

6           **Q. Okay. And would you characterize the 60/40**  
7 **weighting factor that the company had initially**  
8 **proposed, partly based on the history that you just**  
9 **gave, as something of an arbitrary delineation?**

10          A. I hesitate to call it "arbitrary." That  
11 sounds just wrong. But yes, it was fairly arbitrary,  
12 yes.

13          **Q. Okay. Thank you.**

14          A. Arbitrary, but also in the range of  
15 reasonableness compared to the other arguments.

16          **Q. Fair. And let's talk for a second about**  
17 **some of the proposals to impose design day costs to**  
18 **interruptible customers -- design day peak costs to**  
19 **interruptible customers.**

20                 You've made it clear the company does not  
21 believe that design day peak demand costs should be  
22 allocated to interruptible customers; right?

23          A. That's correct.

24          **Q. And the company takes that position because**  
25 **at times of peak demand, interruptible customers will**

1 be interrupted; right?

2 A. That's right. I think that they're  
3 interrupted even at times that are not design peak  
4 days.

5 Q. And design -- you've indicated in this  
6 docket that design day peak demand infrastructure is  
7 built to ensure that firm customers receive firm  
8 service; is that right?

9 A. That's right.

10 Q. And in sizing the system to meet anticipated  
11 design day demands, the company assumes that  
12 interruptible customers will be interrupted, so the  
13 sizing takes into account this notion of those  
14 customers being interrupted; right?

15 A. That is right.

16 Q. Okay. Bear with me for just a moment.

17 A. Sure.

18 Q. I do want to talk for a moment about the  
19 company's approach to gradualism here, which you  
20 touched on in your summary and in -- which is  
21 outlined, I think, in your -- either rebuttal or  
22 surrebuttal. I can't remember.

23 A. It was rebuttal.

24 Q. Rebuttal. Yeah, there it is.

25 You indicate in your rebuttal testimony that



1 you agree, sort of, on a high level with the proposal  
2 suggested by Mr. Higgins, the three-step phase-in.  
3 You identify which parts of that you agree with, and  
4 I want to touch on one aspect of one that you depart  
5 from Mr. Higgins' proposal, and that is the timing of  
6 those step increases.

7 Just to lay it out, Mr. Higgins' proposal  
8 proposes a, you know, Step 1 increase to go into  
9 effect on --

10 A. It was March 1st.

11 Q. Yeah, March 1st of this year.

12 And then the subsequent increases to go into  
13 effect also on March 1 of next year and in 2022;  
14 right?

15 A. That's correct.

16 Q. And your proposal moves up the second --  
17 Step 2 from Mr. Higgins' proposal of March 2021 to  
18 sometime this fall; is that right?

19 A. Yes. My proposal had the first increase  
20 going into effect March 1st of 2020, so that's coming  
21 up. And then after that, just follow with the  
22 infrastructure tracker filings that the company files  
23 every fall. And the reason I did that was just so  
24 that would be fewer rate changes for the customers.

25 That said, I think that if everybody's

1 comfortable with having more rate changes for those  
2 customers, Mr. Higgins' approach is reasonable.

3 Q. Okay. And I'm -- I -- the reason that I  
4 wanted to talk about this is that in your summary --  
5 and you note this in your prefiled testimony as  
6 well -- you indicate that you think it would be  
7 fruitful for the parties, after the conclusion of  
8 this docket, to further study some of the issues that  
9 have arisen in this docket to address things in  
10 anticipation of the next rate case. And as you  
11 talked about in your summary today, having stable  
12 data is important to that process. And I'm wondering  
13 how your proposal interacts with that, because you  
14 have a rate increase in March of 2020, and then  
15 another one six months later that is a fairly  
16 significant change in the rates.

17 How do you see that interacting with the  
18 process that you've outlined afterwards?

19 A. So the way I would see that process going,  
20 because I think that we're -- we'll have to look at  
21 cost of service issues for sure. But knowing that  
22 the class will be at full cost, I think, helps --  
23 will help stabilize.

24 But what we would use is, knowing that rates  
25 would be at full cost coming up in the next rate

1 case, I think that we would do all of the analysis  
2 using not the three-step approach, but we would use  
3 the revenue that would be generated at full cost. So  
4 we would just skip ahead to what the revenue looked  
5 like for the existing customers, and we would use  
6 that -- the full cost revenue to do the analysis.

7 **Q. But some of that analysis is going to have**  
8 **to take into account potential customer migration**  
9 **between classes; right?**

10 A. Yes. And hopefully -- so I see a couple  
11 things happening. If the 35,000 dekatherm moratorium  
12 is implemented -- and again, I think that that's a  
13 critical point of making this all work -- it will  
14 limit how many new customers end up in the TS class.

15 Now, if some decide to leave the TS class  
16 and go back to firm sales, I guess we'll have to  
17 monitor that as we go. I don't think that that will  
18 have as big of a change -- I don't think there will  
19 be as big of a change there as what there would be in  
20 the -- if there wasn't a moratorium, as far as growth  
21 in the TS class.

22 So I think you might have -- for instance,  
23 if you had 50 customers decide over the next few  
24 years -- and I'm just throwing out numbers here, but  
25 if you have 50 customers decide to leave the TS class

1 and go back to firm sales over the next few years as  
2 rates gradually increase, that won't have a very big  
3 impact on the rate design or the cost of service in  
4 the TS class or the GS class.

5           What would have a big effect is if you don't  
6 get that moratorium and you add another -- I don't  
7 know. If we're looking at that chart on page 22 of  
8 my direct testimony, you see that 150 customers in --  
9 from 2018 to '19? If I had 150 customers coming into  
10 the TS class every year for the next three years, I  
11 think that would be a more significant problem that  
12 we'd have to deal with. That -- that is not stable  
13 data. And I think we'll have to change before we  
14 file the next case.

15           **Q. Okay. Thank you. That's all I have.**

16           A. Thank you.

17           CHAIRMAN LEVAR: Thank you, Mr. Russell.

18           Mr. Mecham?

19           MR. MECHAM: Thank you, Mr. Chair.

20  
21                                   CROSS-EXAMINATION

22 BY MR. MECHAM:

23           **Q. Good morning, Mr. Summers.**

24           A. Good morning.

25           **Q. Just to kind of lay the groundwork, would**

1 you let -- tell me what types of customers there are  
2 using fewer than 35,000 dekatherms a year that are in  
3 the TS class?

4 A. I think that it would vary a lot. And you'd  
5 have everything from schools to hospitals to hotels,  
6 perhaps a -- I don't know if a big restaurant would  
7 quite make it on to TSI. Those types of customers, I  
8 think it would be customers that were formerly large  
9 sales customers.

10 Q. Okay. And if there is no moratorium, would  
11 you expect the same kind of customer to transfer to a  
12 TS phase?

13 A. Yes, I think it would be those same types of  
14 customers. Small grocery stores, those kinds of  
15 things, yes.

16 Q. Do you know the approximate average end  
17 usage per customer for the entire GS class?

18 A. GS class, on average, I want to say is right  
19 around 117. I'd have to -- I mean, that's very, very  
20 subject to check, but I think it's in that  
21 neighborhood.

22 Q. Okay. Thank you.

23 Do you accept, subject to check, that the  
24 average end usage for the TS customer in the -- any  
25 time I say "small TS customer," I mean under

1     **35,000 dekatherms. Let me restate that.**

2             **Yeah. Is about 7,700 dekatherms?**

3             **Does that sound right to you?**

4             A. That sounds reasonable. And I would base  
5 that on the chart that I included in surrebuttal that  
6 shows the -- I can just look at that really quick in  
7 my surrebuttal.

8             I turned right to it. It's page 6 of my  
9 surrebuttal. It shows a histogram of the sizes of  
10 the customers in the TS class. And it looks like  
11 the -- there's a bucket there that has 5,000 to  
12 10,000. And it has the largest use, so I would say  
13 that sounds reasonable.

14            **Q. Okay. Thank you.**

15            **So even the small TS customer is much larger**  
16 **than the average customer in the GS class, 77 times,**  
17 **based on usage?**

18            A. That's correct. There are a lot of  
19 residential customers in the GS class that would  
20 bring that average down.

21            **Q. Okay.**

22            A. Absolutely.

23            **Q. Now, Mr. Snarr directed you to**  
24 **ANGC Exhibit 2.01R.**

25            **Could you return to that?**

1 A. Okay. I'm at 2.01R.

2 Q. Thank you. Now -- and let me make sure I  
3 understand. With respect to your original -- the  
4 company's original filing, there was no division of  
5 the TS class as far as cost of service is concerned?

6 A. That's correct. This --

7 Q. And so -- go ahead. Sorry.

8 A. This was done as part of a data request.

9 Q. So it's in response to UAE's data request  
10 2.01, which is stated at the top of the  
11 Exhibit 2.01R?

12 A. That's correct.

13 Q. And Mr. Snarr directed your attention to  
14 line 50, where the small TS customer is producing a  
15 return on rate base of 9.11 percent; is that correct?

16 A. That is correct.

17 And before we go too far down the road on  
18 this data request, I think it's important to note  
19 that this was one look -- and I think it's an  
20 important look -- at how the class could be split.  
21 And it definitely shows that the TS customer -- the  
22 smaller customers are paying their share the way that  
23 rates are designed right now.

24 But relying on this to completely make a  
25 fundamental shift in the change of the TS class, this

1 data request has not seen enough analysis to be used  
2 for the sole basis to do that.

3 **Q. Have you seen -- there were other data**  
4 **requests that asked for splits of the class at**  
5 **different areas. And have you seen any of those that**  
6 **produced a return where the TS -- the small TS**  
7 **customer wasn't producing more than the average**  
8 **system return?**

9 A. No.

10 CHAIRMAN LEVAR: Mr. Mecham, I'm sorry to  
11 interrupt you, but just to clarify: Are the  
12 highlighted numbers at the bottom of this exhibit  
13 indicating confidential numbers?

14 MR. MECHAM: No.

15 CHAIRMAN LEVAR: They're highlighted for  
16 other reasons?

17 MR. MECHAM: They're highlighted just to  
18 call attention to it.

19 CHAIRMAN LEVAR: I'm sorry. I didn't know  
20 that. Okay. Thank you.

21 THE WITNESS: They're just for emphasis.

22 CHAIRMAN LEVAR: For emphasis.

23 MR. MECHAM: Yeah. They're for emphasis.

24 BY MR. MECHAM:

25 **Q. And if you look, you can see, again, on**



1 line 50, the first number is the average system  
2 return of 6.93. And then you can see the basic --  
3 the various returns of all the classes.

4 And isn't it true that that shows the small  
5 TS customer is producing the second highest of all  
6 the classes?

7 A. That's what this data request shows. And if  
8 this is the only thing that's relied on, then that's  
9 what it would show. I think there's a lot of other  
10 information that needs to be considered that wasn't,  
11 such as differences in demand for these customers,  
12 their load factors, all these things that I've  
13 already talked about. I think that all of that  
14 information needs to be considered, probably, in  
15 addition to size before this is utilized.

16 Q. But there's nothing else on the record that  
17 you or anyone else has produced that shows that the  
18 small customer is causing the problem?

19 A. No.

20 Q. So there's been kind of a narrative over  
21 many years that it's the small customer that's  
22 causing the problem, but the evidence that we have in  
23 this record so far shows that isn't true?

24 A. Yeah. And I think that -- and that's true.  
25 The narrative has definitely changed as we've done

1 more analysis on this. I think that when -- when we  
2 originally looked at the case and we -- you know,  
3 we're coming down to everything and we're looking at  
4 it and we say, okay, we -- in 2013, we set rates, and  
5 we agreed to a gradualism approach that took two  
6 steps towards full cost rates. And one of those was  
7 a step to 60 percent of full cost, and then another  
8 step to 72 percent of full cost.

9 Then we come into this case and we do that  
10 same look, and it's down to 40. And we're going,  
11 "What has happened? What was the change?"

12 And I think that -- I don't know if it was  
13 just easy to look at it and say, "What has changed in  
14 the class?" And we look at it and we say, "It's all of  
15 these small customers that are coming in. They're  
16 not covering their costs." And that was the  
17 narrative that was even in my direct testimony.

18 Now, what probably really did cause that  
19 change from when we went 60 percent, then 72 percent,  
20 but suddenly we're back down to 40, as we've done  
21 more analysis, it looks like what has happened is --  
22 the problem is that we never did get to full cost.

23 So what happens is I'm now doing a feeder  
24 line infrastructure replacement program, and I'm  
25 adding revenue every year, two times. But I'm not

1 allocating that to the TS class based on full cost;  
2 I'm allocating it based on something that was only  
3 meant to ever get to 72 percent of full cost. So all  
4 throughout this time, I haven't been allocating  
5 enough of those tracker dollars to the transportation  
6 class, and that is more likely what has caused  
7 this -- the change.

8 So based on this data request, it definitely  
9 looks like those small customers are covering their  
10 costs.

11 **Q. So the narrative so far has been wrong.**

12 A. I think -- yeah. Well, the narrative that I  
13 started with was wrong, and I've just laid out why  
14 that was wrong.

15 **Q. Thank you.**

16 **Now, the -- again, based on the evidence**  
17 **that we have in this docket, the moratorium would**  
18 **stop the customers that are paying more than -- more**  
19 **than their share, beyond the average return, from**  
20 **joining the TS class; is that not true?**

21 A. I think the moratorium -- as I mentioned in  
22 my summary just a few minutes ago, the moratorium is  
23 meant to stabilize the TS class so that we can really  
24 do a solid analysis. It's -- you could definitely  
25 argue that if they came into the class, that they

1 would be covering their costs. But that's only one  
2 portion of what needs to be analyzed before we make a  
3 rate for these customers.

4 From what I've seen here, I think this was a  
5 good analysis, and it's something that is a result of  
6 collaborating with other parties. But it's only the  
7 start. Using these rates, I think, would lead to  
8 further problems down the road if we just add a small  
9 class.

10 **Q. But wouldn't it -- if you bring customers in**  
11 **that are contributing more than the average system**  
12 **return, doesn't that bring the class closer to full**  
13 **cost faster?**

14 A. I think that -- well, I wouldn't agree to  
15 that because the revenue that they're bringing -- if  
16 this shows that the large class, the large customers,  
17 are the ones that are causing the undercollection, I  
18 don't think that the revenue that would be brought in  
19 by small customers would have a material impact on  
20 the -- on the undercollection of the large customers.

21 **Q. But it certainly wouldn't add to the**  
22 **problem.**

23 A. No --

24 **Q. It may not be big compared to what the large**  
25 **users use, but it would give you an incremental**

1 **positive return.**

2 A. No. But as I've already mentioned, though,  
3 the moratorium really is meant to stabilize the class  
4 so that a solid analysis can be done.

5 Q. But isn't it true -- I mean, the large  
6 users, as you point out -- I mean, that's what the  
7 highlighted figure under "TSL" shows. They're  
8 returning .75 percent in this exhibit; correct?

9 A. That's correct.

10 Q. And in response to UAE's 2.01?

11 A. That's right.

12 Q. And if you turn to ANGC Exhibit 2.02R, that  
13 gives you additional breakdowns that were requested.  
14 Of course, you've got the first one that -- above and  
15 below 35,000 dekatherms, and then you've got the  
16 Division's request at above or below 120,000, and  
17 then you've got US Mag at above or below 800,000.

18 And that further shows, when you look at the  
19 large class, does it not, at above or below 800,000,  
20 that the large customers are in the negative  
21 territory of negative 2.54?

22 A. That -- that is what that shows. And that's  
23 a summary of those data requests.

24 Q. Okay. And then we've been talking about the  
25 design day allocation factor.

1           **Again, even using that, if you look at**  
2 **page 22 of Mr. Oliver's surrebuttal testimony --**

3           A.    You said page 22?

4           Q.    **22 of the surrebuttal.**

5           A.    Okay.

6           Q.    **It shows -- there is a correction there.**  
7 **Where it says Dominion at 60 -- it says 60/60. That**  
8 **should be 60/40.**

9           But it shows the returns on rate base under  
10 **each of those scenarios, where you're at 68/32,**  
11 **60/40, or 50/50. And in each case, doesn't that show**  
12 **that the small TS customer returns above average**  
13 **system rate of return?**

14          A.    It does show that.

15          Q.    **So what are you stabilizing by using the**  
16 **moratorium?**

17          A.    So my ultimate goal, when I'm looking at the  
18 TS class and the state that it's in right now, is I  
19 need to set -- it's probably going to be a split  
20 class. We're going to make a new class of customers  
21 somewhere there.

22                But for me to be able to do the rate design  
23 and to set it for a group of customers, I need for  
24 that growth to stop. I need for -- I need to have a  
25 consistent set of customers that I can do that

1 analysis on. And then after I get the rates done  
2 right -- and that includes making sure that they're  
3 paying the appropriate demand charges -- that means  
4 making sure that they're paying the appropriate  
5 administrative charges, it means doing a lot of that  
6 analysis.

7           Once I get a new class for this new class of  
8 customers, then I will open everything back up and  
9 let everybody join whichever class they feel is  
10 suited best for them.

11           **Q. But in the meantime, hasn't that stifled**  
12 **competition?**

13           A. I really don't think it has.

14           **Q. I don't want to interrupt. Are you**  
15 **finished?**

16           A. Oh, I covered in my summary that I think  
17 that a lot of the things that I'm doing show that I'm  
18 not trying to stifle competition.

19           I -- if customers -- the whole circumstance  
20 we're in is because of a market change, right? So  
21 when market prices dropped dramatically back in 2008  
22 with the Shale Revolution, and -- and so it put it so  
23 that some of these customers can now go to  
24 transportation service and pay less for their  
25 commodity than they would as a sales customer.

1           That class was never designed for them. The  
2 demand charges, the way that we treat their demand  
3 and require them to use that, was not designed for  
4 them. They're coming on to a rate right now that is  
5 simply not for that type of customer. They really  
6 are meant to be more of a GS or FS customer.

7           So I think that the new class would probably  
8 look something like that. It may not have a demand  
9 charge. I don't know. But it might not, because  
10 they're not as sophisticated as the large users. A  
11 lot of that stuff needs to be considered.

12           So the point of the moratorium is saying,  
13 "Just time out for a minute." We're talking about,  
14 you know, a three-year period where everybody can get  
15 together, do the analysis, design a good rate, and  
16 then let people back on.

17           And I think that it -- like I said in my  
18 summary, it does protect those customers who would  
19 make a decision otherwise. If I'm a GS customer  
20 right now and I'm exploring if I want to go to the TS  
21 class, I'm looking at this saying, "Well, I don't  
22 even know what rates are going to be at this point.  
23 I know that they're going up over the next few years,  
24 but do I -- should I be entering into a three-year  
25 contract to -- with a supplier when I don't even know



1 what the rates are going to be at the end of that?"

2 It's -- I think that it's protecting  
3 customers, and I definitely do not think it's  
4 anticompetitive.

5 **Q. Did you read Mr. Chisholm's surrebuttal**  
6 **testimony?**

7 A. I did.

8 **Q. And did you see where he said, in 2019,**  
9 **school districts saved \$1.6 million in the TS rate?**

10 A. Right. And like I said, that was due to a  
11 commodity change.

12 **Q. So a three-year moratorium, were they not**  
13 **able to take TS service, would cost them \$5 million?**

14 A. It's hard to say that it would cost them  
15 that. I mean, I think that the customers that  
16 haven't switched, they probably -- yeah, you're  
17 right. They wouldn't be getting that benefit. I  
18 don't know why they haven't switched already. If  
19 there was that kind of savings, chances are they are  
20 completely satisfied paying the rates that they are  
21 as a sales customer.

22 **Q. But with a three-year moratorium, they**  
23 **wouldn't even have the opportunity, would they?**

24 A. No.

25 **Q. And they would also be prevented from coming**

1 **into the class and adding to the positive return**  
2 **based on your moratorium; is that correct?**

3 A. Well, they would still be contributing to  
4 their -- I mean, I'm proposing full cost rates for  
5 all classes of customers. I mean, if you're talking  
6 about the difference between -- you know, in between  
7 a class, I think that they'd be paying a similar --  
8 they're paying a fair return where they're at.

9 **Q. Well, aren't they -- if they're left in the**  
10 **GS class, aren't they paying a tremendous subsidy?**

11 A. It depends on your use of the word  
12 "tremendous." But they are -- there is an intraclass  
13 subsidy in the GS class.

14 **Q. Well, they wouldn't want to leave if the**  
15 **rates were set correctly; correct?**

16 A. I think if rates were set correctly, there  
17 should be no benefit for staying or going, as far as  
18 a DNG cost is concerned.

19 **Q. You talked about load factor.**

20 **Do you know what the average load factor is**  
21 **for the TS class?**

22 A. I don't, off the top of my head.

23 **Q. Would 72 percent, subject to check, sound**  
24 **about right?**

25 A. Sounds about right.

1           **Q.    In your surrebuttal, on page 5 I believe it**  
2 **is, you have a table there that shows rate impacts on**  
3 **customers using various levels of dekatherms; is that**  
4 **correct?**

5           A.    That's correct.

6           **Q.    What was the load factor assumed in that**  
7 **table?**

8           A.    There was no load factor assumed. Load  
9 factor -- when you're talking about load factor, load  
10 factor is how a customer uses gas throughout the  
11 year.

12          **Q.    Yes.**

13          A.    So if a customer uses gas more evenly  
14 throughout the year, say for an industrial process,  
15 they'll have a higher load factor. If a customer  
16 uses gas more seasonally, they'll have a low load  
17 factor. But the TS class, right now, has no cost  
18 difference for load factors. There's not a load  
19 factor rate or even a load factor provision. It's --  
20 it wouldn't affect any of these rates.

21          **Q.    Wasn't this computed with about 33 or**  
22 **35 percent load factor assumed?**

23          A.    Load factor has no effect on any of the TS  
24 rates. You can be using a high load factor or low  
25 factor. If you're talking about demand, that's a

1 different issue. But load factor does not have any  
2 bearing on -- on this table. If I have a high load  
3 factor, I'm paying volumetric rates plus an admin fee  
4 plus a basic service fee. If I have a low factor,  
5 I'm paying the same thing.

6 **Q. Let me ask about the demand charge for just**  
7 **a moment.**

8 **The demand charge increases in your proposal**  
9 **by over 104 percent, \$2.19 to \$4.47 per dekatherm; is**  
10 **that correct?**

11 A. Is that due to the stepped increases?

12 **Q. Yes. It occurred -- well, it does occur**  
13 **over the full period of the three-step phase-in.**  
14 **Ultimately, you're at 104 percent or \$4.47; is that**  
15 **correct?**

16 A. This table doesn't --

17 **Q. No, no. I'm sorry. I shifted off the**  
18 **table.**

19 A. Okay. So now you're asking about demand --

20 **Q. Your demand charge increase, what are you**  
21 **proposing?**

22 A. Well, there's a significant increase in the  
23 demand charge.

24 **Q. How much?**

25 A. I can look at Exhibit 4- -- I think it was

1 4.14. This would show what was originally filed.  
2 And I will look at page 4 of 5.

3 And that shows -- I'm looking at line 14,  
4 and it looks like the revenues from the demand would  
5 increase by 100.9 percent.

6 **Q. Okay. And did I understand your testimony**  
7 **to say that you didn't expect price increases on the**  
8 **DNG side to -- that is, the distribution non-gas side**  
9 **to send signals to customers?**

10 A. I think the customers do look at the  
11 prices -- at the DNG prices. I mean, Mr. Swenson  
12 mentioned in his testimony that he does look at DNG  
13 costs as a price signal.

14 I think when the company is usually looking  
15 at DNG, all I'm trying to do is accurate cost  
16 allocation. So I'm -- I want to make sure the  
17 customer who is causing the costs is paying for those  
18 costs. I think that the price signal -- the stronger  
19 price signal that customers should look at would come  
20 through the commodity, and that's what I said in my  
21 testimony.

22 **Q. But you referenced Mr. Swenson's testimony.**  
23 **He made it pretty clear, did he not, that an**  
24 **increase like that in the demand charge would cause**  
25 **him to look at alternatives?**

1 A. That's right.

2 **Q. So it is sending a price signal?**

3 A. It is to him.

4 **Q. Pretty significant one, sounded like?**

5 A. It is to him. I'd also point out that  
6 Mr. Oliver pointed in his testimony that these  
7 customers have not been switching due to DNG savings.  
8 They've been switching due to commodity savings.

9 So in that light, I think that those  
10 customers, those smaller customers, the ones that  
11 we're concerned about here, are the ones that are  
12 using commodity as a pricing.

13 **Q. Thank you.**

14 **Now let's talk for just a minute about your**  
15 **step phase-in.**

16 A. Okay.

17 **Q. So am I looking at this correctly that, with**  
18 **respect to Block 4 of your phase-in, in the initial**  
19 **step, Step 1 for Block 4, it would be about a**  
20 **34 percent reduction?**

21 A. Yeah. And that was pointed out -- I believe  
22 Mr. Higgins, in the last Q and A of his testimony,  
23 pointed that out as well.

24 This, I believe -- and I guess just to come  
25 clean, I think that we noticed that in the rebuttal

1 model that we were filing. We did make a change, and  
2 then somewhere in the process of, I don't know,  
3 making other changes, it got undone. And I -- I'm  
4 sure that was me. I think I did some late modeling  
5 and probably undid that.

6 But Mr. Higgins' testimony points out that  
7 he would propose -- let me just turn to that so I  
8 don't get that wrong, what he said. It was his last  
9 question and answer in his surrebuttal.

10 He had some issues with the -- he had some  
11 concerns with the TS rate design that I proposed in  
12 rebuttal. So on line 233, he says: "It appears the  
13 DEU is attempting to target absolute differentials  
14 between the various volumetric blocks. Instead, I  
15 recommend scaling each volumetric block rate by an  
16 equal percentage increase to minimize the disruption  
17 to TS customers."

18 And I agree with what Mr. Higgins said  
19 there. I think that it makes sense to scale it -- to  
20 scale those by an equal percentage increase.

21 **Q. So your proposal from your surrebuttal has**  
22 **changed?**

23 A. I didn't make any changes in my surrebuttal  
24 to what I had in rebuttal, so I think that the model  
25 that I used in rebuttal is where the problem lied.

1 And then a lot of those rates carried forward into  
2 surrebuttal.

3 Q. What I'm asking, though, is it -- I'm just  
4 looking at the fourth block, for instance. There's  
5 almost a negative 34 percent drop. And then in  
6 Step 2, there's a 38.6 percent increase. And in  
7 Step 3 -- or, I guess, the overall, it's 55.7 at the  
8 last block --

9 A. Yeah.

10 Q. -- increase?

11 A. Yeah. And I think that as long as rates are  
12 collecting the revenue requirement that they're  
13 supposed to collect, and I think as long as there's  
14 logic to the phased steps, I'm open to a different  
15 proposal.

16 Like I said, Mr. Higgins' proposal to scale  
17 it by equal percentage increases, I think there's --  
18 that makes sense.

19 Q. So with respect to the 34 percent reduction,  
20 you're not going to do that in the first step in your  
21 proposal now?

22 A. Well, to be clear, what's on the record from  
23 my rebuttal testimony would have that 34 percent  
24 decrease because, like Mr. Higgins points out, we  
25 targeted absolute differentials rather than just a



1 scaled volumetric increase. So it still collects the  
2 right revenue requirement, it's just a matter of  
3 which block does it come in.

4 As long as it's collecting the right revenue  
5 requirement, I'm impartial to what it -- which  
6 proposal it is. So what I proposed in rebuttal, if  
7 it was replaced with Mr. Higgins' approach, I would  
8 be fine with that.

9 Q. Okay. But if we stayed with your approach,  
10 the evidence so far in this case is, is that the  
11 large users are actually not returning their average  
12 return to the system, and the small ones are.

13 A. That's right.

14 Q. But it would be the large ones, in  
15 particular, who would take advantage of this fourth  
16 block and negative 34 percent.

17 Is that the right price signal to send at  
18 this point?

19 A. No. That's why I just said that I would  
20 agree to what Mr. Higgins...

21 Q. Let me ask you: How long have you been --  
22 has the company been concerned about the TS class?

23 A. The TS class, as it is known now, has been  
24 around since 2008, 2009. And from that time, it has  
25 been underpriced. And so the company has been

1 concerned about it since then. I have been doing  
2 cost of service and rate design since 2012 and have  
3 been consume -- concerned about it. Not consumed by  
4 it, but concerned about it since then.

5 **Q. And this collaborative process you're**  
6 **proposing, is that going to go in tandem with a**  
7 **three-year moratorium? So we're going to be doing**  
8 **this for three years?**

9 A. I don't want it to take longer than it needs  
10 to take. But I think that there is a lot of analysis  
11 that needs to be done. And if it takes the full  
12 three years, I'm committed to do that.

13 Like I said, this is a fundamental change.  
14 It's not something that can be done so easy as just  
15 saying, "Oh, there was a data request that was based  
16 on 35,000 dekatherms, having them split, let's go  
17 with that, it shows us exactly what we want." It's  
18 too early to use that.

19 Now, it does show some information, but it's  
20 not even close to enough information to make a new  
21 class of customers using that 35,000 dekatherms. So  
22 if it takes time, it takes time. Whatever that  
23 process is, I think that we can make some progress on  
24 this.

25 **Q. With respect to your one-time election**

1 **tariff that you mentioned in your summary, did I**  
2 **understand that it's the Wexpro agreement and Wexpro**  
3 **gas that makes it unique here?**

4 A. Well, what my summary said was we are unique  
5 in that we have company-owned production and that we  
6 have to plan for that production.

7 There's a cap on how much Wexpro can  
8 produce, and so Wexpro needs to know how much -- how  
9 many firm sales customers there will be so that it  
10 can make plans for how much gas to produce. These  
11 aren't decisions that can be made on a -- you know,  
12 on a weekly basis. Once you commit to drilling, the  
13 gas comes. So they do need to know in advance how  
14 much they can produce.

15 **Q. So Wexpro is acting as a drag on the system?**

16 A. I wouldn't say that at all. Not even close  
17 to a drag. I think that the Wexpro price -- and it's  
18 not a secret to anybody in this room -- Wexpro prices  
19 are higher than market prices right now. But they  
20 are coming down.

21 Wexpro has changed a lot of its processes.  
22 And, I mean, we have -- I feel like I'm preaching to  
23 the choir here because everybody -- a lot of people  
24 from the Division and the Office and the Commission  
25 have been part of audits of Wexpro. New properties

1 have been brought forward, new ways of operating and  
2 how much money Wexpro can return. Wexpro has done a  
3 lot to bring that cost down.

4 But Wexpro has been valuable to customers  
5 since its inception. And even last year when the  
6 Enbridge Pipeline happened, we would have been paying  
7 prices, you know, in the \$15 range if we hadn't had  
8 that Wexpro gas, so I wouldn't even come close to  
9 calling Wexpro a drag on the system.

10 **Q. But it -- it -- of the jurisdictions where**  
11 **my client operates, this is the only one that doesn't**  
12 **have, say, 60-day notice transferability. So if it**  
13 **isn't Wexpro, then there's something else going on**  
14 **that perhaps isn't as unique as we think it is. Or**  
15 **am -- what am I missing?**

16 A. It's tricky to compare state to state. I  
17 mean, there's --

18 **Q. Well, then let's not do it.**

19 A. There's almost a 40-year history of Wexpro.

20 **Q. Yes, I'm aware of that.**

21 A. Yeah, you're very aware. You were probably  
22 a part of it back then. But -- my point is we do  
23 that for a reason. We have to make some of those  
24 plans. I don't think that the -- that the timing of  
25 when these customers can sign up hasn't prevented

1 customers from signing up. I mean, the chart that  
2 I've referred to already shows that we've had  
3 incredible growth in the TS class.

4 So I don't think that our planning process  
5 is influencing growth in the class. I think that it  
6 could be left right how it is, and customers could  
7 still work with us to make sure that they've got gas  
8 when -- or that they can be a transportation customer  
9 at that time.

10 **Q. Okay. Thank you. That's all I have.**

11 A. Thank you.

12 CHAIRMAN LEVAR: Why don't we take a break  
13 right now, and then we'll go to Major Kirk, if you  
14 have any cross-examination. Why don't we come back  
15 at 10:50 by that clock.

16 (A brief recess was taken.)

17 CHAIRMAN LEVAR: Okay. I think we'll start.  
18 We'll go to Major Kirk, if you have any  
19 questions for Mr. Summers.

20 MAJOR KIRK: Chairman, it's Captain Friedman  
21 that will be handling the cross.

22 CAPTAIN FRIEDMAN: Chairman, it's come to  
23 our attention that the surrebuttal testimony of  
24 Brian Collins may not have made it to the online  
25 docket. It was served on all the parties on the 6th

1 of January. Our paralegal is researching it, but  
2 it's been resent to the Commission this morning.

3 CHAIRMAN LEVAR: Okay. I don't have his  
4 surrebuttal either, but hopefully we will have it by  
5 this afternoon. But that may lead to procedural  
6 issues that we'll have to deal with as we get to that  
7 point. But, yeah, to my knowledge, the Commission  
8 has not received any surrebuttal from Mr. Collins.

9 CAPTAIN FRIEDMAN: Yes. So we're happy to  
10 provide a copy now, and then, as I say, we're -- the  
11 electronic was submitted just recently.

12

13

CROSS-EXAMINATION

14

BY CAPTAIN FRIEDMAN:

15

**Q. Good morning, Mr. Summers.**

16

A. Good morning.

17

**Q. I'd like to direct you to the surrebuttal of**

18

**Brian Collins, which is Exhibit 4.0SR.**

19

A. Okay.

20

**Q. Would you agree that the company must --**

21

**designs distribution main capacity to meet the**

22

**coincident design day's demand of its customer**

23

**classes?**

24

A. I do agree with that.

25

**Q. If I can direct you to table 4 in the**

1 surrebuttal of Mr. Collins on page 14.

2 Have you had a chance to review this?

3 A. I have.

4 Q. And column 1 includes the design day demands  
5 for each class as utilized in your class cost of  
6 service study; correct?

7 A. I'd have to -- I would have to compare that  
8 real quickly, but it looks like that's correct, yes.

9 Q. Okay. And you utilized a 60/40 weighing of  
10 the design day and average demand?

11 A. In my direct testimony, I did use a 60/40  
12 weighting. That was changed to a 68/32 weighting in  
13 my rebuttal.

14 Q. Okay. And column 2 of table 4 includes the  
15 allocated gross plant cost of feeder mains for each  
16 class as a result of your class cost study -- service  
17 study using 60/40; right?

18 A. Yeah. Again, I'd have to compare, but it  
19 looks like that's accurate.

20 Q. Okay. Column 3 of table 4 shows the gross  
21 plant cost for feeder mains divided by the respective  
22 class design day demand; correct?

23 A. Correct.

24 Q. Okay. And column 5 indicates the system  
25 average gross plant cost for feeder mains is showing

1 **a \$709 per unit of design day capacity?**

2 A. I believe that's what it shows, yes.

3 **Q. Going to column 3 for the GS class, it shows**  
4 **a \$652 per unit of design day capacity; correct?**

5 A. Yeah. I'm still trying to figure out what  
6 the differences are here. So I'm looking at column 2  
7 as a "P&A allocation of costs," so that's -- remind  
8 me what you're referring to as "P&A"?

9 **Q. I'm looking at column 3, "P&A capacity per**  
10 **unit cost."**

11 A. Right. And what does "P&A" stand for?

12 **Q. Peak and average.**

13 A. Okay. Peak and average.

14 **Q. And it's showing as \$652 per unit for the GS**  
15 **class.**

16 A. That's correct.

17 **Q. And for the TS class, it's showing a unit**  
18 **cost of \$1,064.**

19 A. That's correct.

20 **Q. So it's roughly double.**

21 A. Yes. If you're looking at it on a per  
22 dekatherm basis like this, yes.

23 **Q. The company incurs the same cost per unit**  
24 **regardless of class?**

25 A. That's true. I think what we're trying to



1 do is here is we're trying to determine which class  
2 is using the cost.

3 **Q. Okay.**

4 A. So that's why that's allocated -- that's why  
5 it's allocated.

6 **Q. But it's the same product. It's a unit.**

7 **And one group is paying double the other group.**

8 A. One group is being allocated more per  
9 dekatherm.

10 **Q. Okay. Just to put this in simpler terms, it**  
11 **would be like two people walking into a barbershop,**  
12 **asking for the same type of haircut, one paying 20**  
13 **bucks and one paying 10 bucks; right?**

14 A. Well, the difference is that I've got -- the  
15 GS class is paying for \$753 million of costs, and the  
16 TS class is only paying 223 million. So, I mean --  
17 but that's how allocations work in different classes.  
18 You're trying to figure out who should be responsible  
19 for that cost and allocating that. If that's how it  
20 works out on a per dekatherm basis, then I think  
21 that's reasonable.

22 **Q. Okay. So the customer who's paying the**  
23 **20 bucks for the haircut in this hypothetical is**  
24 **basically subsidizing the customer that's paying**  
25 **10 bucks?**

1           A.    I don't know that I can make a -- these  
2 aren't two different -- these aren't like two  
3 different people, right? I'm dealing with a million  
4 customers versus -- with completely different usage  
5 patterns and completely different uses of the system  
6 as compared to a thousand customers that are using  
7 the system. I mean, it -- I can't make that  
8 comparison with the haircuts.

9           **Q.    But under column 5 on table 4, under the**  
10 **design day demand capacity, all classes are allocated**  
11 **the same cost per unit, \$709; correct?**

12          A.    Yes. And is that Mr. Collins' calculations?  
13 Is that his proposal, that each customer -- that they  
14 each be allocated the same amount?

15          **Q.    Yes, sir, it is.**

16          A.    Okay. So yes, that's what his column 5  
17 shows.

18          **Q.    If I can direct you to table 5?**

19          A.    That's on page 17?

20          **Q.    Page 17, yes.**

21          A.    Okay.

22          **Q.    If we go to column 7, the GS class needs**  
23 **80.2 percent of the system design day demand capacity**  
24 **to meet its expected design day demand; correct?**

25          A.    If you'll give me just a moment to look over

1 table 5 --

2 **Q. Sure.**

3 A. -- just to see what it's calculating.

4 So column 1 is the design day capacity. And  
5 again, that looks like taken that from the  
6 company's...

7 Column 2 looks the same as your column 7.

8 Yes, it looks like 80.2 percent of the costs  
9 are being allocated to the GS class.

10 **Q. But if we look to column 4 for the**  
11 **percentage of system capacity, we see it's**  
12 **73.7 percent.**

13 A. That's right.

14 MR. RUSSELL: Mr. Chairman, I hate to  
15 interrupt. I'm getting some information that the  
16 audio feed may not have restarted yet.

17 CHAIRMAN LEVAR: And I'm just getting that  
18 same information too.

19 Do we have the streaming up and running?

20 COURT CLERK: Yeah, it's not working. We're  
21 not getting any data.

22 CHAIRMAN LEVAR: Why don't we take a  
23 five-minute recess and then come back. It sounds  
24 like there are some people who are relying on that,  
25 so hopefully we can resolve this in five minutes. If

1 not, we'll take a little bit longer.

2 I apologize for interrupting the  
3 cross-examination.

4 (A brief recess was taken.)

5 CHAIRMAN LEVAR: Why don't we go back on the  
6 record.

7 And before I go back to Captain Friedman, I  
8 just want you to know that the three of us don't have  
9 these exhibits from Mr. Collins' surrebuttal that  
10 you're referring to, so we don't have it in front of  
11 us as you're referring to this. We haven't had it or  
12 read it or had it available to us, so if you're  
13 okay -- so that puts us at a disadvantage as we're  
14 following your cross-examination.

15 MR. SNARR: Copies are being produced that  
16 we might share with you momentarily.

17 CHAIRMAN LEVAR: Well, do parties prefer a  
18 little bit more delay? It'll be -- it's difficult  
19 for us to follow you cross-examination without this  
20 in front of us, and we haven't received it yet.

21 Do we need another five minutes, then?  
22 More? More than that? Or we have...

23 MR. SNARR: Courtesy copy for the  
24 commissioners.

25 CHAIRMAN LEVAR: Captain Friedman, you may

1 continue with your cross-examination. I apologize  
2 for the interruption. I don't know the cause of  
3 our -- the cause of our streaming problem, but I  
4 apologize for interrupting your flow of the  
5 questions.

6 CAPTAIN FRIEDMAN: No problem. Thank you,  
7 Chairman.

8 BY CAPTAIN FRIEDMAN:

9 Q. Mr. Summers, when we left off, it was  
10 table 4 that we were discussing. And we were looking  
11 at column 5.

12 A. I thought we were at table 5. Are we on  
13 table 4?

14 Q. Just wanted to back up for a moment.

15 A. Okay.

16 Q. And it was table 4, which is on page 14.

17 A. Okay.

18 Q. And I was pointing out that under the  
19 "Design Day Capacity Per Unit," there's the -- the  
20 per unit cost is the same per class.

21 Would you agree with that?

22 A. As it was calculated by Mr. Collins, that's  
23 right.

24 Q. Okay. Thank you.

25 Now, if I could please direct you to

1 **table 5?**

2 A. Okay.

3 **Q. We were discussing the column 7 for the GS**  
4 **class shows an 80.2 percent for the percentage of**  
5 **system capacity.**

6 A. That's correct.

7 **Q. And column 4 shows a 73.7 percent for the**  
8 **percentage of system capacity under the "Peak and**  
9 **Average Allocation."**

10 A. Right. Now, if I'm looking at this right,  
11 though, column 7 is the company's proposal and  
12 column 4 is Mr. Collins' proposal?

13 Is that -- am I reading this correctly?

14 **Q. Yes, that is correct.**

15 A. Okay. Yes, so then that would be right.

16 So the company's proposal, which I believe  
17 is duplicated in column 2, is 80.2 percent for the GS  
18 class, and the -- and Mr. Collins' proposal is  
19 73.7 percent.

20 **Q. Yes. No. It's the other way around.**

21 A. If you give me just a moment, I'm going to  
22 look at my original exhibit that covered the design  
23 day just to verify what I'm looking at. If you give  
24 me a moment, I'll tell you which exhibit I'm going to  
25 look at.

1           So I'm looking at DEU Exhibit 4.05, which  
2 shows that 80.2 percent of the design day costs are  
3 allocated to the GS class.

4           **Q.    Yes.**

5           A.    So yeah, the company's position would be in  
6 columns 2 and 7.  And then I would -- it looks like  
7 the -- Mr. Collins' proposal would be in column 4.

8           **Q.    So what I'm pointing out is that -- the**  
9 **difference between these two numbers shows that the**  
10 **GS implied capacity available for the class on the**  
11 **peak day is actually less than the capacity needed to**  
12 **meet the GS design day demand; is that accurate?**

13          A.    I'm sorry.  Will you repeat that so I can  
14 make sure that I can --

15          **Q.    That the GS implied capacity available is**  
16 **less than the capacity actually needed on the design**  
17 **day demand?**

18          A.    According -- that would be according to  
19 Mr. Collins' proposal.

20          **Q.    Right.**

21          A.    That's what he shows.  I wouldn't say that I  
22 agree with that, but that's what his proposal shows.

23                My allocation factor uses a 68/32 weighting  
24 and would give it a different result.

25          **Q.    And moving to the TS class on table 5, I**

1 want to go through the same brief exercise.

2 We see a 21.9 percent percentage of system  
3 capacity under peak and average.

4 And then under the "Design Day, Percentage  
5 of System Capacity," column 7, we see a 14.6 percent.

6 A. That's what I see.

7 Q. And that actually shows that there would be  
8 too much capacity available compared to the design  
9 day demand; is that accurate?

10 A. That's what Mr. Collins has tried to show  
11 with his exhibit, yes.

12 Like I say, my -- I don't agree with how --  
13 with his allocation factor. But I think that I've  
14 supported my proposal. I'm not going to support his  
15 exhibit.

16 Q. Okay. I'd like to direct you to table 3 on  
17 page 11, please.

18 A. Okay.

19 Q. Has Mr. Collins summarized the customer  
20 accounts and design day demands correctly, to your  
21 understanding?

22 A. The customer accounts look accurate, and the  
23 design day demand -- yeah, that looks right, as far  
24 as columns 1, 2, and 3.

25 Q. If I could direct you to column 6 for the GS



1 **class, for revenue as percentage of system, it shows**  
2 **17 percent for the GS class.**

3 **Do you see that?**

4 A. Yes.

5 **Q. But moving over to column 4, the GS class is**  
6 **responsible for 80.2 percent of the system design day**  
7 **demand.**

8 A. Yeah. You're comparing different things  
9 here, though. Because the -- their demand isn't  
10 really related to the number of customers or the  
11 percentage of revenue.

12 So I -- again, this wasn't my exhibit. I'm  
13 not going to say that it's a better analysis because  
14 I believe that the information that I put out there  
15 for all of my cost for service allocators is  
16 accurate. But the number of customers and their  
17 percentage of revenue really isn't related to how  
18 this allocation factor should happen.

19 **Q. Okay. But this class is -- does contain**  
20 **99.8 percent of the customers, GS class?**

21 A. That's true, it does.

22 **Q. Which amounts to 80.2 percent of the design**  
23 **day demand?**

24 A. That's right.

25 **Q. But this class is only responsible for**

1 **17 percent of the revenue?**

2 A. Of the revenue increase? Is that what  
3 column 6 is...

4 **Q. Yes.**

5 A. Yeah. I think we're talking past each other  
6 here a little bit. And maybe I can clarify this by  
7 using an example of two people going to get a  
8 haircut, but -- I know. That was supposed to get  
9 laughs, but -- but the two people that go in to the  
10 haircut aren't the same person. If I go into the  
11 haircut place and my wife goes into the haircut  
12 place, we're both going to be looking for different  
13 things, okay? My haircut should be free. It's that  
14 good.

15 COMMISSIONER CLARK: Mr. Summers, I was  
16 going to say, I don't think you and I should be doing  
17 haircuts at all. It's all I've got.

18 THE WITNESS: Whereas if my wife goes in,  
19 she's going to be getting different services. Now,  
20 we're two people, so it's fair to look at it and say  
21 we are two people and we should be treated fairly.  
22 But we're both going to be using the haircut place --  
23 I don't know where she goes to get her hair done, but  
24 we're going to be using different services, and so I  
25 think it's fair for both of those people to be paying

1 a cost that is fair to them.

2 BY CAPTAIN FRIEDMAN:

3 Q. Okay. And going back to table 3, the TS  
4 class, just the same analysis we went through a  
5 moment ago with the GS class.

6 This class amounts to .1 percent of the  
7 customers, but yet it's responsible for a much higher  
8 percent of the increase, 64 percent; is that what the  
9 table shows?

10 A. That appears to be what his table shows.

11 Q. Just wanted to go back. You testified about  
12 the moratorium, and I just want to get a little more  
13 information about that.

14 The concern you have that customers may  
15 migrate from the GS class to the TS class, can you  
16 explain that?

17 A. Yeah. So the concern is that -- we've  
18 learned a lot of information in this case. When we  
19 filed it, as Mr. Mecham pointed out, the narrative  
20 has changed a little bit. We originally said that  
21 small customers were causing all the problems in the  
22 TS class, and that narrative has changed.

23 And so what we've proposed is that as we do  
24 the analysis going forward, that's going to take some  
25 time, and it's going to take a lot of data gathering,

1 and it's going to take a lot of analysis. The point  
2 of the moratorium is to stabilize the TS class so  
3 that the customers that are there now are the  
4 customers that we can use for the analysis.

5 And then moving forward, we'll set a rate  
6 and we'll take the moratorium off so that it's --  
7 we'll set an accurate rate for all the customers and  
8 take the moratorium off. But we need to have a  
9 stable set of data. And so that's what the point of  
10 the moratorium is.

11 **Q. So you're trying to accomplish that by**  
12 **preventing the GS customers from moving into the TS**  
13 **customers -- the TS class.**

14 A. It's the GS and the FS classes. We've had  
15 customers from both of those classes, the general  
16 service and the firm sales. Both of those -- we've  
17 had customers from both of those classes moving to  
18 the TS class.

19 **Q. And this allows you to keep the TS group**  
20 **stable enough that you can do a further study?**

21 A. That's correct.

22 **Q. But there's nothing that's preventing**  
23 **customers from leaving the TS class?**

24 A. No, there's not.

25 **Q. So they may leave and you may not be able to**

1 **do your study in an accurate way?**

2 A. Well -- and I think I pointed that out  
3 earlier, that if the growth that has happened in the  
4 TS class were to continue, I would expect, you know,  
5 that's -- before the next rate case, you're going to  
6 have 150 customers per year moving into the TS class.  
7 So 450 new customers, that's an increase of almost --  
8 that's almost a 50 percent increase,  
9 40-some-odd percent increase. That makes a pretty  
10 big difference.

11 Now, as far as customers that leave, I don't  
12 know that it's going to be 450 customers leaving the  
13 class. The reason I say that is because we're  
14 gradually changing the rates. We've agreed to go  
15 gradually. So you might have customers -- I think  
16 you'll have customers that are constantly looking at  
17 it every year saying, "Making an economic decision,  
18 should I leave now? Can I still stay in the TS class  
19 and save money, or should I leave?"

20 And so I think that you might have -- again,  
21 I'm throwing out a number here, but if you had  
22 50 customers leave out of 1,000, it wouldn't be as  
23 big of a deal as adding 450, 500 customers.

24 **Q. But the rate increases to the TS class, the**  
25 **higher they get could very well push customers out?**

1           A.    I think each customer will be different, but  
2 I would imagine that could be the case. It also  
3 depends on what market prices are doing.

4           **Q.    And rather than just leaving the TS class to**  
5 **go to another class, they could leave the system**  
6 **altogether?**

7           A.    Well, I don't know where they would go. I  
8 mean, if we're assuming that they're going to get  
9 natural gas service, I think they would be on our  
10 system. There are some customers that are in the --  
11 that could bypass us. If those customers are close  
12 enough to a -- an intrastate pipeline, such as Kern  
13 River or Dominion Energy Questar Pipeline, a customer  
14 that's close enough and the economics were right for  
15 them, that customer could bypass us and build their  
16 own line.

17                   We do have a rate, the TBF rate, that if  
18 everything is working right and the rates are set  
19 right, customers would probably go to that rate.  
20 It's a subsidized rate. And so I think customers, if  
21 they were to leave and they did have that option to  
22 bypass, they would probably go to that bypass rate.  
23 Otherwise, I think they would stay on our system in  
24 one way or another.

25           **Q.    And just finally, in conclusion, back to my**

1 haircut analogy, one of the customers that is being  
2 asked to pay the \$20 haircut, not the \$10 haircut, is  
3 the FEA, including Hill Air Force Base; is that your  
4 understanding?

5 A. That's correct.

6 Q. And this money that is being paid by Hill  
7 Air Force Base is O&M dollars that impact the mission  
8 directly at that base; is that your understanding?

9 A. I believe -- yeah, I think every customer  
10 has an operating budget that they have to adhere to.

11 Q. Nothing further. Thank you.

12 CHAIRMAN LEVAR: Okay. Thank you.

13 Any redirect from Dominion?

14 MR. SABIN: Yes, please.

15  
16 REDIRECT EXAMINATION

17 BY MR. SABIN:

18 Q. Mr. Summers, I'm going to try and take these  
19 in the order in which you were asked them.

20 A. Okay.

21 Q. I want to start with interruptible customers  
22 for just a moment.

23 You have a tariff in place that governs the  
24 penalties that are charged to interruptible customers  
25 that do not interrupt; isn't that true?

1 A. That's true.

2 Q. Subject to check, would you agree with me  
3 that that penalty is twofold: One, it requires  
4 interruptible customers to pay \$40 per dekatherm as a  
5 penalty for all interruptible volumes that they  
6 utilize during the interruption period?

7 A. That is correct.

8 Q. As well as a prohibition for them being an  
9 interruptible customer for three years thereafter?  
10 In other words, they have to move over to be a firm  
11 customer for three years?

12 A. That's right.

13 Q. The penalties that are paid by those  
14 interruptible customers for failing to interrupt,  
15 where does that money for those penalties go?

16 A. The penalty money goes back to customers.  
17 It's treated as a credit in the infrastructure  
18 tracker, so it goes back to all customers.

19 Q. So is it true that to the extent  
20 interruptible customers have used the system during  
21 interruption when they shouldn't have, that -- is the  
22 system being fully compensated for that -- their  
23 failure to interrupt?

24 A. Yes. I think that the other customers  
25 probably benefit more than if they were just paying a



1 rate, because those penalties are steep.

2 Q. Okay. I'm going to shift now to the  
3 moratorium issue.

4 A. Okay.

5 Q. I think you've pointed out a chart in your  
6 direct testimony that talks about the migration  
7 that's been going on since really -- since 2008 until  
8 now, from the GS class into the TS class.

9 Do you know what I'm talking about?

10 A. I do. That's the chart on page 22.

11 Q. So up until now, without a moratorium, how  
12 would you characterize what has been going on during  
13 that period of time?

14 A. I think the -- just based on that chart,  
15 growth has been consistent every year. There are new  
16 customers that switch from a -- from a sales class to  
17 transportation.

18 Q. From a percentage growth standpoint, how  
19 would you characterize the change?

20 A. The percentage growth -- well, let's turn to  
21 the chart.

22 Q. Do you refer to the --

23 A. That's page 22.

24 Am I allowed to use a calculator?

25 Q. Yes, you absolutely are.

1           A.     Just pick a year at random, just 2015 to  
2     2016.  That's a 28 percent growth rate, and it looks  
3     like it's been consistent right in that same range  
4     each year.

5           **Q.     Okay.  And without a moratorium, what would**  
6     **you expect would continue to happen in the next year**  
7     **or two or three until your next rate case?**

8           A.     I think that I don't have any reason to  
9     believe that that growth would stop, but I think that  
10    the growth would be consistent, easily adding  
11    150 customers to the TS class every year.

12          **Q.     And if that growth continues at that pace or**  
13    **some pace similar to that, how would that -- how does**  
14    **that impact your ability to accurately set rates and**  
15    **accurately design rates?**

16          A.     That's a fun question because I think that  
17    the way that I envision this collaborative process  
18    going forward is that the parties that want to be  
19    involved in that, we need to gather a set of data,  
20    and we would have to use that data to do all of this  
21    analysis.

22                 So say we take -- I don't know if we want to  
23    use the 2018 data that we've already got for this  
24    rate case and we use that for cost of service studies  
25    and everything or if we gather new data for 2019, but

1 we get a set of information, and we use that to do  
2 all this analysis, do all of the rate design, do all  
3 the comparisons that we need to do. Then in the next  
4 rate case, we've got new rates, a home for every  
5 customer to go to.

6 But what would happen if we keep getting  
7 this growth is that that analysis, by the time we get  
8 there, could completely change. You might get a  
9 completely -- you know, 50 percent growth in the  
10 class would easily impact that analysis that's  
11 already been done.

12 **Q. Resulting in incorrect rates at that point?**

13 A. That's correct.

14 **Q. Some in this proceeding have argued that**  
15 **the -- and you've heard a couple of questions just a**  
16 **moment ago about some, the TS class for example,**  
17 **experiencing a larger increase in your proposed rate**  
18 **design than other classes.**

19 **Why is it that the TS class is being asked**  
20 **to pay more in this round than they have in the past?**

21 A. Well, the TS class is simply being moved to  
22 full cost. So the -- I think that's the basic answer  
23 to the question, is that those customers have been  
24 underpaying for a long time, and now that we're  
25 asking them to pay full cost rates, it's a bigger

1 increase to those customers.

2 Q. So in other words, the reason there's a  
3 larger increase is because they've been being  
4 subsidized by the GS customers up till now?

5 A. That is correct.

6 Q. And you're correcting for that -- your  
7 proposal seeks to correct that subsidization?

8 A. That's right.

9 Q. Okay. I'd like to shift now to the NGV rate  
10 quickly.

11 A. Okay.

12 Q. If you were to adopt Mr. Daniel's NGV rate  
13 approach, what would happen to the NGV rates?

14 A. I put in rebuttal some exact costs, but in  
15 my rebuttal testimony, I was calculating a rate of  
16 around \$8. And if we used Mr. Daniel's approach, it  
17 would increase that rate to around \$12 per dekatherm.  
18 That's a 50 percent increase to that rate. And  
19 that's significant, particularly considering that  
20 rate -- that volumes in the NGV class have been  
21 declining. If -- this is basic economics, but if  
22 price is going up and the demand is going down, it's  
23 not a sustainable rate.

24 Q. Final question on the NGV rate: For  
25 purposes of allocating costs to the NGV rate -- to

1 establish the proposed NGV rate, did you use the same  
2 allocations that have previously been used by the  
3 company?

4 A. Yes.

5 Q. So you're not proposing any change to those.  
6 You're using the same allocation methodology you've  
7 used in prior rate cases?

8 A. That's correct.

9 Q. So isn't it true Mr. Daniel's approach is  
10 the one that's asking to change the allocation?

11 A. That's right.

12 Q. I'd like you to now, if you could, turn to  
13 2.01R. That's a document that you were asked about  
14 by Mr. Mecham.

15 A. Okay. So we're looking at Oliver's 2.01R?

16 Q. Yes. Correct.

17 A. I just flipped past that earlier, and now  
18 it's -- okay. I'm at 2.01R.

19 Q. So there has been a lot of discussion from  
20 or questions from other parties asking you about the  
21 data requests that led to this document being  
22 created. And it -- specifically, the statement was  
23 made that this shows that the TS customers are paying  
24 their full cost of service.

25 What I'd like to know is, the data used to

1 create this, this data response, was it data from the  
2 prior rates that have been existing till now, or was  
3 it data used for the rates that would be applied  
4 going forward?

5 A. Yeah, the return on rate base, those  
6 highlighted numbers towards the bottom, those were  
7 calculated using the existing rates. So that is  
8 using revenue from the existing rates.

9 One thing that is definitely changing right  
10 now is the decrease in the administrative charge. So  
11 if you were to put that into the mix and, you know,  
12 reduce that revenue also, that's going to make a --  
13 that's going to reduce that return.

14 Q. And that would impact, would it not, the  
15 return numbers that Mr. Mecham was referring to where  
16 he was saying that small customers are -- would  
17 return 9.11 percent?

18 A. That's right. It would -- that number would  
19 come down.

20 Q. Okay. And do you know what that number  
21 would be?

22 A. I did a back-of-the-envelope calculation  
23 including that -- just that one change, and that  
24 return came down so it was closer to the actual  
25 return on rate base. It made a significant decrease

1 in that amount.

2 Q. That's just the administrative charge  
3 change?

4 A. That's just the administrative charge  
5 change.

6 Q. And if you factored in the other rate  
7 modifications you're proposing, that would also have  
8 an impact on that return?

9 A. Yeah. If -- and we are increasing rates a  
10 little bit, so that would definitely have an impact.

11 Q. So as we sit here today, do we -- we don't  
12 know, I take it, that -- whether these small TS  
13 customers would be paying their full freight or not?

14 A. No.

15 Q. Okay. And that analysis, as far as you  
16 know, has that been done?

17 A. No.

18 Q. Okay. Is that the kind of analysis you  
19 would propose doing after your Step 1 and 2 have been  
20 done?

21 A. That's exactly the kind of analysis that I  
22 think needs to be done, yeah.

23 Q. All right. While we're sticking on 2.01R,  
24 this shows that there's some bypass customers that  
25 are -- that switched to the TS class that are

1 **factored in here?**

2 A. Those customers are part of the TS large  
3 class.

4 **Q. Would you just describe -- these are the**  
5 **bypass customers you were just talking about?**

6 A. That's right.

7 **Q. And do you have any anticipation of what**  
8 **those bypass customers might do after this rate case?**

9 A. I think all along, the point is if rates are  
10 set correctly and everybody's covering their costs  
11 and rates are designed right, then I think that a  
12 customer would naturally migrate to the right class.

13 So if there are customers that qualify for  
14 the bypass rate and the bypass rate is set at a cost  
15 that is beneficial to them, I think that they would  
16 leave the TS class and move to the bypass rate.

17 **Q. So which class is the bypass rate?**

18 A. That is the TBF rate.

19 **Q. Would you expect those bypass customers,**  
20 **following this proceeding, to move to that -- back to**  
21 **the TBF class?**

22 A. I think that by the time rates are at full  
23 cost, I could see that they would move.

24 **Q. And what would that do to the calculations**  
25 **performed in this Exhibit 2.01R?**



1           A.     It would take costs out of -- it would  
2 change the allocation on the TS large class.  So I'm  
3 not exactly sure -- there's, you know, a thousand  
4 different moving pieces, but I think that -- I think  
5 that it would probably improve the TBF class.  I'm  
6 not exactly sure about the impact on the large.

7           **Q.     Suffice it to say, it would impact the**  
8 **calculations to some extent?**

9           A.     Absolutely.

10          **Q.     And do we have any calculation that would**  
11 **show what that impact would be?**

12          A.     No.

13          **Q.     Okay.  Is that something that would become**  
14 **available to you after this rate case and after rates**  
15 **are stabilized?**

16          A.     Yeah, I think that that's analysis that  
17 could be done and should be done.

18          **Q.     Okay.  Mr. Mecham asked you about the load**  
19 **factor of the TS class, and he -- I think he -- if I**  
20 **have this right, I think he indicated that the**  
21 **collective load factor of that class was somewhere in**  
22 **the range of 70 percent?**

23          A.     That's correct.

24          **Q.     Do you recall that?**

25                    **You indicated that the small -- these small**

1 TS customers are comprised of things like hospitals  
2 and schools, et cetera.

3 Are those the types of customers that would  
4 have a high -- a high load factor?

5 A. No. Any customer that's using the natural  
6 gas primarily for heat would have a low factor, so --  
7 a low load factor. So a customer like a school would  
8 probably have a load factor that's closer to 23, 24.  
9 Not anywhere near 70.

10 Q. And where would that line up relative to,  
11 let's say, residential customers?

12 A. Residential customers typically come in  
13 around 22.

14 Q. So is it a fair statement that the small TS  
15 customers that Mr. Mecham was asking about are much  
16 closer in the load factor they have to residential  
17 customers than they are to the large TS customers?

18 A. Absolutely.

19 Q. Subject to check, would you agree that the  
20 large TS customers' load factor hovers above  
21 90 percent?

22 A. Yes, that seems reasonable.

23 Q. So that -- would you agree with me that  
24 that's a big difference between the small TS  
25 customers and the large TS customers in the -- from

1 the context of the load factor they have?

2 A. Yes.

3 Q. Do you think that's a reason to distinguish  
4 between the two of them?

5 A. Absolutely.

6 Q. I want to talk just briefly about the --  
7 Mr. Mecham asked you some questions about the reason  
8 there's this sign-up window with -- for customers to  
9 sign up to the TS class.

10 Do you remember those questions?

11 A. Yes.

12 Q. Could you just reiterate what is the  
13 planning that you have to do as a company for the  
14 year that you -- that you have to do from a gas  
15 purchasing standpoint that you were trying to  
16 explain? Could you just lay that out?

17 A. Yeah. From a gas purchasing standpoint, the  
18 gas supply group will come to the rates department,  
19 they will get our forecast of what firm sales will  
20 be. We have personnel that forecast the -- that  
21 demand. They then use that and they will go -- they  
22 have a model that they will run to determine how much  
23 gas should be contracted, how much should be --  
24 different contracts. And they will also determine  
25 how much should be purchased based on spot prices,

1 how much of it should come from Wexpro, those kinds  
2 of factors. And then that is the -- that's what  
3 we're using to contract the gas.

4 **Q. So if you enter into contracts and if you**  
5 **decide from Wexpro's standpoint what you're going to**  
6 **drill that year, and then you have a significant**  
7 **departure of TS customers to the TS class, what**  
8 **happens to the costs of those contracts and that**  
9 **drilling that would have been paid by the TS**  
10 **customers who have just left?**

11 A. It would remain in the sales customers. It  
12 will be paid for by the sales customers.

13 **Q. So if the TS customers leave, the GS**  
14 **customers are left to pay the bill -- their portion**  
15 **of what the TS -- what was being planned for those TS**  
16 **customers?**

17 A. That's correct.

18 **Q. Okay. By contrast, if the commodity rate**  
19 **increases and they were able to jump right back into**  
20 **the GS class, what impact would that have on the GS**  
21 **class in that scenario?**

22 A. I think they would be -- well, those  
23 customers that are switching back are taking  
24 advantage of a free hedge, is basically what they're  
25 doing. But those customers would then be

1 contributing to the costs.

2 **Q. Thank you very much. That's all I have.**

3 CHAIRMAN LEVAR: Thank you.

4 Mr. Jetter, do you have any recross?

5 MR. JETTER: I do not. Thank you.

6 CHAIRMAN LEVAR: Mr. Snarr?

7 MR. SNARR: No.

8 CHAIRMAN LEVAR: Thank you.

9 Mr. Russell?

10 MR. RUSSELL: No, thank you.

11 CHAIRMAN LEVAR: Mr. Mecham?

12 MR. MECHAM: I have a couple. Thank you.

13

14 RECCROSS-EXAMINATION

15 BY MR. MECHAM:

16 **Q. So Mr. Summers, you refer to the chart on**  
17 **page 22 of your testimony showing the growth of TS**  
18 **customers.**

19 **What's been the percentage growth in the TS**  
20 **class throughput?**

21 A. It's not shown on that chart.

22 **Q. No, I know it's not, but I -- how much**  
23 **difference does that make?**

24 A. From a throughput basis, they are not nearly  
25 as big.

1           Actually, hold on.

2           **Q.   It's comparatively small, is it not?**

3           A.   No.  In fact, if you look at that chart on  
4 page 22, the fact that that red line, the average  
5 dekatherms per customer, the fact that it keeps going  
6 down every year shows that they're -- as they're  
7 coming on, they are smaller customers.  They don't  
8 have a very high usage.

9           **Q.   So the throughput percentage doesn't come**  
10 **anywhere close to the increase in the number of**  
11 **customers?**

12          A.   That's correct.

13          **Q.   Okay.  And what's been the percentage growth**  
14 **in the TS demands?**

15          A.   In the TS demand cost?

16          **Q.   Yeah.**

17          A.   I think that we talked earlier and looked at  
18 DEU Exhibit 4.14 and showed that it was almost a  
19 100 percent increase in the demand charge.

20                 But as far as the increase to demand, I  
21 don't have that.

22          **Q.   Would it be relatively small, given the kind**  
23 **of customers?**

24          A.   That seems --

25          **Q.   Sorry.**

1 A. I think that seems reasonable.

2 Q. Okay. And then Mr. Sabin talked about the  
3 fact that ANGC Exhibit 2.01R reflects existing rates,  
4 true enough?

5 A. That's correct.

6 Q. And obviously we agree that you proposed to  
7 bring the administrative charge down, but as you  
8 point out, there's also an increase to those  
9 customers.

10 So you really don't know what that number  
11 is?

12 A. That's correct.

13 Q. Conceivably, it's -- well, we won't go  
14 there.

15 Let me ask about the planning that you  
16 listed or enumerated and explained the way the  
17 one-time window is essential.

18 Didn't you describe what every other company  
19 does, including Dominion, with the exception of  
20 Wexpro?

21 A. That a big exception. I mean, Dominion --  
22 when you're looking at other Dominion companies,  
23 there's a big difference between Dominion companies.  
24 For example, Dominion East Ohio is a completely  
25 unbundled company. They -- all of their customers

1 are transportation customers.

2 **Q. Well --**

3 A. So they're absolutely going to have a  
4 different process than what Dominion Energy Utah is  
5 going to have.

6 So we are just saying the one thing that  
7 makes Dominion Energy Utah unique, being Wexpro, it's  
8 just one thing. It's a big thing. And I think it's  
9 appropriate to plan so that we can manage those  
10 supplies. And again, like I said before, this  
11 process that you're proposing to change has not  
12 prevented people from coming to the class. I just  
13 don't see any reason to change it going forward.

14 **Q. Hasn't it worked in other areas, or do you**  
15 **know the answer to that?**

16 A. Well, I'm assuming that it works for other  
17 companies.

18 **Q. Okay. And then this -- this analysis that**  
19 **you want to do over a three-year period, why wasn't**  
20 **it done for this case?**

21 A. It's a fair question. And I think that it  
22 happens in every rate case that you look at, that you  
23 wish that you had just originally analyzed the final  
24 result and filed that. But we did do a lot of  
25 analysis over the last three years. But as -- with



1 the class constantly changing, by the time we got to  
2 2019, everything that I had proposed in 2016 just  
3 didn't work. It just -- we got to the point in  
4 preparing this case where we said, "We've got to back  
5 away from what we proposed in 2016. The class has  
6 changed so much that it no longer works."

7           What I need to do now is fix the things that  
8 I can right now, and that's why I did the three-step  
9 approach, saying, "Let's -- we know need to get the  
10 class to full cost. That's going to fix a part of  
11 the problem. Let's also stop the growth in the  
12 class. That's going to be another part of the  
13 problem. And then that gives us the chance to really  
14 look at rate design in 2019."

15           It's -- I was actually thinking about this  
16 just yesterday, and I was thinking, "You know, it's  
17 easy to Monday morning quarterback it and say, 'You  
18 should have looked at this all along.'" But we  
19 didn't see it. If I had, I'm sure I would have  
20 proposed it. But we need to -- I think we need the  
21 time now to make sure that it's done right.

22           **Q. But by not planning, doesn't that penalize**  
23 **those that would move to the TS class?**

24           **In other words, it could have been done,**  
25 **there would have been no moratorium, now we've got**

1 **this in front of us.**

2 A. I would like nothing more than to have had  
3 this fixed in this case. I really would. But it's  
4 not ready. I've already talked about that at length.

5 There's one proposal out there that was  
6 based on a 35,000 dekatherm split. I'm not convinced  
7 that A, it should be split by size, or B, that it  
8 should be split at 35,000 if it is based on size.

9 I think that we need to look at -- I think  
10 the demand, the way the customers use the system, I  
11 think those are more important things to look at. It  
12 could be that you just have a firm transportation  
13 class moving forward, and it doesn't matter what size  
14 the customer is on.

15 If they're using -- if they have a low load  
16 factor and they're using the system seasonally, maybe  
17 it makes sense for them to have a, you know,  
18 summer/winter differential instead of a firm demand  
19 charge. We would just treat them as firm customers.

20 I'm talking ideas here, but there's a lot of  
21 analysis that still needs to be done. And so if I  
22 could, you know, go back in time, knowing what I know  
23 now, things might be different. But that's the point  
24 of a rate case, is to put the ideas out there. Get  
25 the ideas. I think that all of the parties have put

1 out good proposals or good information, good ideas  
2 that we can use. And going forward, we'll use that.

3 **Q. One last question.**

4 **If you're not convinced that the**  
5 **35,000 dekatherm level is the right split, why is the**  
6 **moratorium based on that?**

7 A. The 35,000 dekatherm, it's kind of an  
8 interesting history. Because when we proposed  
9 35,000 dekatherms, it was originally to be a floor  
10 for the TS class. You had to have minimum usage  
11 above 35,000 to be even considered in the class,  
12 right? So that's where we proposed it, and that was  
13 based on mostly us looking back in history and  
14 saying, in 2010, that's kind of where customer usage  
15 was at, right?

16 So we're saying that's where it's at. Let's  
17 make that the floor. I realize that's not a really  
18 quantitative analysis, but we're saying that will get  
19 us the objective that we need. That will help  
20 stabilize the class.

21 So that's how 35,000 started. And then in  
22 the direct testimony of -- I think it was Mr. Higgins  
23 proposed that it be a moratorium rather than a floor,  
24 and so we agreed to the 35,000. Then that  
25 35,000 dekatherm amount was used for discovery to

1 calculate that data request for lack of any other  
2 place to split the class. So that was just their way  
3 of saying, "Let's do the break there."

4 And so it's kind of what started out as one  
5 thing has morphed into other things. And so no  
6 analysis has really been done to say if  
7 35,000 dekatherms is the best place to split the  
8 class.

9 **Q. You talk about stabilizing the class, but**  
10 **doesn't it pretty much end the class as far as new**  
11 **customers are concerned? It's over?**

12 A. It's not over. It's a temporary moratorium.  
13 For three years, I'm saying I need to slow that  
14 growth. I can't do an analysis every year based on  
15 what customers have been added to the class. It's --  
16 it can't be done.

17 We'll be in the same position again next  
18 time. We'll have data from the 2019 case that we'll  
19 all have looked at, we've all done it, but then by  
20 the time I get to 2022, it comes time to put together  
21 rates, I'm going to have completely new information  
22 to deal with.

23 **Q. Thank you. I have nothing further.**

24 CHAIRMAN LEVAR: Are you -- you want to --  
25 oh, sorry. I haven't got to Captain Friedman yet.

1 Sorry.

2 CAPTAIN FRIEDMAN: No follow-up, Chair.

3 CHAIRMAN LEVAR: Okay. Were you wanting to  
4 do --

5 MR. SABIN: Can I ask just one question?

6

7 FURTHER REDIRECT EXAMINATION

8 BY MR. SABIN:

9 Q. As it relates to the moratorium, are you  
10 seeing substantial growth in small TS customers or  
11 the large TS customers?

12 A. It is the small.

13 Q. So the moratorium, as you're proposing it,  
14 would temporarily stay the flow of that large group  
15 that is causing the problem and making it so you  
16 can't do the data?

17 A. Right.

18 Q. No further questions.

19 CHAIRMAN LEVAR: Does anyone have any  
20 follow-up to that?

21 Okay. Commissioner Clark, do you have any  
22 questions?

23 COMMISSIONER CLARK: Thanks.

24

25 ///

1 CROSS-EXAMINATION

2 BY COMMISSIONER CLARK:

3 Q. Sticking with page 22, for a moment, of your  
4 direct testimony, Mr. Summers, at line 575, I see the  
5 sentence that we've been discussing: "Since rates  
6 were set below cost, there was still an incentive for  
7 customers to switch from sales classes to the TS  
8 class."

9 Hypothetically, if in this proceeding the  
10 Commission orders a path toward and a path that  
11 results in full cost allocation, one of the step  
12 processes that has been proposed, is it your  
13 testimony that that action won't dampen the trend  
14 that you're seeing, dampen the percentage of growth  
15 that you're seeing in this?

16 A. I think it would probably have a -- some  
17 impact. If it were an immediate impact, you know,  
18 if -- if the rates were to jump to full cost in March  
19 of this year, I think that would have a -- you know,  
20 more of an impact on how many customers would join  
21 the class. But I -- if you're doing the gradual  
22 approach, I think that that effect is diminished at  
23 least somewhat.

24 Q. Thank you. Separate to a different issue  
25 now, but still principally with regard to the TS

1 **class.**

2 **With respect to administrative charges, is**  
3 **there studies that you performed regarding customer**  
4 **representative time and how it's devoted to customers**  
5 **that have significantly different throughput rates?**  
6 **Is there -- do you have any analytical or**  
7 **quantification of that difference?**

8 A. We don't have any quantification. The big  
9 cost that goes into the administrative charge is for  
10 customer support, basically, right? So you've got  
11 the account reps that work with these customers.

12 When I talked with them -- and like I said,  
13 this isn't a quantitative analysis, but just said,  
14 "Where do you spend your time? Are you spending your  
15 time on large customers or are you spending it on  
16 small customers?"

17 And they said it's really kind of equal.  
18 Right now, there's so many small customers that it  
19 takes a lot of time to work with them, whereas the  
20 large customers are more sophisticated and I think  
21 that they don't take as much time to work with them.

22 Q. So on a per customer basis, there would be a  
23 lot of difference, but on a -- if you look at them in  
24 the aggregate, placing them into two rough, separate  
25 categories of usage, you'd say it's --

1 A. I'd say it's --

2 Q. It's anecdotal information. It's similar.

3 A. Yes.

4 Q. And the kind of analysis that you're talking  
5 about performing to better understand cost allocation  
6 in this class, would that include a more analytical  
7 approach to customer representative time, for  
8 example?

9 A. Absolutely. In fact -- I hesitate to throw  
10 out what just comes through my head, but assuming  
11 these customers were sales customers before and they  
12 didn't have, you know, an administrative charge, they  
13 didn't pay a demand charge, some of these things  
14 where their rate design was a lot more simple, it  
15 could be that you look at those administrative  
16 charges for those customers, and rather than doing an  
17 administrative charge, you could lump that into the  
18 volumetric rates.

19 Now, I know that that's been discussed even  
20 with the ANGC. They proposed that they want the  
21 administrative charge to go away altogether. I don't  
22 think that that's the best thing right now. I think  
23 that the administrative charge collects some costs,  
24 some real costs. It is a cost-based charge. And for  
25 the customers that the rate was originally designed



1 for, it's a suitable charge. I don't think it should  
2 go away.

3 Of course, the overall effect, if the admin  
4 charge were to go away, is that volumetric rates  
5 would go up. You're going to collect the same  
6 revenue requirement from whatever rate design you  
7 use.

8 **Q. Now, separate subject.**

9 **Regarding the design day allocation factor**  
10 **as contrasted with using an actual peak day usage**  
11 **factor, is there anything extraordinary in developing**  
12 **an actual peak day factor for use in your studies?**

13 A. The extraordinary thing -- and I'll also  
14 point out that both of these methods would require  
15 estimates.

16 **Q. Right.**

17 A. So the extraordinary thing with actually  
18 calculating a peak day factor based on the highest  
19 sendout day of the year would be that we just don't  
20 have hourly information for -- or daily -- sorry,  
21 daily, even, information for GS and FS customers. So  
22 we don't know exactly how much to do.

23 Now, if I were to estimate how much the GS  
24 class and FS classes were using on that day, chances  
25 are I would use the same method that I'm using in the

1 design day. So I think if you did use the highest  
2 sendout day, you'd get a similar result of what you  
3 would get by using the design day to begin with.

4 What I like about the design day, though, is  
5 that it's -- that's what we use in the IRP every  
6 year. And that's consistent -- you know, it just  
7 shows a consistent number from year to year, whereas  
8 the highest sendout day of the year could be high  
9 some years, could be low some years. I just think  
10 it's more consistent to use the design day that we  
11 use in the IRP.

12 **Q. I understand the preference you're**  
13 **expressing, but I want to make sure I understand the**  
14 **full implications of your answers. And what I think**  
15 **I'm hearing from you is that if the Commission were**  
16 **to request or direct that you develop a factor that**  
17 **would be representative of actual peak day usage**  
18 **rather than design day usage, that you can see a path**  
19 **to doing that in a defensible way; is that correct?**

20 **A. I think it could be done. I just think it**  
21 **would give a similar result to what the design day**  
22 **is.**

23 **Q. Regarding the F230 allocation factor, and**  
24 **you, I think, testified that you saw logic behind the**  
25 **68/32 split, is that logic different than the 60/40**

1 split?

2 Can you distinguish or articulate a  
3 difference in those two relationships or ratios that  
4 has a logical underpinning?

5 A. Yeah. The 60/40 weighting really is just a  
6 middle ground, and we've never put any quantitative  
7 analysis into that. It's just been a matter of the  
8 small users, residential customers. That's --  
9 typically, the Division and the Office are usually  
10 proposing a 50/50 weighting, and the industrial users  
11 are usually filing something or requesting something  
12 that's closer to a 70/30. And so the company's -- it  
13 was just the middle ground. We said, "If there's no  
14 agreement on how to do this, then this middle ground  
15 is the way we should go."

16 So when I'm comparing the 60/40 to the  
17 68/32, we're talking a number that was just used as a  
18 compromise and comparing that to a number with  
19 quantitative data behind it, which is what the 68/32  
20 has.

21 Q. And the data has reference to...

22 A. Yeah, the data that's used for the 68/32,  
23 the way that that's calculated is we're looking at  
24 the overall system-wide load factor. And so we're  
25 saying if the system is being used more -- is being

1 used 68 percent of the time to meet the average  
2 demands of customers, then that would put the other  
3 32 percent onto peak. So it gets tied into  
4 system-wide load factor.

5 Q. With regard to TS rate design --

6 A. Okay.

7 Q. -- and the testimony that you gave in  
8 reference to Mr. Higgins', I think, surrebuttal where  
9 he pointed out that it would be more appropriate to  
10 scale each volumetric block rate --

11 A. Right.

12 Q. -- by an equal percentage, we don't have a  
13 model or modeling results that reflect that outcome  
14 in this record, do we?

15 A. I don't think you do. You have summary  
16 exhibits from -- I think from Mr. Higgins. But the  
17 company could produce a model that would show that  
18 result.

19 COMMISSIONER CLARK: So that's my question  
20 now to counsel: Is there a way that that can occur?

21 MR. SABIN: I think I'm hearing yes, and I  
22 would need to understand the time frame by which we  
23 would need to deal with it. We could talk over lunch  
24 and come prepared with an answer as to how long that  
25 would take to prepare.

1           COMMISSIONER CLARK: And perhaps that  
2 conversation could include not just your clients but  
3 also other counsel, as well, so that maybe there's  
4 something that could be agreed upon.

5           MR. SABIN: Sure.

6           COMMISSIONER CLARK: Thank you.

7           That concludes my questions. Thank you very  
8 much.

9           CHAIRMAN LEVAR: Commissioner White?

10          COMMISSIONER WHITE: I have no questions.  
11 Thank you.

12

13                           CROSS-EXAMINATION

14 BY CHAIRMAN LEVAR:

15           **Q. Mr. Summers, are you aware of any --**  
16 **anything that this commission or another commission**  
17 **has done that's analogous to the moratorium you're**  
18 **asking us to implement for TS customers that's been**  
19 **done for the same purpose?**

20           A. I am not aware of anything that other  
21 companies have done. This was brought about by  
22 the -- I think the unique circumstances of this case,  
23 and as we're trying to figure out how to best solve  
24 this, that's the solution that came up. So I'm not  
25 aware of any others.

1 Q. Thank you. I think I just had one more.

2 Oh. So after the 2007 general rate case  
3 here that impacted peak demand allocation to  
4 interruptible service customers, what incentive  
5 existed between that case and the 2013 case for  
6 customers to move from transportation service to  
7 interruptible service?

8 Was there a financial incentive during that  
9 period?

10 A. I'm trying to -- I'm not sure what existed  
11 between 2007 and 2009.

12 Q. And I recognize it's a bit of an unfair  
13 request to ask about something over ten years ago,  
14 but just if you have any --

15 A. And what I'm thinking is I believe that the  
16 2009 rate case was settled, as well, so there's  
17 probably only a two-year period where that was the  
18 case. And I would have to double check on that to  
19 see what that settlement stipulation included, but I  
20 know in 2009, we did propose that we change that.

21 Q. Okay. Are you aware, though, of any other  
22 financial incentives to move to interruptible service  
23 other than peak demand allocation?

24 A. No.

25 Q. In terms of comparing transportation service

1 **to interruptible service?**

2 A. Oh. So you're asking if the transportation  
3 customer had an incentive to move to interruptible  
4 service? Is that --

5 **Q. Are you aware of any other financial**  
6 **incentives other than peak demand allocation?**

7 A. No, I'm not. No. And that's why I think  
8 it's important that we do this, is so that there is  
9 an incentive. Otherwise, there's no point in having  
10 an interruptible class.

11 Now, that class is down to about  
12 20 customers right now. A lot of those customers  
13 have gone to the transportation service over the last  
14 decade or so. But for those customers who still want  
15 an interruptible option and want that benefit, I  
16 think that there needs to be a distinguishing factor.  
17 And I'm not aware of anything besides the allocation  
18 of design day costs that would make that  
19 distinguishment.

20 **Q. Okay. Okay. Thank you for your testimony**  
21 **today.**

22 A. Sure.

23 CHAIRMAN LEVAR: And knowing that our last  
24 hour and a half or so has been a little bit  
25 disruptive, I think we'll still go ahead and take a

1 break now and reconvene at -- why don't we say 1:15  
2 by that clock. I know that clock's a little bit  
3 ahead, but we'll reconvene at 1:15 on that clock.

4 (A lunch recess was taken.)

5 CHAIRMAN LEVAR: Okay. I think we'll start,  
6 and we're ready for Dominion's next witness.

7 MS. CLARK: Thank you. The Company calls  
8 Jessica Ipson.

9 CHAIRMAN LEVAR: Ms. Ipson, do you swear to  
10 tell the truth?

11 THE WITNESS: Yes.

12 CHAIRMAN LEVAR: Thank you.

13

14 DIRECT EXAMINATION

15 BY MS. CLARK:

16 **Q. Ms. Ipson, will you please state your full**  
17 **name and business address for the record?**

18 A. My name is Jessica Ipson. The address of  
19 our work is 33 --

20 CHAIRMAN LEVAR: I think your microphone's  
21 not on.

22 THE WITNESS: Oh, I'm sorry.

23 Jessica Ipson. The address is 333 South  
24 State Street, Salt Lake City, Utah.

25 ///



1 BY MS. CLARK:

2 Q. And by whom are you employed?

3 A. Dominion Energy.

4 Q. And what is your -- what position do you  
5 hold with Dominion Energy?

6 A. I'm a Regulatory Analyst III.

7 Q. Ms. Ipson, are you the same Ms. Ipson that  
8 filed prefiled direct testimony in this docket that  
9 is labeled DEU Exhibit 5.0 with accompanying  
10 Exhibits 5.01 and 5.02?

11 A. Yes.

12 Q. And do you adopt the contents of those  
13 documents as your testimony today?

14 A. Yes.

15 MS. CLARK: The Company would move for the  
16 admission of DEU Exhibit 5.0 and accompanying  
17 Exhibits 5.01 and 5.02.

18 CHAIRMAN LEVAR: If anyone objects, please  
19 indicate to me.

20 (No response.)

21 CHAIRMAN LEVAR: And I'm not seeing any  
22 objection in the room, so the motion is granted.

23 (DEU Exhibits 5.0, 5.01, and 5.02 were  
24 admitted.)

25 MS. CLARK: Thank you.

1 BY MS. CLARK:

2 Q. Ms. Ipson, can you please summarize the  
3 testimony you've offered in this docket?

4 A. Yes. The purpose of my testimony and  
5 exhibits were to clean up and propose modifications  
6 to the company's tariff. I have made a summary of  
7 nine applicable changes being proposed in this  
8 docket.

9 No. 1 is adding a manual meter reading fee  
10 of \$20 per month. This would give customers an  
11 option when it comes to their perceived health  
12 concerns to have their transponder removed from their  
13 meter. The customer's usage would then be read  
14 manually by an employee.

15 No. 2, removing the winter daily limit in  
16 the GS -- general service and firm sales classes.  
17 There was once a time where cost of service gas was  
18 considered a scarce resource. However, now it is  
19 plentiful, so it is not necessary to have this limit.  
20 Also, there have been certain customers that have  
21 preferred to be a sales customer but have approached  
22 the winter daily limit. At this time, there is no  
23 reason not to let them continue to be a sales service  
24 customer if they choose to.

25 No. 3, removing the tracking of accounting

1 requirements for the CO2 processing plant recovery.  
2 This is a cleanup issue, since it relates back to  
3 2005, and doesn't serve a purpose anymore.

4 No. 4 is removing the extension area charge  
5 for Brian Head. This expired back in 2014.

6 No. 5 is removing the option for the company  
7 to provide temporary propane service. This service  
8 has been discontinued by the company due to safety  
9 concerns.

10 No. 6, adding language for customers that  
11 have had prior fraudulent activity, bankruptcy, or  
12 won't provide identification to pay a security  
13 deposit of the greater of \$125 or the highest month's  
14 bill over the last 12 months. High-risk customers  
15 need to pay a security deposit to mitigate risk.  
16 Once the cover -- customer has proven good payment  
17 history for a year, the security deposit would be  
18 returned to them.

19 No. 7 is adding language for cost treatment  
20 for the high-pressure main extensions and service  
21 lines. This addition to the tariff is the company's  
22 current policy. This policy mirrors the intermediate  
23 high-pressure main and service policy. By adding the  
24 language of cost treatment, it provides transparency,  
25 consistency in administrating, and gives notice to

1 customers.

2 No. 8, some other proposed changes including  
3 rewording, referencing, punctuation, formatting, and  
4 grammatical corrections. These substantive changes  
5 do not affect the substance or applicability of the  
6 tariff.

7 No. 9, some of the other changes within the  
8 tariff including the distribution non-gas rates,  
9 administration charge, transportation service class  
10 35,000 dekatherm moratorium have been sponsored by  
11 another witness.

12 To my knowledge, the changes I mentioned,  
13 No. 1 through 8, no party has objected to. And  
14 No. 9, Mr. Summers has addressed today in his  
15 testimony. The proposed changes are just,  
16 reasonable, and in the public interest.

17 In addition, an order issued on  
18 December 31st, 2019, in Docket No. 19-057-T05  
19 identifies a change to Tariff Section 2.01, "Firm  
20 Sales Service." So there is no additional need to  
21 change the time request for the firm sales service  
22 class in this general rate case docket.

23 And this concludes my testimony.

24 MS. CLARK: Ms. Ipson is available for  
25 cross-examination and Commission questions.

1 CHAIRMAN LEVAR: Thank you.

2 Mr. Jetter, do you have any questions for  
3 Ms. Ipson?

4 MR. JETTER: I have no questions. Thank  
5 you.

6 CHAIRMAN LEVAR: Thank you.

7 Mr. Snarr?

8 MR. SNARR: We have no questions.

9 CHAIRMAN LEVAR: Mr. Russell?

10 MR. RUSSELL: No questions. Thank you.

11 CHAIRMAN LEVAR: Mr. Mecham?

12 MR. MECHAM: Just a couple of quick ones.

13 THE WITNESS: Okay.

14

15 CROSS-EXAMINATION

16 BY MR. MECHAM:

17 Q. I'm not sure I understood your summary on  
18 the moratorium. But looking at the legislative  
19 version of the tariff, on page 5-11, No. 11 talks  
20 about 35,000 dekatherms required for any customer to  
21 begin TSF or TSI.

22 Is the moratorium in lieu of that or -- in  
23 lieu of this paragraph?

24 A. So the moratorium Austin talked about during  
25 his testimony this morning, about the

1 35,000 dekatherm limit for, I guess, the TS class, I  
2 believe that would have to be added into the tariff.  
3 I'm not sure if a modification to the tariff would be  
4 any different than a moratorium. I...

5 **Q. Okay. I'm just trying to figure out if this**  
6 **paragraph stays or goes, No. 11.**

7 A. I guess.

8 MS. CLARK: I think if the Commission  
9 granted it, you'd want to modify this language a  
10 little bit to make it clearer, if the Commission  
11 agreed to a moratorium. This reflects --

12 MR. MECHAM: Well, I know that's what you're  
13 asking.

14 MS. CLARK: -- the admission of that.

15 MR. MECHAM: I'm just trying to figure  
16 out --

17 MS. CLARK: And if they don't, I think that  
18 this would not be appropriately included in the  
19 tariff.

20 MR. MECHAM: Okay. So --

21 MS. CLARK: Depending if --

22 MR. MECHAM: It would change?

23 MS. CLARK: It would be governed by the  
24 rule, wouldn't you agree?

25 MR. MECHAM: It would be different than

1 this?

2 MS. CLARK: Depending on the Commission's  
3 order.

4 MR. MECHAM: Okay. Thank you.

5 BY MR. MECHAM:

6 Q. And then on page 5-10, under 4.04, there is  
7 a supplier non-gas adder of \$1.42.

8 A. Okay.

9 Q. Now, that hasn't -- I didn't see that in  
10 your narrative testimony. I'm certain that  
11 Mr. Summers referred to it, but that's not been part  
12 of the TS tariff, has it?

13 A. No. That is an addition.

14 Q. And do you know why?

15 A. That is what Mr. Summers discussed earlier  
16 today. Some of the supplier non-gas charges, we  
17 would like to charge to transportation service  
18 customers. We would do that by adding this supplier  
19 non-gas adder to their firm demand charge.

20 Q. But they normally don't use supplier non-gas  
21 services, do they?

22 A. That's not true.

23 Q. What is true, then?

24 A. They do use supplier non-gas services. For  
25 example, the peak. They use, I guess, gas during

1 peak time, and we have peak hour services that are  
2 collected through the supplier non-gas charge.

3 **Q. Okay. And -- but isn't that if they -- if**  
4 **they use service at peak hour times, aren't they**  
5 **penalized, and that's how they -- the company**  
6 **recovers its revenue?**

7 A. No. We have different contracts set up for  
8 peak hour service, and that is for different time  
9 periods of the year. And that is recovered through  
10 the supplier non-gas charge.

11 **Q. Or would be, because it hasn't been.**

12 A. Yes. But it -- just in general, it's  
13 recovered by the supplier non-gas charge, and  
14 we're -- in this case, in this tariff modification,  
15 we would like to charge the TS class for that charge.

16 **Q. Okay. Thank you.**

17 CHAIRMAN LEVAR: Is that all your --

18 MR. MECHAM: Nothing -- yeah, that's it.

19 CHAIRMAN LEVAR: Okay. Thank you.

20 Major Kirk or Captain Friedman?

21 MAJOR KIRK: No questions, sir.

22 CHAIRMAN LEVAR: Any redirect based on  
23 Mr. Mecham's questions?

24 MS. CLARK: No, I don't think so. Thank  
25 you.



1 CHAIRMAN LEVAR: Commissioner White?

2 COMMISSIONER WHITE: No questions. Thank  
3 you.

4 CHAIRMAN LEVAR: Okay. Commissioner Clark?

5 COMMISSIONER CLARK: No questions. Thank  
6 you.

7 CHAIRMAN LEVAR: Just one very minor  
8 question.

9

10 CROSS-EXAMINATION

11 BY CHAIRMAN LEVAR:

12 Q. So with respect to the manual meter reading  
13 fee --

14 A. Mm-hmm.

15 Q. -- is there a cost for the initial removal  
16 of the transponder?

17 A. So no, the company would just come out and  
18 do that. And then just from that point on, it would  
19 be \$20 a month to send an employee out there to read  
20 their meter.

21 Q. Okay. So your proposal is just to absorb  
22 the cost of the initial removal?

23 A. Mm-hmm.

24 Q. Okay. Thank you.

25 A. Thanks.

1 CHAIRMAN LEVAR: Thank you for your  
2 testimony this afternoon.

3 Anything else from Dominion?

4 MS. CLARK: We have no further witnesses.  
5 However, we're prepared to address the question  
6 related to providing a supplemental model, if now --

7 CHAIRMAN LEVAR: Yes, please.

8 MS. CLARK: -- would be the time to address  
9 it.

10 The company's conferred with other parties,  
11 and we are able to prepare such a model and then  
12 circulate it to other parties for review. Our hope  
13 is that we could get consensus and just submit that  
14 by the end of next week, as agreed upon. That is our  
15 hope.

16 CHAIRMAN LEVAR: I'm pretty sure that's  
17 sooner than we would have an order ready to issue,  
18 so --

19 MS. CLARK: Okay.

20 CHAIRMAN LEVAR: Thank you.

21 MS. CLARK: Thanks.

22 CHAIRMAN LEVAR: I'll just look around the  
23 room, just assuming everyone's in agreement to that,  
24 assuming there can be some consensus around the model  
25 once it's put together. And if there's not, then I

1 guess we'll have an issue to work through in a short  
2 period of time. Okay.

3 MR. SNARR: No objection. Although, I think  
4 we need to -- we need to have such clarity as you can  
5 provide as to what we collectively ought to be  
6 putting in that model so that it's a task that we can  
7 accomplish as opposed to something we can debate  
8 about as parties and is pursuant to your request.

9 CHAIRMAN LEVAR: So you're looking for  
10 Commission direction on this model?

11 MR. SNARR: Well, I think the --

12 CHAIRMAN LEVAR: If you --

13 MR. SNARR: -- Commission asked for the  
14 model.

15 CHAIRMAN LEVAR: Well, Commissioner Clark --

16 COMMISSIONER CLARK: Sure.

17 CHAIRMAN LEVAR: -- asked about it, so why  
18 don't I --

19 COMMISSIONER CLARK: Yeah. What I'm looking  
20 for is for the record to reflect, with respect to the  
21 TS rate design, a scaling of each volumetric block  
22 rate by an equal percentage consistent with the  
23 recommendation that is in Mr. Higgins' testimony and  
24 also consistent with what Mr. Summers testified would  
25 be an approach that -- I think he said he could

1 support it. But at least it would correct the error  
2 that crept in during his last -- the model run that  
3 we have in connection with his rebuttal testimony.  
4 So that's all I'm looking for.

5 MS. CLARK: I think we can do that.

6 COMMISSIONER CLARK: Thanks for the --

7 MR. SNARR: I have no problem. Just that  
8 definition helps, though, so we all have an eye on  
9 the same task.

10 CHAIRMAN LEVAR: Okay. So there's no need  
11 for additional clarification from anyone?

12 (No response.)

13 CHAIRMAN LEVAR: Okay. Thank you.

14 MS. CLARK: Thank you.

15 CHAIRMAN LEVAR: Mr. Jetter?

16 MR. JETTER: Thank you. The Division would  
17 like to call and have sworn in Howard Lubow.

18 CHAIRMAN LEVAR: Mr. Lubow, do you swear to  
19 tell the truth?

20 THE WITNESS: I do.

21 CHAIRMAN LEVAR: Thank you.

22

23 DIRECT EXAMINATION

24 BY MR. JETTER:

25 Q. Good afternoon, Mr. Lubow. Would you please

1 state your name and occupation for the record?

2 A. Howard E. Lubow. I'm a utility consultant.

3 Q. Thank you. And -- oh, I think your  
4 microphone may not be turned on.

5 A. How is that now?

6 Q. That sounds better.

7 A. Okay.

8 Q. And were you hired by the Division to  
9 provide testimony in this docket?

10 A. I was.

11 Q. And did you have an opportunity to review  
12 the filings made throughout this docket by other  
13 parties?

14 A. I have.

15 Q. And did you create and cause to be filed  
16 with the Public Service Commission here in Utah  
17 direct and surrebuttal prefiled testimony along with  
18 Direct Exhibits 6.0 through 6.7 and surrebuttal  
19 DPU Exhibit No. 6.0SR?

20 A. That's correct.

21 Q. Do you have any changes or corrections you'd  
22 like to make to your prefiled testimony?

23 A. No.

24 Q. And if you were asked the same questions  
25 contained in your prefiled testimony, would your

1 **answers be the same?**

2 A. They would.

3 **Q. Thank you.**

4 MR. JETTER: I'd like to move at this point  
5 to enter into the record the prefiled direct and  
6 surrebuttal testimony along with the attached  
7 exhibits of Mr. Lubow.

8 CHAIRMAN LEVAR: Okay. Please indicate if  
9 anyone has any objection to the motion.

10 (No response.)

11 CHAIRMAN LEVAR: And I'm not seeing any, so  
12 it's granted.

13 (DPU Exhibits 6.0DIR - 6.7DIR and 6.0SR  
14 were admitted.)

15 MR. JETTER: Thank you.

16 BY MR. JETTER:

17 **Q. Have you prepared a summary of your**  
18 **testimony?**

19 A. I have.

20 **Q. Please go ahead.**

21 A. As I just indicated, I was retained by the  
22 Division to review the DEU class cost of service and  
23 rate design in this proceeding.

24 Primarily, as a consequence of the issues  
25 surrounding service and pricing for services to the

1 TS class, the cost allocation process and rate design  
2 recommendations are now a major focus of this case.  
3 I've had previous experience in gas cost of service  
4 matters, in state and federal proceedings,  
5 representing utility companies and state commissions.  
6 My testimony today reflects that experience,  
7 recognizing specific policies and practices that have  
8 evolved here in Utah.

9           Having reviewed the DEU filed evidence, I  
10 performed an analysis of key factors driving their  
11 cost of service study and proposed rate design.  
12 While there's a range of accepted criteria and  
13 practices employed in the cost allocation and rate  
14 design process, ultimately the Commission must find  
15 those procedures that result in fair and equitable  
16 outcomes based on established precedence and the  
17 evidence before it in forums such as this case.

18           While various parties represent different  
19 constituencies with stakes of interest to their  
20 clients, the aims of the Division evidence in this  
21 phase of the case are aligned most directly with the  
22 objectives of the Commission itself. That is, the  
23 Division has no intended bias to privilege one group  
24 of customers over another.

25           In this context, my findings and

1 recommendations are proposed as a balancing of all  
2 customer interests within a framework of recognized  
3 regulatory policies and procedures. More  
4 specifically, my analysis leads to certain  
5 recommendations which are proposed for implementation  
6 in rates at this time, while other proposals are made  
7 as suggestions for improvements that may be achieved  
8 in the next DEU rate proceedings.

9           Concerning the cost of service methodology  
10 employed by DEU, I've raised three areas for proposed  
11 modification: Recognition of interruptible volumes  
12 in the DEU design day factor, use of a 50/50  
13 weighting in the DEU hybrid allocation factor, and  
14 use of actual test year peak day demands as a  
15 superior basis for peak responsibility allocation  
16 factor. The first two recommendations are proposed  
17 for this proceeding while the latter recommendation  
18 is proposed for consideration in the next DEU rate  
19 case.

20           In my prepared testimony, I pointed out that  
21 a hybrid allocation factor is somewhat arbitrary as  
22 there is little empirical evidence to support any  
23 particular percentage weighting. In this testimony,  
24 I mentioned that utilities have, on occasion, relied  
25 on such a weighting and have employed a 50/50



1 allocation, also recognizing that a range of  
2 alternatives can also be found.

3 An intervenor requested any specific  
4 analysis that I might have to support this claim. It  
5 was made in my prefiled testimony. And absent the  
6 time or the data necessary to perform that review, I  
7 responded by saying that this assertion was based on  
8 many cases in which I've been personally involved.  
9 Mr. Higgins specifically found that this  
10 representation was insufficient and proposed that my  
11 recommend -- my proposal be ignored in the absence of  
12 specific citations.

13 Since Mr. Higgins seemed to be fixated on  
14 this specific testimony, apart from other points that  
15 I addressed in support of this weighting, I reviewed  
16 a recent Southwest Gas case in Arizona where I had a  
17 role similar to the one in this case. In that  
18 proceeding, which was Case No. G-01551A-16-0107,  
19 Southwest Gas, in its own filed testimony before that  
20 commission, employed a 50/50 hybrid allocation factor  
21 in allocating the demand component of mains and  
22 services.

23 I reference this case now not to sway this  
24 Commission to a particular weighting of a 50/50, but  
25 simply to recognize that there are a range of

1 weightings that have been employed in similar cases  
2 in this jurisdiction as well as other jurisdictions.  
3 Of greater relevance to this case is the historical  
4 use of the 60/40 weighting recognized in previous DEU  
5 rates as well as DEU's reliance on weighting in  
6 this -- in its initial filing.

7           In my surrebuttal testimony, I found that  
8 Mr. Higgins' observation that a modification of the  
9 weighting might be considered a bit punitive in light  
10 of the cost shifts otherwise under review at this  
11 time. I found that this testimony had merit, and  
12 therefore revised my initial proposal to revert back  
13 to the DEU filing of 60/40, which is also implicit in  
14 historical rates.

15           In another recommendation, I proposed that  
16 the recognition of actual interruptible use during  
17 actual peak period be reflected in the peak demand  
18 allocation factor. This is consistent with previous  
19 findings of this Commission where it directed a  
20 recognition of interruptible usage in the  
21 construction of this allocation factor. The facts in  
22 this case support the finding previously made by this  
23 Commission. And, if anything, the basis is more  
24 compelling at this time.

25           DEU has not experienced a design day peak

1 condition in over 50 years. For many years,  
2 interruptible customers have enjoyed the benefit of  
3 gas deliveries even during actual peak period  
4 conditions. Ignoring this benefit in the allocation  
5 process, as well as a more general consideration of  
6 the access and use of these facilities, provides an  
7 unreasonable subsidy to these customers.

8 Finally, I propose the DEU employ a peak day  
9 factor based on actual test period conditions rather  
10 than relying on design day estimates. This  
11 recommendation is more consistent with general  
12 industry practice and is specifically supported by  
13 the fact that the DEU design day represents a  
14 condition that is unlikely to occur. Actual customer  
15 usage is a reflection of those customers who benefit  
16 from DEU system facilities.

17 For these reasons and the reasons further  
18 developed in my prefiled testimony, I recommend that  
19 DEU be required to develop and include actual peak  
20 day customer data by tariffs necessary for  
21 consideration by the parties in the next rate  
22 proceeding.

23 Aside from the DEU cost of service analysis,  
24 I also reviewed the DEU proposed rate design. It  
25 made recommendations which include a distribution of

1 the DPU revenue requirement, a separation of  
2 residential customers from the GS class in the next  
3 case, and isolating TS customers with volumes falling  
4 below 35,000 dekatherms threshold at this time.

5 The recommendation to separate residential  
6 customers from the GS tariff is consistent with  
7 predominant industry practice, including at least  
8 some of DEU's own sister companies. As stated in my  
9 filed testimony, this separation provides for a more  
10 uniform or heterogeneous group of customers, provides  
11 for greater transparency, and has a more accurate  
12 basis to allocate costs and design rates for these  
13 customers as well as those commercial customers  
14 remaining in the GS tariff. DEU should be directed  
15 to file data consistent with these tariff separations  
16 in its next case.

17 Finally, in consideration of the rebuttal  
18 testimony filed by other parties, I modified my  
19 recommendation for the proposed tariff changes to be  
20 implemented evenly over a three-year annual period.

21 This concludes my opening comments.

22 **Q. Thank you.**

23 MR. JETTER: I have no further questions for  
24 Mr. Lubow. He is available for cross and questions  
25 from the Commission.

1 CHAIRMAN LEVAR: Thank you, Mr. Jetter.  
2 Mr. Snarr, do you have any questions?

3 MR. SNARR: Yes, I just have a couple of  
4 areas that I want to seek some clarification on.

5

6 CROSS-EXAMINATION

7 BY MR. SNARR:

8 Q. Mr. Lubow, let's briefly discuss the design  
9 day/throughput allocator, as that issue has been a  
10 center point to some of the discussion in this  
11 proceeding.

12 CHAIRMAN LEVAR: Mr. Snarr, could you bring  
13 your microphone a little bit closer?

14 MR. SNARR: Oh, sure. I'm sorry.

15 BY MR. SNARR:

16 Q. Mr. Lubow, are you familiar with the  
17 seaboard cost classification allocation methodology?

18 A. It's been a while, but yes.

19 Q. And is the seaboard methodology recognized  
20 in the industry?

21 A. It has been, yes.

22 Q. And isn't your originally proposed 50/50  
23 weighting similar to the seaboard method?

24 A. Oh, goodness. It's been too long. You  
25 know, when you look at cost of service, there are so

1 many variables and ways in which cost allocation  
2 principles may be implemented and considered  
3 consistent with NARUC and other industry practice.  
4 You really have to almost go behind just the  
5 allocation factor itself but also look at what  
6 facilities those factors are applied to.

7 **Q. But it is true that the seaboard method did**  
8 **some significant allocations based on a 50/50**  
9 **allocation --**

10 A. That's my --

11 **Q. -- percentage rate?**

12 A. -- memory, yes.

13 **Q. Thank you.**

14 **Let's move to one other area, and that is**  
15 **related to what you just summarized in your**  
16 **testimony, the revenue requirement rate design. I'd**  
17 **like to just seek a clarification on a couple things**  
18 **you represented.**

19 **First of all, just for context, it's my**  
20 **understanding that Dominion sought approximately**  
21 **\$19.2 million as a revenue increase, initially, in**  
22 **this application; is that right?**

23 A. Correct.

24 **Q. And in the rebuttal testimony, I believe**  
25 **that was reduced or revised to a request of**

1 17.5 million; is that correct?

2 A. I don't remember that specific number, but  
3 I'll accept that.

4 Q. All right. Now, at the bottom of page 5 of  
5 your testimony -- of your surrebuttal testimony, and  
6 continuing over to page 6, you were asked to describe  
7 your current rate proposal, including the assumptions  
8 underlined in that proposal; is that correct?

9 A. It is.

10 Q. What is the DPU revenue requirement you have  
11 assumed in responding to those questions?

12 A. Well, I originally took the initial outcome  
13 of the staff analysis, the Division analysis, which I  
14 believe implied an increase of about \$1.2 million.  
15 However, that was with a caveat that it had a  
16 position with regard to certain plant facilities  
17 that, if considered in the revenue requirement, would  
18 have essentially brought that number to zero or  
19 slightly negative.

20 Q. All right. At Line 145 of your surrebuttal  
21 testimony, you suggest that having considered current  
22 Commission policies and using your assumptions, that  
23 the possibility would be that the result -- the  
24 result of this case may indeed produce rate  
25 reductions to the GS class of customers; is that

1 correct?

2 A. Nominal reductions, yes.

3 MR. SNARR: All right. That concludes my  
4 questions.

5 CHAIRMAN LEVAR: Thank you, Mr. Snarr.

6 Mr. Russell, do you have any questions for  
7 Mr. Lubow?

8 MR. RUSSELL: Yes, I do. Thank you.

9

10 CROSS-EXAMINATION

11 BY MR. RUSSELL:

12 Q. I want to weigh in on this topic that we've  
13 been discussing regarding the allocation of peak  
14 demand cost to interruptible customers.

15 Your position and the position of various  
16 other parties has been clarified in the prefiled  
17 testimony, so I don't want to spend a lot of time on  
18 it. But you acknowledge that Dominion does not plan  
19 for interruptible usage in its construction of a  
20 design day demand; right?

21 A. I do.

22 Q. Okay. And nonetheless, your proposal would  
23 impose costs associated with the construction of that  
24 design day system on interruptible customers for whom  
25 that system was not planned, yes?



1           A.     That's correct. Based on my testimony, I've  
2 indicated a consistent availability and use of system  
3 demand by interruptible customers, and there should  
4 be some recognition consistent with Commission past  
5 statement and policy that those benefits should be  
6 reflected in the cost of service.

7           **Q.     I will admit, I'm a little bit confused on**  
8 **this next point because it's not clear to me what**  
9 **proposals you're making with respect to this**  
10 **allocation for this rate case and which ones you are**  
11 **proposing be developed for the next rate case.**

12          A.     Okay. Just to clarify that, for this case,  
13 I've indicated that the company's design date peak  
14 demand allocation factor be modified to reflect the  
15 actual use of interruptible customers during the  
16 actual peak day in the test year.

17          **Q.     And so then tell me what it is you're**  
18 **proposing that the Commission order the company to do**  
19 **with respect to the next rate case on this issue?**

20          A.     In the next rate case, I think, along with  
21 other considerations as discussed by Mr. Summers, the  
22 Commission should be able to have the opportunity to  
23 look at the potential use of an actual peak day  
24 allocation factor and the rationale behind that  
25 alternative.

1           **Q.    And you're making that recommendation**  
2 **because you don't believe the Commission has**  
3 **sufficient -- that the record here is sufficient to**  
4 **develop such an actual peak day allocator; correct?**

5           A.    That's right.  They -- in discovery, the  
6 company indicated that -- and Mr. Austin discussed --  
7 I'm sorry.

8                   Mr. Summers indicated in his testimony  
9 earlier today that that data is not readily  
10 available.  It can be developed, but it was not  
11 developed for purposes of production of discovery in  
12 this case.

13           **Q.    Okay.  I want to talk for a moment about**  
14 **your proposal to impose those design day costs on**  
15 **interruptible customers in this rate case.**

16                   You have included in your direct testimony  
17 various spreadsheets that contain the calculations  
18 supporting that proposal; correct?

19           A.    Just to clarify, I don't 100 percent agree  
20 with the predicate in your question.  What I'm  
21 proposing is that the system facilities employed by  
22 the company that relate to provision of meeting  
23 customer demand include interruptible usage as a  
24 reflection of the actual demand placed on the system  
25 in the test year and implicitly year over year as it

1 exists in how this system is actually used.

2 And I've reflected that adjustment at some  
3 level in this case by taking the company's design day  
4 factor and adjusting it for the interruptible volumes  
5 that were actually used at the time of the company's  
6 system peak.

7 **Q. And you've done that with respect to**  
8 **interruptible volumes used by the IS class as well as**  
9 **those interruptible volumes utilized by customers in**  
10 **the TS class; correct?**

11 A. That's right.

12 **Q. Okay. And how have you sought to impose**  
13 **those additional costs on interruptible customers?**  
14 **What is -- what is the specific mechanism that the**  
15 **company will collect those additional costs?**

16 A. Well, of course, for purposes of this case,  
17 we've assumed that there's a fair amount of linkage  
18 between the results of the cost of service analysis  
19 and, ultimately, the rate design that might come out  
20 of this case.

21 So there -- that's the bridge, basically,  
22 that would be relevant to how those costs would flow  
23 through into a somewhat revised allocation of cost  
24 that would be reflected in the design of TS and IS  
25 rates.

1           **Q.    So, specifically, you have proposed to**  
2 **increase the volumetric rate blocks in the TS class**  
3 **and to impose an additional -- an increase in the**  
4 **contract demand for TS customers to account for those**  
5 **additional costs; correct?**

6           **A.    Implicitly, I generally, as you know,**  
7 **supported DEU's recommendation with regard to rate**  
8 **structure modifications.  And then I've gone on to**  
9 **say that I -- while I might normally be inclined to**  
10 **support some of their rate structure adjustments, if**  
11 **this Commission ends up at a revenue requirement**  
12 **level that produces nominal to no change in the**  
13 **overall revenue requirement, that the rate structure**  
14 **modifications are probably something that might**  
15 **better be deferred until the next case, along with a**  
16 **lot of other matters that have been raised by DEU and**  
17 **the other parties.**

18           **Q.    Okay.  But I really don't think that**  
19 **answered my question.**

20                   **What I'm trying to get at is, in your**  
21 **proposal to impose these incremental costs that you**  
22 **associate with interruptible customers' usage for the**  
23 **peak demand factor that you're proposing be imposed**  
24 **here, you're proposing to raise rates for all TS**  
25 **customers in the volumetric rate blocks and in the**

1 **contractural firm demand factor; correct?**

2 A. That's correct to the extent it's consistent  
3 with the prefiled recommendations of how DEU intends  
4 to employ changes to that tariff.

5 **Q. But they're -- it's consistent with your**  
6 **proposal; right? I mean, you have submitted --**

7 A. Well, I -- I -- excuse me, but I clarified  
8 that a bit, indicating that while I generally support  
9 the DEU rate structure recommendations, that I would  
10 specifically not make some of the modifications that  
11 DEU's made at this time, given the fact that there  
12 may be little to no change in the overall revenue  
13 requirement.

14 But I would just simply -- a simplifying way  
15 of answering that is, I would spread that in a  
16 uniform way across the existing rate structure.

17 **Q. So you would -- and so you would do it just**  
18 **like the way that you've proposed? I mean, I'm**  
19 **trying to understand. You know, you're now offering**  
20 **what I think may be a different recommendation than**  
21 **maybe what you had submitted earlier. Or are you**  
22 **not?**

23 A. I don't think it's different.

24 **Q. Okay. I didn't think so either, but you**  
25 **seem to be pushing back on my question, which is --**

1 and maybe it's just easiest to go to your  
2 spreadsheet. Why don't you pull up DPU Exhibit 6.3,  
3 which was submitted with your direct testimony.

4 A. Yes, I have that.

5 Q. Okay.

6 A. And I guess what I was alluding to is that  
7 this rate structure is really within the DEU model.  
8 And I've made certain changes in the assumptions, and  
9 this is the result of changes such as the inclusion  
10 of the interruptible volume.

11 Q. Right. So it might be useful for us just to  
12 kind of walk through what this Exhibit 6.3 is.

13 So you've got four tables here. The table  
14 at the top of this exhibit is the base case that I  
15 believe Mr. Snarr had asked you about, which includes  
16 certain adjustments made by the Division but not all  
17 of the adjustments that the Division had proposed for  
18 revenue requirement; correct?

19 A. That's correct.

20 Q. Okay. And so that's what you called a "base  
21 case."

22 And then the second chart down is the base  
23 case but with a design day factor to impose those  
24 costs on interruptible volumes; right?

25 A. Correct.

1 Q. Okay. And then the third table down -- and  
2 I guess I should say the -- you've also submitted  
3 various exhibits that correspond with each of these  
4 tables; right?

5 A. That's right.

6 Q. Okay. So your Exhibit 6.4 corresponds with  
7 the table at the top?

8 A. That's right.

9 Q. And 6.5 corresponds with the second table  
10 related to the design day with interruptible volumes;  
11 right?

12 A. And so on, yes.

13 Q. Yeah. And so you've got these two tables at  
14 the bottom of 6.3, which correspond to your -- your  
15 proposal in your direct testimony, which you no  
16 longer are proposing, relating to the 50/50 demand  
17 throughput factor; right?

18 A. That's right.

19 Q. Okay. I --

20 A. So at this point, I think the focus would be  
21 on this second set of data within the 6.3.

22 Q. Yeah. So in order to figure out how we get  
23 from the table at the top of 6.3, your base case, to  
24 the second table -- which the only change you made  
25 there is allocating design day costs on interruptible

1 volumes; right?

2 A. That's right.

3 Q. Okay. And so to look at that, we would  
4 compare Exhibit 6.4 with 6.5; correct?

5 A. That's right.

6 Q. Okay. And I'm going to ask that we do that,  
7 so let's pull up 6.4. And you are looking at a hard  
8 copy. I've got a spreadsheet, and I'm gathering that  
9 probably at least half of the room has a spreadsheet.  
10 So I'll try to direct these questions so that we can  
11 deal with this both ways.

12 So if we scroll down on the spreadsheet or  
13 turn on your hard copy to the part of that chart  
14 addressing TS customer class --

15 A. That would be on page 5 of 8 of my exhibit.

16 Q. Of your hard copy version.

17 Okay. So there's a table that, at the top,  
18 says Utah TS, and then on -- sort of on the left-hand  
19 side of that table, it has something -- kind of a  
20 table header say -- calling -- saying "From Revenue  
21 Run Output."

22 And those are company numbers; correct?

23 A. That's right.

24 Q. And it's got Block 1, 2, 3, and 4 with the  
25 block rates in the TS class; right?



1 A. Correct.

2 Q. And then down below, we have a line showing  
3 "Annual Demand Charges per Dth of Contract Firm  
4 Transportation"; right?

5 A. Yes.

6 Q. Okay. So on the left-hand side, as we've  
7 established, those are the company numbers. And on  
8 the right-hand side, that's how you would propose to  
9 change the rate to account for your proposals. And  
10 this -- we're looking at 6.4 -- the proposals here  
11 are some but not all of the Division proposed changes  
12 to the revenue requirement, yeah?

13 A. That's right.

14 Q. Okay. So in order to figure out what you've  
15 done to impose the design day cost on interruptible  
16 volumes, we would look at -- we would compare the  
17 proposed rate in 6.4 with the corresponding proposed  
18 rates in Exhibit 6.5; right?

19 A. That's right.

20 Q. Okay. And what we see when we make that  
21 comparison is that in order to impose those design  
22 day peak demand costs on interruptible customers,  
23 what you've done -- or what you've proposed here is  
24 an even volumetric -- or an even increase for each  
25 volumetric block rate; correct?

1 A. That's what it shows.

2 Q. Okay. And you've also proposed to increase  
3 the annual demand charge per dekatherm of contract  
4 firm transportation; right?

5 A. I believe that that's the result of the  
6 underlying assumptions in the DEU rate design model  
7 that I relied upon in reflecting these changes. I  
8 didn't independently crunch through all of this data.  
9 I relied on the DEU model and the representation made  
10 by DEU of how it was proposing to spread any level of  
11 increase that the Commission might authorize.

12 Q. But, of course, DEU doesn't believe it's  
13 appropriate to impose design day costs on  
14 interruptible customers; correct?

15 A. That's its current position, yes.

16 Q. Yeah. And so using that model in this way  
17 yields something of an odd result, where we're -- in  
18 an effort to impose interruptible design day costs  
19 for interruptible volumes, we're imposing additional  
20 charges for firm transportation customers; right? At  
21 least in this example?

22 A. Well, this goes to the very heart of DEU's  
23 testimony and, at some level, mine as well, which is  
24 that maybe we don't have the best breakdown within  
25 tariff groups to be able to properly reflect

1 underlying cost of service to the extent that that's  
2 going to be a primary driver of utility rate design.

3 Q. Okay. I think we've explored that, perhaps,  
4 enough.

5 I want to go back to your 6.3, if we may.  
6 Walk through the -- what each of these tables -- or  
7 at least identify what each of these four tables is.  
8 But I want to -- I want to kind of focus a little bit  
9 on the effects of the proposed changing here.

10 Again, starting with your base case at the  
11 top, you note a 37.91 percent increase to the net  
12 cost of service collected from TS customers; correct?

13 A. That's right.

14 Q. Okay. And a corresponding 3 percent  
15 decrease to those -- that cost of service collected  
16 from the GS customers; right?

17 A. That's right.

18 Q. Okay.

19 A. And again, I think it's important, based on  
20 the way you're answer -- asking me these questions,  
21 this is simply the raw output of the revenue -- the  
22 cost of service model based on a different --  
23 differing sets of assumptions. That doesn't  
24 necessarily completely link up with the rate design  
25 recommendations. But go ahead.

1 Q. Yeah. But this does tend to highlight, to  
2 some degree, the proposals that you have made in this  
3 docket; right?

4 A. Certainly, it's a sensitivity or a scenario  
5 analysis, as it's identified on the exhibit, that  
6 shows the relative monetary impact of these different  
7 assumptions.

8 Q. Okay. So moving from the base case to the  
9 design day that incorporates your -- excuse me -- the  
10 second chart down, "Design Day with Interruptible  
11 Volumes," which incorporates your proposal to impose  
12 design day costs on those interruptible volumes, we  
13 see a corresponding increase of 45.45 percent to the  
14 TS class; correct?

15 A. That's right.

16 Q. And that's up from the 37.91 percent; right?

17 A. That's right.

18 Q. Okay. And then in that second chart, we see  
19 a corresponding decrease to the GS class of  
20 3.62 percent; right?

21 A. Correct.

22 Q. And in terms of the percentage increase,  
23 that's a relatively small change for the GS class but  
24 a relatively large one for the TS class, yes?

25 A. Well, it's about 7 percent.

1 Q. To the TS class?

2 A. Correct.

3 Q. And then we see, with the other two  
4 recommendations that you have below -- and I do  
5 understand that the 50/50 demand throughput is no  
6 longer your proposal, but we see with those that both  
7 of those recommendations also increase, resulting in  
8 further increases to the TS class net cost of  
9 service; correct?

10 A. That's right. And as you point out, those  
11 record -- the results of that analysis are now moot,  
12 given that I've proposed the 60/40 cost allocation  
13 basis.

14 Q. Okay. So each of those changes would  
15 increase and -- the change regarding the  
16 interruptible volumes would increase the TS class  
17 cost of service in addition to the fact the TS class  
18 is moving towards full cost of service here; correct?

19 A. It's not in addition to, in my opinion.  
20 It's simply a reflection of the use of this system by  
21 these customers. So it's not in addition to. It's a  
22 component -- integral component of the consideration  
23 of this usage in the cost of service study.

24 Q. The Division does not object to the company  
25 building a system aimed at a particular design day,

1 **does it?**

2 A. No. Well, I think that's the result of a  
3 process. And, of course, it's been fairly robust in  
4 recent years. So the Commission -- or I should say  
5 as a consultant for the Division, as I understand it  
6 at this time, is that the Division accepts the  
7 approval of whatever system design the company  
8 proposes that has been reviewed and accepted by this  
9 Commission and does not challenge that -- those  
10 assumptions.

11 **Q. Going back to 6.3 for my last question.**

12 **The 45 percent increase to the TS class**  
13 **that's represented there, that is your latest**  
14 **recommendation in this docket; right?**

15 A. Yes.

16 MR. RUSSELL: Okay. I think that's all I  
17 have.

18 CHAIRMAN LEVAR: Thank you, Mr. Russell.

19 Mr. Mecham, do you have any questions for  
20 Mr. Lubow?

21 MR. MECHAM: I think just one quick one.

22

23 CROSS-EXAMINATION

24 BY MR. MECHAM:

25 **Q. Mr. Lubow, in your surrebuttal, on page 6,**

1 after you have talked about rate spread and so on,  
2 you say that the rate spread -- "rate spreads  
3 generally conform with current Commission policies  
4 and/or assumptions made in previous rate  
5 settlements." But you don't say what those are.

6 What do you have in mind when you ask  
7 yourself that question?

8 A. Well -- excuse me. What I had in mind was  
9 that -- a few things. The cost of service model  
10 developed by DEU has been relatively stable in terms  
11 of the construction of that model and major  
12 assumptions within it over a period of time.

13 In that -- in that interim period and in the  
14 evidence in this record, I thought about the  
15 direction of the Commission, that there should be  
16 some recognition to the -- of the use of  
17 interruptible customers in terms of the access and  
18 utilization of capacity-related facilities that it  
19 may use during peak period conditions. And I thought  
20 about the hybrid allocation factor, generally, kind  
21 of settling, as Mr. Summers referred to it this  
22 morning, at around 60/40.

23 And that's maybe varied somewhat over time  
24 in terms of what underlying assumptions have been  
25 made, but the company's looked at that as a

1 compromised position that it thought, certainly as it  
2 filed its testimony, was a reasonable basis for the  
3 cost of service model. So those are the main things  
4 I was thinking about.

5 Q. Okay. Thank you.

6 And you've also been in the room. On page 7  
7 of your surrebuttal, you talk about the company's  
8 proposed increase uniformly being -- or being  
9 uniformly applied in the rate structure when taken as  
10 a whole, but -- that may yet come, but you don't --  
11 there's no evidence or exhibit in the record right  
12 now that shows that these increases, particular to  
13 the TS class, would be applied uniformly, is there?

14 A. No. But that's not unusual. Of course, the  
15 whole point of this proceeding is to get to a set of  
16 recommendations in the record that may be acted upon  
17 by this Commission. And typically, what occurs is  
18 that the Commission, either in the form of a  
19 late-filed exhibit or as a requirement of a proof of  
20 revenue, would lay out the parameters of the rate  
21 design it intends to have implemented, and the  
22 company would be required to produce the result of  
23 those findings.

24 MR. MECHAM: Okay. I have nothing further.

25 CHAIRMAN LEVAR: Thank you, Mr. Mecham.



1 Major Kirk or Captain Friedman?

2 MAJOR KIRK: No questions, sir.

3 CHAIRMAN LEVAR: Okay. Ms. Clark or  
4 Mr. Sabin?

5 MR. SABIN: Just very briefly.

6

7 CROSS-EXAMINATION

8 BY MR. SABIN:

9 Q. If I understand your test -- I just want to  
10 confirm. In your testimony, I understand you to be  
11 supportive of the concept of bringing the TS class to  
12 full cost of service; is that correct?

13 A. Yes. As that may be defined.

14 Q. Understood. But the general idea is that  
15 they -- as I take your testimony, you agree with the  
16 company that people -- that each class should bear  
17 their full cost of service?

18 A. I do.

19 Q. Okay. And I think I just heard you, a  
20 minute ago, say this, but I want to make sure I'm  
21 understanding you correctly. I think I've -- if I've  
22 understood your testimony, you agree with Mr. Summers  
23 that before you make decisions about specific  
24 intraclass breakouts or intraclass rate setting, you  
25 need to have sufficiently clear data to be able to

1 **make those decisions and make them in a credible and**  
2 **sustainable way?**

3 A. I 100 percent agree with that. And I'm sure  
4 it's frustrating to the parties and the Commission  
5 that we get to these cases and it's a component of a  
6 utility rate filing, and it's simply not possible to  
7 look at the scope of massive changes in a customer  
8 rate design inter- and intraclass. So I 100 percent  
9 support the company's notion that this needs a deep  
10 dive and further analysis.

11 And I think the Division has comparable  
12 views with regard to what needs to occur to bring  
13 this to a point for the Commission to have sufficient  
14 evidence to make clear findings about what's good or  
15 bad about these proposals with regard to cost of  
16 service and rate design.

17 Q. Thank you.

18 Last question. You just noted earlier in  
19 response to -- I don't remember which attorney. I  
20 think it was Mr. Russell's question, that as it  
21 relates to actual peak day data, you believe that the  
22 company should, for the next rate case, be developing  
23 actual peak day data that could be used to  
24 allocate -- I think your words in your testimony are  
25 essentially to allocate the --

1           A.    To tariffs.

2           **Q.    Right.**

3           A.    And the implication of that, just to be more  
4 clear about it, is that, as Mr. Summers pointed out,  
5 this isn't something that you just have available  
6 from internal records.

7           **Q.    And I just want to clarify that exact point.**  
8 **To the extent the company does not have and cannot**  
9 **obtain peak day data for some of the classes, would**  
10 **you agree with me that if you -- if the company or**  
11 **the Commission was going to do what you're proposing,**  
12 **it would have to be relying, to some extent, on**  
13 **estimates because there isn't data for every class**  
14 **showing a peak day for every class?**

15          A.    I do agree with that. And as Mr. Summers  
16 pointed out, it relies -- it -- by its nature, of  
17 course, it makes those estimates now with regard to  
18 design day data when it separates it out by various  
19 groups of customers. And, of course, in the context  
20 of a rate case, we're talking about tariffs.

21          **Q.    Understood.**

22               MR. SABIN: That's all I have. Thank you.

23               CHAIRMAN LEVAR: Mr. Jetter, any redirect?  
24

25               ///

1 REDIRECT EXAMINATION

2 BY MR. JETTER:

3 Q. I just have a very brief question I'd like  
4 to -- line of questions I'd like to ask you. And if  
5 you wouldn't mind just turning to -- this is  
6 Exhibit 6.3.

7 A. Yes, sir.

8 Q. And this is just to, I guess, clarify a  
9 little bit of -- something that's not necessarily  
10 intuitive here.

11 In the GS class on each of these -- and we  
12 can just look at even the top chart here, the top  
13 table -- a 3 percent increase or decrease for a  
14 typical GS customer, is it accurate that that would  
15 represent a 3 percent difference in their -- a  
16 typical customer in that class -- their total cost of  
17 gas service during a billing period?

18 A. Well, to be clear, it would represent the  
19 distribution component, not the commodity. So the  
20 impact on the customer, when it looks at its total  
21 bill, would be less than this.

22 Q. Than 3 percent?

23 And -- but that same -- that same difference  
24 between what's represented here as a percentage of  
25 the distribution cost as compared to total cost of

1 gas service applied to all of the other classes, TS  
2 included?

3 Let me --

4 A. I hadn't looked --

5 Q. -- rephrase that question.

6 A. -- at it this way, and maybe it's in this  
7 record. But, of course, when you're looking at large  
8 volume customers, the percentage of the distribution  
9 cost versus commodity may be skewed to an even lower  
10 weighting.

11 Q. Okay. And that's what I was trying to get  
12 at here is a 45 percent increase intuitively sounds  
13 like a lot, but that may be a very small portion of  
14 their total gas cost over any period of time, a month  
15 or a year?

16 A. Well, that's right. It would not be the  
17 majority of the cost that these high volume, high  
18 load factor users face.

19 Q. Okay. Thank you.

20 MR. JETTER: That's the only redirect I  
21 have.

22 CHAIRMAN LEVAR: Does anyone have any --  
23 well, does anyone have any recross based on  
24 Mr. Jetter's questions?

25 (No response.)

1 CHAIRMAN LEVAR: I'm not seeing any  
2 indication.

3 Okay. Commissioner Clark, do you have any  
4 questions for Mr. Lubow?

5  
6 CROSS-EXAMINATION

7 BY COMMISSIONER CLARK:

8 Q. I just have a question related to the 60/40  
9 allocation, the factor that we've discussed today.

10 And I'm quite familiar with your surrebuttal  
11 testimony on the subject, but do you have anything  
12 more to say than you've said here with respect to  
13 Mr. Summers' -- the logic that Mr. Summers sees in  
14 using the system load factor as -- for the throughput  
15 percentage as opposed to 40 percent? In other words,  
16 32 as opposed --

17 A. Right.

18 Q. -- to 40?

19 A. Only this: It's nice to be able to -- when  
20 you're a decision-maker or a party in the case -- to  
21 be able to have empirical evidence that supports some  
22 finding. So it's nice to be able to say, "Look to  
23 this kind of a allocation factor. I don't find it  
24 particularly compelling."

25 As a decision-maker, I think I'd recognize

1 this for what it is, which is a hybrid allocation  
2 that is designed to reflect diversity -- system  
3 diversity among different kinds of customers.

4 And whether it's 60/40 or 68/32, it's hard  
5 for me, as an expert witness, to say why -- where  
6 this Commission should come down in one place as  
7 versus another. The only place I would help -- maybe  
8 hang my hat on the 60/40 a bit more is that  
9 historically, it's kind of skewed to that result.  
10 And if we're going to look at a lot of other factors  
11 in the next case and defer things that maybe each of  
12 the parties is recommending now for deeper  
13 consideration, I'd probably be somewhat biased more  
14 towards the 60/40.

15 **Q. Thank you.**

16 COMMISSIONER CLARK: That concludes my  
17 examination.

18 CHAIRMAN LEVAR: Commissioner White?

19 COMMISSIONER WHITE: I have no questions.  
20 Thank you.

21 CHAIRMAN LEVAR: I don't have anything else.  
22 Thank you, Mr. Lubow. Thank you for your  
23 testimony today.

24 Mr. Jetter?

25 MR. JETTER: Thank you. The Division would

1 like to call and have sworn in  
2 Mr. Douglas Wheelwright.

3 CHAIRMAN LEVAR: Mr. Wheelwright, do you  
4 swear to tell the truth?

5 THE WITNESS: I do.

6 CHAIRMAN LEVAR: Thank you.

7

8 DIRECT EXAMINATION

9 BY MR. JETTER:

10 Q. Mr. Wheelwright, would you please state your  
11 name and occupation for the record?

12 A. My name is Douglas D. Wheelwright. I'm a  
13 technical consultant supervisor for the Division of  
14 Public Utilities.

15 Q. Thank you. And in the course of your  
16 employment with the Division, have you had the  
17 opportunity to review the application as well as the  
18 filings from the various parties in this docket?

19 A. Yes, I have.

20 Q. And did you create and cause to be filed  
21 with the Commission direct and surrebuttal testimony  
22 in this docket?

23 A. I did.

24 Q. Do you have any corrections or edits you  
25 would like to make to that?



1 A. No, I don't.

2 Q. I would -- if you were asked the same  
3 questions in that prefiled testimony today, would  
4 your answers be the same?

5 A. Yes, they would.

6 MR. JETTER: I'd like to move to enter into  
7 the record the direct and surrebuttal testimony of  
8 Douglas Wheelwright.

9 CHAIRMAN LEVAR: If anyone objects to that  
10 motion, please indicate to me.

11 (No response.)

12 CHAIRMAN LEVAR: I'm not seeing objections,  
13 so the motion is granted.

14 (DPU Exhibits 1.0DIR and 1.0SR were  
15 admitted.)

16 MR. JETTER: Thank you.

17 BY MR. JETTER:

18 Q. Have you prepared a brief summary of your  
19 testimony?

20 A. Yes, I have.

21 Q. Please go ahead.

22 A. Thank you.

23 Good afternoon, Commissioners. The Division  
24 of Public Utilities has reviewed the testimony and  
25 exhibits of the company witnesses as well as the

1 testimony and exhibits of the intervening parties.  
2 The Division has also participated in meetings and  
3 discussions with company representatives and has  
4 submitted data requests in order to obtain additional  
5 information and clarification on specific issues.

6 In addition, the Division has hired Overland  
7 Consulting to help in the review and analysis  
8 process. Mr. Howard Lubow from Overland has provided  
9 written testimony and analysis on behalf of the  
10 Division and has provided testimony in the hearing  
11 today.

12 The company has stated that one of the  
13 primary goals or objectives of this phase of the case  
14 is to bring each customer class to the calculated  
15 full cost of service and has specifically identified  
16 transportation customers as the class that is being  
17 subsidized. The application states that large TS  
18 customers were subsidized, and new -- were  
19 subsidizing the new small customers in the class and  
20 that movement of commercial customers from the GS  
21 class to TS in recent years is one of the primary  
22 reasons for the undercollection of this class in  
23 total.

24 In response to data requests, the company  
25 provided a revised calculation to show the cost of

1 service for TS customers with usage less than 35,000  
2 dekatherms compared to large-use customers. This  
3 analysis showed that under the current rate  
4 structure, small TS customers are paying more than  
5 their fair share of the cost of service while larger  
6 TS customers are being subsidized by the other rate  
7 classes. This new analysis was the exact opposite of  
8 what was originally presented as the reason for a  
9 moratorium on the new customers moving to this class.

10 The company maintains the burden of proof to  
11 demonstrate the need for a change in the rate  
12 structure as provided conflicting information in this  
13 case. If the smaller TS customers are meeting their  
14 cost allocation requirements, the company should be  
15 indifferent as to which customer class they fall  
16 into.

17 The Division supports the company's effort  
18 to bring all customer classes to full cost of service  
19 and believes that additional study and analysis is  
20 needed. Any additional analysis should also include  
21 a more detailed explanation and review of the  
22 potential impact of reduced GS sales volumes, how  
23 they could have -- excuse me.

24 Any additional analysis should also include  
25 a more detailed explanation and review of the

1 potential impact that reduced GS sales volumes could  
2 have on a company-owned supply provided by Wexpro.

3 Division would recommend that the company  
4 direct -- the Commission direct the company to  
5 complete a more detailed review and analysis of these  
6 issues and require the company to include specific  
7 options and alternative recommendations for a  
8 possible split in the TS class as part of the next  
9 general rate case filing. The Division would also  
10 support a similar view and analysis of a possible  
11 split in the GS rate class as part of the next  
12 general rate case filing.

13 The Division supports the proposed reduction  
14 in the administrative fee for the TS customers, the  
15 allocation of peak hour costs to transportation  
16 customers, and supports the phased-in increase in the  
17 TS rate spread evenly over a three-year period.

18 And that concludes my summary.

19 **Q. Thank you.**

20 MR. JETTER: Mr. Wheelwright is available  
21 for questions and cross from the other parties.

22 CHAIRMAN LEVAR: Thank you, Mr. Jetter.

23 Mr. Snarr, do you have any questions for  
24 Mr. Wheelwright?

25 MR. SNARR: No. The Office has no

1 questions.

2 CHAIRMAN LEVAR: Thank you.

3 Mr. Russell?

4 MR. RUSSELL: No questions. Thank you.

5 CHAIRMAN LEVAR: Mr. Mecham?

6 MR. MECHAM: Yes, thank you. I've got a  
7 few.

8

9 CROSS-EXAMINATION

10 BY MR. MECHAM:

11 Q. Good afternoon, Mr. Wheelwright.

12 A. Good afternoon.

13 Q. So as I understand it, your view's been  
14 changed through this process as you've seen new  
15 evidence come in that small TS customers actually are  
16 providing return above the average system return?

17 A. The data request that was completed by the  
18 company did show that small TS customers were  
19 providing -- or meeting their cost of service  
20 requirement, yes.

21 Q. And adding -- actually providing a return  
22 beyond the average system return?

23 A. They were higher than the larger customers.  
24 I'll say that.

25 Q. Okay. When you say that there has been

1 **inconsistent evidence, what are you referring to?**

2 A. Well, I think the initial application stated  
3 that small customers were the problem and that they  
4 were the cause of -- that the TS class was being  
5 undercollected was the movement of customers from GS  
6 to TS, that that was the root cause of problem. This  
7 subsequent analysis does not show that that is the  
8 cause.

9 **Q. So in the initial filing, the company didn't**  
10 **address that Division of the TS class, did it?**

11 A. No.

12 **Q. It came in response to data requests?**

13 A. That's correct.

14 **Q. And it showed just opposite of what the**  
15 **narrative has been for many years, did it not?**

16 A. Yes. That's correct.

17 **Q. And you heard Mr. Summers say that the**  
18 **narrative is shifting; correct?**

19 A. Yes.

20 **Q. And then in your testimony, in your**  
21 **surrebuttal, you say that the moratorium may not be**  
22 **necessary.**

23 **Is that still your testimony?**

24 A. The moratorium, I think, can go either way,  
25 depending on which -- how you look at this. And I

1 can argue both points. I think the moratorium would  
2 be helpful to gain a clear understanding of those  
3 customers that are in that class. I don't disagree  
4 with that. However, if those small TS customers are  
5 meeting their cost of service, the moratorium may not  
6 be the best thing. So you can argue it both ways.

7 **Q. But they are meeting their cost of service;**  
8 **correct? So you would really need to argue that the**  
9 **moratorium's not necessary under those circumstances.**

10 A. No. I don't -- I wouldn't say that because  
11 we don't know how many customers would be moving to  
12 that class. If we have -- as Mr. Summers said, if we  
13 have an additional 450 or 500 or 1,000 customers that  
14 move to that class, that would cause a problem for  
15 the company. If we have 20 customers, I don't think  
16 it would be a problem, but we don't know. So the  
17 moratorium may make sense, to freeze that until we  
18 get a handle on what's going on within that collapse.

19 **Q. For three years?**

20 A. That's the problem that I have. Three years  
21 is a long time. We've been talking about this issue  
22 for ten years now, and now we're going to go an  
23 additional three years. That's one of my concerns  
24 with the moratorium.

25 **Q. Does that strike you as unreasonable?**

1           A.    I don't know if there's another option  
2 because the company will file a rate case every three  
3 years.  We can't do anything outside of a general  
4 rate case.  So given those parameters, I don't know  
5 if there's another choice that we have.

6           **Q.    But you recognize that the moratorium will**  
7 **stop any movement whatsoever to the TS class and**  
8 **prevent customers from the -- from enjoying the**  
9 **savings that they have been?**

10          A.    There's a lot of moving parts to this.  
11 Customer savings, yes.  There are also implications  
12 for the Wexpro agreement that we need to look at  
13 this.  We need to look at this in total.  So I don't  
14 think this is an easy answer with a moratorium.  And  
15 like I said, I can argue it both ways.

16          **Q.    Wouldn't the TS class achieve its full cost**  
17 **of service faster by having customers join it that**  
18 **are actually producing return above the average**  
19 **system?**

20          A.    I don't know.

21          **Q.    Well, wouldn't it stand to reason?**

22          A.    The volumes of the smaller customers are not  
23 really significant.  So I don't know if -- I don't  
24 know if they -- what the correct answer is.  I don't  
25 know if it would improve it, or if we had additional



1 customers moving into that class, the exact impact.  
2 We need more study. We need more analysis.

3 **Q. But again, the direction, even for those**  
4 **small customers, even if it's a slight increment,**  
5 **it's still an improvement, is it not?**

6 A. It could be. It -- but again, we don't know  
7 what the impact's going to be if we have 500  
8 customers, if we have 1,000 customers moving. I  
9 don't know what the impact's going to be. Or if we  
10 have 50 customers moving into that class. So it's a  
11 moving target that's difficult to try and get your  
12 arms around.

13 **Q. Doesn't the evidence show that the large TS**  
14 **customers are the ones that are underperforming?**

15 A. Yes, it does.

16 **Q. Should there be a moratorium on anyone**  
17 **joining that class?**

18 A. I don't think that's a problem. I don't  
19 think we have many in the thousand dekatherm  
20 customers.

21 **Q. And that's -- that is a problem. If they're**  
22 **the ones causing the problem, and the ones who aren't**  
23 **causing the problem are prevented by the moratorium**  
24 **from moving, how is that just and reasonable or fair?**

25 A. I think the charge of the company is to look

1 at their rates and make them fair. If they have a  
2 difficult time analyzing the data -- I don't know how  
3 long it's going to take to pull the data together, to  
4 do all this work. Three years is a long time.  
5 That's a concern that I do have.

6 **Q. So what's the solution?**

7 A. The first thing we need to do, I believe, is  
8 to gather the data. I don't know -- again, the  
9 challenge is we don't know what's going to happen to  
10 this class if we don't put a moratorium on it. You  
11 know, based on some of the information, it looks like  
12 some of the smallest customers would have a decrease.  
13 So if that were to occur, there may be a flood of new  
14 small customers coming into this class. That would  
15 impact the analysis process.

16 So again, I can argue it both ways. If  
17 there's -- without a moratorium, we may have a flood  
18 of new customers. With a moratorium, nobody can come  
19 in. So I don't know if there is an easy answer, and  
20 we're going to leave that up to the Commission.

21 **Q. So what incentive is there to move quickly**  
22 **if we have a three-year moratorium imposed?**

23 A. To move quickly?

24 **Q. To move quickly to do the analysis you're**  
25 **talking about.**

1           A.     That's another one of my concerns. I would  
2 like to do this analysis quickly while we do have  
3 people who are engaged, people who are familiar with  
4 the case, people who are understanding of the issues.  
5 If we drag this out for three years, it's going to be  
6 very difficult to get people involved and to get them  
7 motivated to even participate.

8           **Q.     What confidence do any of us have that the**  
9 **collaborative process is going to be more productive**  
10 **than what's been happening in the last seven,**  
11 **eight years?**

12          A.     We don't have any assurance. If -- but I  
13 would hope, and it's my recommendation that the -- I  
14 would hope that the Commission would order the  
15 company to move forward. And it may take that.  
16 We've been looking at this for a number of years. So  
17 it may take an order or some kind of direction from  
18 the Commission to move this forward. Or as an  
19 alternative, the Division could also act and initiate  
20 some -- a proceeding to move this information forward  
21 and to gather that information.

22                   The other challenge that we have is the  
23 company has all the data. We don't have that. So we  
24 do rely on the company to provide that information.

25           **Q.     But who benefits from a moratorium?**

1 A. I don't know if -- who would benefit.

2 Q. Well, the customers looking to make a change  
3 won't benefit, will they?

4 A. No. If -- one of the examples was the  
5 savings to school districts. If they were -- if  
6 there was a moratorium, they would not be able to  
7 achieve those savings.

8 Q. And is that -- as I said to Mr. Summers, I  
9 mean, those savings for the school districts was  
10 nearly \$5 million in 2019. Is it -- so all of those  
11 customers who yet may move forego whatever the level  
12 of savings is. Is that a benefit to them?

13 A. No.

14 Q. What would you expect to happen to the  
15 number of TS customers if there's a moratorium?

16 A. If there's a moratorium, there won't be any  
17 increase in the TS customers.

18 Q. Can you tell us what will happen to the TS  
19 class dekatherms with a moratorium?

20 A. I would imagine that the volumes would stay  
21 roughly the same as they are today. I don't think  
22 you're going to have any increases if there's no new  
23 customers.

24 Q. And have you given any thought as to what  
25 would happen to TS contract demands with a

1 moratorium?

2 A. I don't think there would be any change with  
3 the moratorium to anything.

4 Q. So how do you provide incentive to the  
5 company to do this analysis in less than three years?  
6 I mean, do you -- let me restate that.

7 Does a moratorium give the company any  
8 incentive to do the kind of analysis you're talking  
9 about?

10 A. Not directly, but I think indirectly, they  
11 are motivated. We've been looking at this for a  
12 number of years. I think indirectly there is some  
13 motivation to get this reviewed and analyzed. This  
14 is a priority for the Division as well.

15 Q. This is the only area -- well, let me  
16 restate that.

17 Isn't this the only -- one of if not the  
18 only area where there's just a modicum of  
19 competition?

20 A. What do you mean by that?

21 Q. We're dealing with a public utility that is  
22 a sole single provider. The TS class actually  
23 enables customers to purchase their own gas on the  
24 market, and that won't be available for three years  
25 under the moratorium; is that correct?

1 A. Yes.

2 **Q. So competition's gone; is that correct?**

3 A. Yes. Well -- yes.

4 **Q. So whether it's the intent of the company or**  
5 **not to engage in anticompetitive activity, it's the**  
6 **result, is it not?**

7 A. It's a consequence of the condition they're  
8 in today. If the Commission decides that there needs  
9 to be a moratorium, there would not be any  
10 opportunity for people to move to that class for  
11 three years. I don't think that's unheard of.

12 **Q. Well, that's a good question. Where have**  
13 **you heard of it?**

14 A. I don't have any specific examples that I  
15 have researched. Mr. Lubow and I were discussing --  
16 he's familiar with other situations where there have  
17 been moratoriums on specific rate classes in other  
18 districts, in other jurisdictions.

19 **Q. For three years?**

20 A. I don't know how long they were.

21 MR. MECHAM: Okay. I think I'm done.

22 THE WITNESS: Thank you.

23 CHAIRMAN LEVAR: Thank you, Mr. Mecham.

24 Major Kirk or Captain Friedman, any  
25 questions for Mr. Wheelwright?

1 MAJOR KIRK: Yes, sir.

2

3 CROSS-EXAMINATION

4 BY MAJOR KIRK:

5 Q. You said that based on the new data that was  
6 available, it seemed that the customers in the TS  
7 class -- the small customers in TS class were  
8 subsidizing the large customers in the TS class.

9 Is that an accurate statement?

10 A. That's the way it looks, yes.

11 Q. And what model is that based off of?

12 A. It's based on the company's model. They did  
13 the analysis.

14 Q. And that's not based on a 100 percent design  
15 day model like Mr. Collins proposes?

16 A. I don't believe it is.

17 Q. And so you're not sure, under that model,  
18 whether small TS customers are actually subsidizing  
19 large TS customers if the Commission chose to adopt  
20 that model --

21 A. I don't know.

22 Q. -- based on the --

23 A. I don't know.

24 Q. Is it fair to say that from the beginning of  
25 the case to where we are now, we're not really sure

1 **what the accurate cost is, then, within the TS class?**

2 A. There's been a lot of changes within this --  
3 within the filing.

4 **Q. But the Division still supports a 46 percent**  
5 **increase to the TS class; is that correct?**

6 A. The Division supports bringing all customer  
7 classes up to full cost of service.

8 **Q. But we're not exactly sure what the cost of**  
9 **service is, is what you just said?**

10 A. We don't -- we haven't filed -- the  
11 Commission has not ruled on a revenue requirement, so  
12 we don't know what the full cost is going to be for  
13 each class.

14 **Q. There's a discussion about moratorium and**  
15 **letting new customers move into the TS class. If we**  
16 **don't really know what the cost of service is for the**  
17 **TS class, perhaps we should have a moratorium on**  
18 **changing the cost of service for customers until we**  
19 **figure that out first.**

20 **Would that be a proposal that the Division**  
21 **would be open to?**

22 A. I have not recommended that. I have not  
23 stated anything about that.

24 **Q. Thank you.**

25 **CHAIRMAN LEVAR: Thank you.**



1 Any cross-examination from Ms. Clark or  
2 Mr. Sabin?

3 MS. CLARK: No questions. Thank you.

4 CHAIRMAN LEVAR: Any redirect, Mr. Jetter?

5 MR. JETTER: Just a brief couple of redirect  
6 questions.

7  
8 REDIRECT EXAMINATION

9 BY MR. JETTER:

10 Q. You've been asked a number of questions  
11 about the effect of customers moving in and out of  
12 the TS class with or without a moratorium and -- as  
13 well as potential TS customers that would move in or  
14 out of the TS class above the 35,000 dekatherm limit.

15 Do you have any ability, at this time, to  
16 know what the effects would be without knowing what  
17 the rate outcome -- the rates that would be set at  
18 the outcome of this hearing would be?

19 A. No.

20 MR. JETTER: That's my only follow-up  
21 question. Thank you.

22 CHAIRMAN LEVAR: Any recross based on  
23 Mr. Jetter's questions?

24 (No response.)

25 CHAIRMAN LEVAR: I'm not seeing any.

1           Okay. Commissioner Clark, do you have any  
2 questions for Mr. Wheelwright?

3           COMMISSIONER CLARK: Yes.

4  
5                           CROSS-EXAMINATION

6 BY COMMISSIONER CLARK:

7           Q. So regarding the moratorium, your -- I'll  
8 call it equivocal -- I don't mean that in a  
9 pejorative way, but -- recommendation regarding  
10 whether the Commission implements it or not, is that  
11 reflecting uncertainty on your part regarding the  
12 entirety of the information that's been presented  
13 regard -- on the TS cost allocations evidence as it's  
14 been presented in the case?

15                   In other words, do you lack conviction about  
16 this latest information that you've received from the  
17 company and the cost recovery in the small TS  
18 customer element, or -- or is there some other reason  
19 for you to doubt whether or not a moratorium ought to  
20 be imposed?

21           A. I think one of the things that Mr. Summers  
22 said is the analysis that was done only looks at one  
23 small portion of this. We don't know if the split at  
24 35,000 is correct. We don't know if the split ought  
25 to be 10,000 or 100,000. There are -- there's a lot

1 of unknowns with the information. That was one run  
2 that was done by the company. It was done with the  
3 company's model, but we don't know if that's the  
4 correct spot. There's still a lot of unanswered  
5 questions.

6 **Q. Do you have a view of what kind of**  
7 **information would persuade you that you -- in a way**  
8 **that you could say unequivocally to the Commission**  
9 **that is your recommendation, that we impose the**  
10 **moratorium because unintended consequences are going**  
11 **to result if we don't?**

12 **Is there a scenario that would make this**  
13 **more clear that you can articulate?**

14 A. The company has -- well, let me qualify this  
15 is little bit. There's a lot of moving parts to  
16 this. One of the aspects that has not been explored  
17 very well is the Wexpro production. Wexpro has some  
18 caps on it, and we can't ignore that. That's part of  
19 the way the company has to do business. We need to  
20 explore that further and see how that's going to play  
21 into this whole scenario.

22 So I think there's a lot of moving parts  
23 that we need to address and analyze and really  
24 understand clearly.

25 COMMISSIONER CLARK: I don't have any

1 further questions. Thank you.

2 CHAIRMAN LEVAR: Commissioner White?

3

4 CROSS-EXAMINATION

5 BY COMMISSIONER WHITE:

6 Q. Good afternoon. Just one brief question.  
7 Obviously, it's been outlined in pretty great detail,  
8 the -- kind of the pros and cons of this moratorium  
9 concept. This concept, is this something that  
10 would -- the only possible installation of the  
11 moratorium would occur at the conclusion or the order  
12 of this rate case?

13 In other words, is this something that could  
14 be monitored by the Division or other parties and --  
15 as to see what potential consequences were to occur  
16 based upon the outcome of the order?

17 Is that something that the Division has  
18 evaluated or --

19 A. We haven't evaluated it. That certainly  
20 would be an option.

21 Q. And what would you, without -- obviously I'm  
22 putting you a little bit on the spot here, but what  
23 might that look like in terms of, you know, the  
24 monitoring and what type of action or request would  
25 the Division potentially make, or other party, to --

1 **as that would be monitored?**

2 A. Let me think about this for a minute.

3 One of the challenges you're going to --  
4 that you would have is there's only one chance during  
5 the year for customers to move from GS to the  
6 transportation service. Once they've made that  
7 election, it's too late. If we have 1,000 new  
8 customers who signed up, it's too late. And we don't  
9 have a choice to go back and say, "Wait a minute. We  
10 want to put a moratorium on this."

11 So that's the challenge that you've got,  
12 where you've only had -- you know, if it was -- if  
13 there were a provision where periodically we could  
14 see how many customers were moving to that class, we  
15 could monitor that on a regular basis and see we've  
16 had 100 customers this month, 200 the following  
17 month, 300 the following month. We don't have that  
18 luxury. There's one time a year when customers can  
19 move.

20 **Q. So potentially there would only be like one**  
21 **bite of apple a year?**

22 A. One bite, yeah.

23 **Q. Okay.**

24 COMMISSIONER WHITE: That's all the  
25 questions I have. Thank you.

1 CHAIRMAN LEVAR: I don't have anything else,  
2 Mr. Wheelwright. Thank you for your testimony.

3 THE WITNESS: Thank you.

4 CHAIRMAN LEVAR: Why don't we break until --  
5 let's just say 3 o'clock by that clock. Thank you.

6 (A brief recess was taken.)

7 CHAIRMAN LEVAR: Okay. We're back on the  
8 record.

9 And at this point, now we'll go to Mr. Snarr  
10 for the Office for your witness.

11 MR. SNARR: Yes, thank you. We'd like to  
12 call as a witness Mr. Jim Daniel.

13 CHAIRMAN LEVAR: Mr. Daniel, do you swear to  
14 tell the truth?

15 THE WITNESS: Yes.

16 CHAIRMAN LEVAR: Thank you.

17  
18 DIRECT EXAMINATION

19 BY MR. SNARR:

20 Q. Good afternoon, Mr. Daniel.

21 A. Good afternoon.

22 Q. Would you state your name and -- for the  
23 record and your address?

24 A. My name is James Daniel. Business address  
25 is 919 Commerce Avenue, Austin, Texas.

1 Q. And with respect to this proceeding, by whom  
2 are you employed or contracted for?

3 A. I'm employed by the Office of Consumer  
4 Services.

5 Q. And in connection with this proceeding, have  
6 you had a chance to review the filings and documents  
7 related to the Phase II cost allocation and rate  
8 design issues?

9 A. Yes.

10 Q. And as a result of that review, have you  
11 produced or caused to be produced testimony and  
12 exhibits for submission in this proceeding?

13 A. I have.

14 Q. And would that include your direct  
15 testimony, which was submitted on November 14th of  
16 2019, along with exhibits; and rebuttal testimony  
17 submitted on December 13th, 2019, along with rebuttal  
18 exhibits; and surrebuttal testimony submitted on  
19 January 6th, 2020, along with exhibits? Is that  
20 correct?

21 A. Yes.

22 Q. And do you have any corrections or changes  
23 to make to any of those documents?

24 A. I do not.

25 Q. And if you were asked the same questions

1 **today, would your answers be the same?**

2 A. Yes, they would.

3 **Q. Thank you.**

4 MR. SNARR: We'd like to offer those  
5 exhibits that have been identified for admission.

6 CHAIRMAN LEVAR: If anyone objects to that  
7 motion, please indicate to me.

8 (No response.)

9 CHAIRMAN LEVAR: I'm not seeing any  
10 objections, so it's granted.

11 (OCS Exhibits 4D, 4.1D - 4.3D, 4SR, and  
12 4.1SR - 4.2SR were admitted.)

13 BY MR. SNARR:

14 **Q. Now, Mr. Daniel, have you prepared a summary**  
15 **of your testimony?**

16 A. Yes, I have.

17 **Q. Would you please present that now?**

18 A. Yes.

19 For several rate cases in many years, the  
20 transportation service customer class has been  
21 receiving significant subsidies at the expense of  
22 other customer classes. In previous rate cases --  
23 excuse me. It's allergy season in Austin, and my  
24 sinuses are giving me fits.

25 In previous rate cases, gradualism has been



1 proposed to gradually reduce or eliminate these  
2 interclass subsidies. Those gradual plans have done  
3 little to reduce these longstanding subsidies.

4 In this case, DEU initially proposed to  
5 eliminate the subsidies at once based on its proposed  
6 cost of service study. While DEU's objective to  
7 eliminate the interclass subsidies makes sense, DEU's  
8 cost of service is flawed. And I'll talk about  
9 several of the issues that I have with the cost of  
10 service study.

11 The first is the design day/throughput  
12 allocation factor. One of the more contested issues  
13 in this case is the proper classification and  
14 allocation of the costs related to the intermediate  
15 high-pressure distribution system costs, or the IHP  
16 system.

17 In its initial application, DEU classified  
18 60 percent of the IHP cost as demand-related and  
19 allocated those on a demand day -- demand allocator  
20 and classified 40 percent as commodity related and  
21 allocated those costs on a throughput allocator.  
22 This cost method recognizes that a portion of the IHP  
23 system is used to meet peak demand and that another  
24 portion is used year-round.

25 As the 40 percent weighting factor of the

1 throughput component decreases, more costs are  
2 allocated to the GS class and less cost allocated to  
3 the TS customer class.

4           ANGC and UAE propose to reduce the  
5 40 percent weighting factor to 32 percent, and the  
6 FEA proposes to reduce it to zero. The DPU  
7 originally proposed to classify 50 percent on design  
8 day peak demand and 50 percent on throughput. The  
9 DPU proposal is commonly referred to as a seaboard  
10 methodology.

11           The DPU also pointed out that the  
12 demand-related costs should be allocated using a test  
13 year peak demand allocator rather than the design day  
14 peak demand. I believe DPU's original 50 percent  
15 recommendation provides the best resolution for this  
16 issue because it offsets some of the problems with  
17 using a design day demand allocation factor.

18           Next issue is the allocation of general  
19 plant depreciation expenses. By underallocating  
20 costs to the NGV customer class, DEU attempts to hide  
21 another interclass subsidy. DEU has incorrectly  
22 allocated general plant depreciation and therefore  
23 underallocates costs of NGV class. General plant  
24 depreciation expenses should be allocated based on  
25 allocation of general plant; i.e., the plant that

1 causes the depreciation expenses.

2 Next issue is the allocation of costs to  
3 interruptible service customers. DEU is proposing to  
4 change the methodology of allocating demand-related  
5 costs to interruptible customers that was approved by  
6 the Commission in DEU's last litigated rate case,  
7 Docket No. 07-057-13. The company is making the same  
8 arguments in this case and does not provide any  
9 support for this change. The Commission should again  
10 reject the DEU's proposal.

11 Next issue is a revenue distribution. As  
12 previously mentioned, eliminating the interclass  
13 subsidies at one time will result in significant rate  
14 increases for some customer classes.

15 Another highly contested issue in this case  
16 is whether gradualism should be used to mitigate  
17 these significant increases. Of course, the level of  
18 the overall revenue increase proved -- or decrease  
19 approved by the Commission will impact the need for  
20 gradualism. UAE's gradualism proposal of a  
21 three-step, two-year approach to eliminate the  
22 interclass subsidies is an acceptable proposal and  
23 should be approved. I would also propose that the  
24 percent increase in each of those steps be an equal  
25 33.3 percent.

1           Next issue is a GSU -- GS rate design. DEU  
2 is proposing a major rate redesign of the GS class.  
3 At the same time, DEU is proposing to delay changes  
4 to the TS rate design due to anticipated customer  
5 migration issues. DEU has not properly supported the  
6 proposed GS rate design changes and not -- has not  
7 shown the impacts on the various types and sizes of  
8 GS customers.

9           As shown on my Exhibit OCS 4.3D, the  
10 company's rate redesign proposal will increase some  
11 GS customers' bills by over 40 percent while  
12 decreasing other GS customers' bills by 13 -- or  
13 15 percent. For these reasons, I recommend DEU's  
14 proposed GS rate redesign be rejected.

15           Next issue is rate TBF class. Customers  
16 receiving service under rate TBF have the option of  
17 bypassing the DEU's system and connecting directly  
18 with another pipeline. In order to retain these  
19 customers, DEU provides rate discount under rate TBF.  
20 In my direct testimony, I demonstrate that one of the  
21 two customers taking service under rate TBF should no  
22 longer receive a rate discount. DEU did not rebut my  
23 testimony on this issue. Commission should require  
24 DEU to move this customer from the discounted TBF  
25 rate to the appropriate rate schedule.

1           Last issue is the rate TS customer class  
2 composition. DEU is proposing to limit the  
3 availability of transportation service in the future  
4 to only customers with gas consumption of 35,000  
5 dekatherms or more. This proposal, along with  
6 eliminating the subsidy received by rate TS, could  
7 cause small TS customers to move back to bundled  
8 service under rate GS. This customer migration  
9 concern is DEU's reason for not redesigning the TS  
10 rate design.

11           I recommend Commission disallow DEU's 35,000  
12 dekatherm minimum use provision on a permanent basis,  
13 and I have not been convinced that a moratorium is  
14 necessary. In addition, I recommend that the  
15 Commission require DEU to split the TS customer class  
16 into two transportation service classes: One for  
17 small customers and one for large customers.

18           Thank you.

19           MR. SNARR: Mr. Daniel is available for  
20 cross-examination.

21           CHAIRMAN LEVAR: Thank you, Mr. Snarr.

22           Mr. Jetter, do you have any questions for  
23 Mr. Daniel?

24           MR. JETTER: I have no questions. Thank  
25 you.

1 CHAIRMAN LEVAR: Mr. Russell?

2 MR. RUSSELL: Yes. Thank you.

3

4 CROSS-EXAMINATION

5 BY MR. RUSSELL:

6 Q. Much of the subject matter of your testimony  
7 in this docket has been the subject matter of other  
8 witnesses' testimonies, so I'm going to focus my  
9 cross-examination on two issues.

10 One is your proposal to use a 50/50 demand  
11 and throughput factor. You, in your direct  
12 testimony, did not take a position one way or another  
13 on any adjustment to the demand and throughput  
14 factor; correct?

15 A. That's correct.

16 Q. And it was in your rebuttal testimony that  
17 you noted that the Division's witness, Mr. Lubow, had  
18 proposed a 50/50 weighting factor; correct?

19 A. That's correct.

20 Q. And it was in response to Mr. Lubow's  
21 testimony adopting that 50/50 weighting that you  
22 agreed with his reasoning and have adopted the 50/50;  
23 right?

24 A. That's correct.

25 Q. Okay. And as Mr. Lubow testified earlier,

1 it's no longer his position; correct?

2 A. Yes. I believe he's moved to 60/40 percent.

3 Q. Okay. Do you have a copy of your direct  
4 testimony?

5 A. Yes.

6 Q. I'll ask you to turn to line 185 of your  
7 direct, please.

8 A. I have that.

9 Q. I should note that we're going to switch  
10 gears a little bit, moving away from the design to  
11 the demand throughput factor and to your  
12 recommendation to impose peak demand costs on  
13 interruptible customers.

14 And I want to explore one aspect of your  
15 testimony on that, which actually comes in response  
16 to the question that's posed at line 192. And you  
17 state -- the question there is: "What is your  
18 recommendation regarding the allocation of costs to  
19 interruptible customers?"

20 And you state that you -- ultimately, that  
21 you support imposing those peak costs to  
22 interruptible customers. And I'm focusing on the  
23 last sentence here: "Changing this allocation factor  
24 reduces the costs allocated to the GS class by  
25 approximately \$54,000."

1 Do you see that?

2 A. Yes, I do.

3 Q. Does that number not seem low to you?

4 A. Well, I don't think so.

5 Q. Okay. I will note that I walked through  
6 Mr. Lubow's Exhibit 6.3, which, of course, uses some  
7 different inputs than yours does, where the change  
8 from there -- from the Division's base case, or at  
9 least the base case that was identified in  
10 Mr. Lubow's direct testimony, to this same allocation  
11 imposing peak day demand costs on interruptible  
12 customers resulted in something like a \$2 million  
13 reduction in cost to the GS class.

14 Did you review those exhibits?

15 A. I did not.

16 Q. Okay. And just to figure out where this  
17 \$54,000 number comes from, I think we get the answer  
18 to that in the question and answer immediately before  
19 it, which is where we started, at line 185. The  
20 question is: "Has DEU provided the information  
21 necessary to allocate costs to the interruptible  
22 customers consistent with the Commission's order in  
23 the 2007 docket"; right?

24 A. That's correct.

25 Q. Okay. And you point to OCS data



1 request 2.18; right?

2 A. Yes, that's what I've used.

3 Q. Okay. And you provide the result of that  
4 data request 2.18 in your -- excuse me -- in your  
5 Exhibit OCS 4.2D; right?

6 A. Yes. I believe that's a copy of the  
7 response to a data request.

8 Q. Right. It is the -- it is. It's the -- the  
9 information there is what was included in the  
10 attachment to the response, I think, to 2.18, if  
11 memory serves.

12 A. I believe that's correct.

13 Q. Okay. In response to OCS 2.18, do you  
14 understand that that response was providing  
15 information that calculates peak usage by the IS  
16 class or by all interruptible customers?

17 A. Not sure I understand the distinction you're  
18 trying to make.

19 Q. Sure. You understand that there is a class  
20 of customers that is the interruptible sales class,  
21 the IS class; right?

22 A. Correct.

23 Q. And there are also interruptible customers  
24 in other classes, specifically the TS class; right?

25 A. That's my understanding.

1 Q. Okay. And do you understand -- well, I  
2 guess maybe I should back up.

3 Is your proposal to allocate peak demand  
4 costs limited to the IS class, or is it for all  
5 interruptible volumes?

6 A. Well, my proposal is to copy what the  
7 Commission approved in the previous docket.

8 Q. Okay. Do you know -- and I've got OCS 2.18  
9 here. It -- the attachment provides the same table  
10 that you have on the -- your first page of 4.2D. The  
11 response -- the written response provides the actual  
12 request in response. And maybe it would be useful to  
13 hand that out, so I'll do that now.

14 MR. RUSSELL: And this will be marked as  
15 UAE Cross Exhibit 1.

16 (UAE Cross Exhibit 1 was marked for  
17 identification.)

18 CHAIRMAN LEVAR: Did we get a copy to the  
19 court reporter?

20 BY MR. RUSSELL:

21 Q. Okay. I've handed you what's been marked as  
22 UAE Cross Exhibit 1. And do you recognize this as  
23 the written response to OCS data request 2.18?

24 I guess I should clarify that  
25 UAE Cross Exhibit 1 is two pages. The first page is

1 the written response to OCS data request 2.18. The  
2 second page is actually -- was actually delivered as  
3 a separate sheet document that was titled "Attachment  
4 OCS 2.18."

5 Do you recognize this document?

6 A. Yes, I do.

7 Q. Okay. The request submitted by OCS sought a  
8 revised design day allocation factor calculation that  
9 includes an allocation to interruptible customer  
10 classes consistent with the Commission's order in the  
11 2007 docket; right?

12 A. Yes, it does.

13 Q. Okay. Did you review this information when  
14 you received it?

15 A. I believe I did, yes.

16 Q. Did you review it to determine whether you  
17 had received a -- an allocation to all customer --  
18 all interruptible customer volumes or -- excuse me --  
19 yeah, all interruptible volumes or whether you  
20 received an allocation to interruptible customer  
21 classes?

22 A. Not sure I reviewed it exactly the way you  
23 described.

24 Q. Okay. If you look at the second page of  
25 this exhibit, in the print down at the bottom of that

1 table, the top line of that print says: "Peak day  
2 responsibility based on contract demand, TS, and TBF  
3 or calculated peak." And in the parenthesis is GS,  
4 FS, NGV, and IS; right?

5 A. Yes, that's what it says.

6 Q. So what you received in the response to the  
7 data request was information related to the peak  
8 usage of the IS on -- or the usage of the IS class on  
9 peak day but the contract demand for TS on that day;  
10 right?

11 A. Well, it doesn't distinguish between firm  
12 or -- the contract demand is firm or not. That's  
13 what this says, contract demand.

14 Q. And contract demand is firm demand; right?

15 A. Yes. Interruptible customer may have some  
16 firm demand in addition to interruptible demand.

17 Q. Okay.

18 (Reporter clarification.)

19 THE WITNESS: Interruptible customer may  
20 have firm demand in addition to interruptible demand.

21 BY MR. RUSSELL:

22 Q. So the calculation that you identify in your  
23 testimony to get to this \$54,000 number is based only  
24 on an allocation of peak day costs to the IS class;  
25 right?



1 necessary to preserve the NGV class and that  
2 therefore it should not be approved; isn't that  
3 correct?

4 A. That is -- correct, yes.

5 Q. Okay. Would you agree, subject to check,  
6 that in 2013, the tariff rate for the NGV class was  
7 \$5.43 a dekatherm?

8 A. I'll accept that subject to check.

9 Q. Subject to check?

10 And would you agree, again, subject to  
11 check, that that tariff rate for the NGV class is  
12 currently \$6.58 a dekatherm, which is approximately a  
13 21.2 percent increase from that 2013 rate?

14 A. I can accept that.

15 Q. Would you also agree, subject to check, that  
16 volumes from 2013 until now have decreased by  
17 61.63 percent?

18 A. I don't know that, but I'll accept --

19 Q. Would you --

20 A. -- that.

21 Q. -- accept my representation for purposes of  
22 this -- of the questions?

23 A. Yes.

24 Q. Thanks.

25 And would you agree, again, subject to

1 check, that your proposal would bring the tariff rate  
2 to \$12.05 a dekatherm, which is roughly a percentage  
3 increase of 83 percent above the current tariff rate  
4 and more than 100 percent over the 2013 rate?

5 A. I believe Mr. Summers made that calculation,  
6 yes.

7 Q. Is it your position that an increase from  
8 \$6.58 to \$12.05 per dekatherm will not adversely  
9 impact the NGV class?

10 A. That's a significant increase.

11 Q. You've also acknowledged in your testimony  
12 that the Utah State Legislature has expressed support  
13 for discounting the rate to this class. And I think  
14 you even cited the Code, Section 54-4-13.1 of the  
15 Utah Code; correct?

16 A. Yes.

17 Q. Is it your position today that the  
18 Commission should ignore the legislative support and  
19 the 100 -- roughly 100 percent increase that you  
20 would recommend -- that your proposal would result  
21 in?

22 A. That's not my testimony. My testimony is  
23 that in order to discount the rate, you have to show  
24 that it's necessary, and I have not seen anything  
25 that would indicate that.

1 MS. CLARK: I don't have any further  
2 questions.

3 CHAIRMAN LEVAR: Thank you.

4 Mr. Snarr, any redirect?

5 MR. SNARR: Yes.

6  
7 REDIRECT EXAMINATION

8 BY MR. SNARR:

9 Q. Mr. Daniel, with respect to the NGV-related  
10 issues, isn't it true that your primary concern was  
11 the use of appropriate allocators to establish the --  
12 what would be, in essence, the full cost that should  
13 be associated with that class?

14 A. Yes, it is. I think the costs should be  
15 allocated properly. And then if it's determined that  
16 a discount is needed, then you look at that.

17 Q. And so if the cost allocation -- if the  
18 application of appropriate cost allocations were  
19 consistent with your proposal, would suggest a \$12.05  
20 rate, you're also comfortable with following the  
21 legislative initiative to discount that rate to  
22 whatever might be required or justified by further  
23 analysis; is that correct?

24 A. Yes. If a discount's necessary, I have no  
25 problem.



1 MR. SNARR: I have no further questions.

2 CHAIRMAN LEVAR: Thank you, Mr. Snarr.

3 Any recross based on those questions?

4 MS. CLARK: No.

5 CHAIRMAN LEVAR: Okay. Thank you,  
6 Mr. Daniel -- oh, Commissioner Clark, do you have any  
7 questions for Mr. Daniel?

8

9 CROSS-EXAMINATION

10 BY COMMISSIONER CLARK:

11 Q. Just relative to the discount you were just  
12 discussing, if that's imposed, then the costs that  
13 would otherwise be recovered but for the discount  
14 need to be allocated somewhere; is that right?

15 They need to be recovered through the other  
16 rates that the company...

17 A. Yes. It's -- be similar to the TBF discount  
18 that get -- well, lost revenues get allocated back to  
19 the other classes.

20 Q. Just one other question, and this really  
21 is -- relates to the -- what I'll call the technical  
22 tariff changes that DEU Witness Ipson reviewed with  
23 us this morning. And I ask only because as far as  
24 I'm aware, the Office hasn't articulated any position  
25 with respect to any of those.

1           And do you -- do you have a position or are  
2 you aware of the Office's position? Can you help us  
3 with that?

4           And I'm particularly interested in one  
5 tariff modification. The existing language says that  
6 "Supplier non-gas cost allocation levels will be  
7 established in general rate cases." Period. And the  
8 modification would be "...and in other appropriate  
9 proceedings."

10           And so I'm just wondering if the Office has  
11 a position on the addition of that language in  
12 particular?

13           A. I --

14           Q. If you're aware.

15           A. I'm not aware of that.

16           Q. Okay.

17           COMMISSIONER CLARK: Thanks. That's all my  
18 questions.

19           CHAIRMAN LEVAR: Commissioner White?

20           COMMISSIONER WHITE: I have no questions.  
21 Thank you.

22           CHAIRMAN LEVAR: And I don't have anything  
23 else. Thank you for your testimony this afternoon.

24           THE WITNESS: Thank you.

25           MR. SNARR: Can Mr. Daniel be excused now?

1 CHAIRMAN LEVAR: Let me just ask if anyone  
2 in the room has any objection to that?

3 (No response.)

4 CHAIRMAN LEVAR: And I'm not seeing any.  
5 So thank for you for your testimony, and  
6 safe travels.

7 THE WITNESS: Thanks.

8 CHAIRMAN LEVAR: Anything further,  
9 Mr. Snarr?

10 MR. SNARR: No. Nothing further.

11 CHAIRMAN LEVAR: Okay. Then we will go to  
12 Mr. Russell.

13 MR. RUSSELL: On behalf of UAE, I call  
14 Kevin Higgins to the stand.

15 CHAIRMAN LEVAR: Good afternoon,  
16 Mr. Higgins. I hope our streaming interruption  
17 didn't cause you too much trouble this morning.

18 Do you swear to tell the truth?

19 THE WITNESS: I do.

20 CHAIRMAN LEVAR: Thanks.

21  
22 DIRECT EXAMINATION

23 BY MR. RUSSELL:

24 Q. Good afternoon, Mr. Higgins. Could you  
25 please state your name and identify yourself for the

1 **record, please?**

2 A. My name is Kevin C. Higgins. I am a  
3 consultant in the firm of Energy Strategies, and I'm  
4 here on behalf of UAE.

5 **Q. And you submitted prefiled testimony in this**  
6 **docket; correct?**

7 A. Yes. I did.

8 **Q. Specifically, you submitted direct testimony**  
9 **identified as UAE Exhibit 2.0, along with associated**  
10 **Exhibits 2.1 through 2.4; rebuttal testimony in the**  
11 **form of UAE Exhibit 2.0R, along with Exhibits 2.1R**  
12 **and 2.2R; as well as surrebuttal testimony identified**  
13 **as UAE Exhibit 2.0S; correct?**

14 A. Yes.

15 **Q. And if I -- do you adopt that -- the**  
16 **testimony included in that prefiled testimony as your**  
17 **testimony today?**

18 A. Yes.

19 **Q. If I asked you the same questions today,**  
20 **would you give the same answers?**

21 A. Yes.

22 MR. RUSSELL: I will move for the admission  
23 of those identified exhibits or -- excuse me --  
24 identified testimony and associated exhibits.

25 CHAIRMAN LEVAR: If anyone objects to that

1 motion, please indicate to me.

2 (No response.)

3 CHAIRMAN LEVAR: I'm not seeing any, so the  
4 motion is granted.

5 (UAE Exhibits 2.0 - 2.4, 2.0R - 2.2R,  
6 and 2.0S were admitted.)

7 BY MR. RUSSELL:

8 **Q. Mr. Higgins, you -- have you prepared a**  
9 **summary of that testimony?**

10 A. Yes, I have.

11 **Q. Please proceed.**

12 A. Thank you.

13 Good afternoon. My Phase II testimony  
14 primarily addresses cost allocation, rate spread, and  
15 transportation service rate design. I'll begin with  
16 cost allocation.

17 There are two key threshold questions before  
18 the Commission regarding cost allocation, and they  
19 both pertain to allocation factor 230. Allocation  
20 factor 230 is used to allocate the feeder system,  
21 compressor station, and measuring and regulating  
22 station costs. These items comprise approximately  
23 40 percent of distribution gross plant.

24 There are two basic components or  
25 classifications that are apportioned to classes using

1 allocation factor 230: Peak demand and throughput.  
2 The first key question is whether peak demand should  
3 be measured based on design day or based on the peak  
4 date that occurred during the test period.

5 In my experience, Dominion and its  
6 predecessor, Questar Gas, has consistently maintained  
7 that the proper measure of peak demand is design day  
8 demand. And that is absolutely correct, in my  
9 opinion. The design day deliverability is what the  
10 system was built for. If in the majority of years it  
11 is not necessary to use the full delivery capability  
12 of the system, that does not change the fact that  
13 that capability is standing by and ready to be used  
14 by the weather-sensitive classes if they need it.

15 TS customers do not have a free option on  
16 firm service. They must contract and pay for firm  
17 service through a demand charge, whether they fully  
18 utilize all of their firm service or not. In  
19 contrast, GS customers are not required to commit  
20 contractually to a specific amount of firm demand.  
21 They pay for what they use. But rather the customers  
22 in this weather-sensitive class can call upon the  
23 full deliverability of the system that was  
24 constructed to serve them during the extremely cold  
25 temperatures of the design day.

1           Some parties in this case choose to ignore  
2 this fundamental fact. Instead, they recommend  
3 allocating peak day costs based on usage levels other  
4 than the design day. In my view, that is simply an  
5 attempt to shift responsibilities for the cost of a  
6 system constructed to meet design day demand away  
7 from the temperature-sensitive GS class for whom  
8 design day deliverability was built and onto  
9 transportation and interruptible service customers.  
10 This proposed cost shift is without merit and should  
11 be rejected by the Commission.

12           The second key question is what respective  
13 weightings should be applied to peak demand and  
14 throughput when using allocation factor 230. Coming  
15 into this case, Dominion advocated for a weighting of  
16 60 percent on peak demand and 40 percent on  
17 throughput. This weighting is arbitrary. As UAE has  
18 pointed out in this case and the previous rate case,  
19 an allocation factor that blends peak demand and  
20 throughput is a clear example of the average and peak  
21 method.

22           The average and peak method does not use an  
23 arbitrary weighting for the volumetric component. It  
24 uses system load factor for the weighting. This  
25 corresponds to the amount of the system that would be

1 utilized if all customers consumed gas at a  
2 100 percent load factor. As such, it is a proxy for  
3 base usage. The Dominion load factor is 32 percent,  
4 and that is what UAE is recommending be used for the  
5 volumetric weighting system load factor just as  
6 prescribed in the NARUC cost allocation manual.

7 And I will note that ANGC witnessed  
8 Mr. Oliver, with whom I have never communicated prior  
9 to the following of our respective testimony in this  
10 case, independently reached the very same conclusion  
11 I have regarding the appropriate weighting of demand  
12 and throughput, 68 to 32. And to its credit,  
13 Dominion has since revised its position and concurs  
14 with using this nationally recognized standard.

15 In contrast, the Division initially proposed  
16 that instead of the arbitrary 60/40 weighting first  
17 proposed by Dominion, an equally arbitrary 50/50  
18 weighting should be adopted. This has the effect of  
19 punitively shifting even more cost to the TS class,  
20 notwithstanding the 45 and a half percent increase  
21 already proposed by Dominion for the TS class in this  
22 case. The Division has since pulled back to a 60/40  
23 recommendation. But the Office, which implicitly  
24 started out at 60/40, later gravitated to 50/50  
25 following the Division.



1           On the other hand, Mr. Oliver and I have not  
2 changed our recommended weightings during the course  
3 of this case. This is not a coincidence, as our  
4 recommended weightings are not based on subjective  
5 judgment.

6           An important related issue is the  
7 sub-question of whether interruptible customers  
8 should be assigned peak day costs. The answer is no.  
9 Assigning peak day costs to interruptible customers  
10 is as illogical as it is inequitable. First of all,  
11 the system is not built to serve interruptible  
12 customers during design day weather. As Dominion has  
13 made clear in its testimony in this case,  
14 interruptible customers would be interrupted on a  
15 design day.

16           Second, the fundamental rationale for using  
17 a volumetric weighting in the averaging peak method  
18 in the first place is that the volumetric component  
19 already allocates a fair share of fixed costs to  
20 interruptible customers. And I'm referring here not  
21 just to interruptible sales customers, but  
22 interruptible transportation customers as well.  
23 After allocating fixed system cost to interruptible  
24 customers through the volumetric component, it is a  
25 misapplication of the method to then turn around and

1 additionally allocate peak day costs to those  
2 customers.

3 Third, allocating peak day costs to  
4 interruptible customers effectively eliminates any  
5 difference in the costs being allocated to firm  
6 service as distinct from interruptible service. And  
7 if we no longer differentiate between firm and  
8 interruptible service in cost allocation and the  
9 resultant pricing implications are adopted, why would  
10 any customer agree to take interruptible service  
11 going forward?

12 And if customers were no longer willing to  
13 take interruptible service because it no longer made  
14 any economic sense, the Commission and the company  
15 would have to contend with how big a system Dominion  
16 would need to construct to ensure firm service on the  
17 design day. I don't know the answer to this  
18 question, but I'm confident it is a much bigger  
19 system than the one we have today.

20 Let me turn now to rate spread and TS rate  
21 design. I am proposing to phase in the full  
22 cost-based increase to the TS class and the target  
23 increase to the transportation bypass firm class in  
24 three annual steps. Most, if not all, of the parties  
25 have responded favorably to this general idea of a

1 three-step phase-in with respect to transportation  
2 service.

3 In my proposal, the Step 1 increase would be  
4 25 percent of the total TS increase in order to  
5 provide some time to address rate design issues  
6 within that class in Steps 2 and 3. To that end, I  
7 recommend that the TS rate design for Steps 2 and 3  
8 of my proposed phase-in period remain subject to  
9 further analysis, either through an extension of this  
10 docket or other means, that would allow for further  
11 examination of the relationship between TS demand and  
12 volumetric charges as well as among the volumetric  
13 blocks in setting the Step 2 and Step 3 rate designs.

14 However, if the Commission prefers to  
15 determine that Steps 2 and 3 TS rate design in its  
16 final order without deferring that decision by  
17 extending this docket or by opening a new one, then I  
18 recommend that the Commission approve the TS rate  
19 design approach I presented in UAE Exhibits 2.3, 2.4,  
20 and 2.2R attached to my Phase II direct and rebuttal  
21 testimonies.

22 As shown in these exhibits which apply to  
23 different total revenue requirements, I recommend an  
24 equal percentage increase to each TS volumetric rate  
25 in each step. I also recommend that the firm demand

1 charge be increased by an equal amount per dekatherm,  
2 a firm contract demand in each of the three steps.

3 Finally, I do not believe it is necessary to  
4 split the TS class into small and large customer  
5 groups at this time. Over the years, I've seen  
6 conflicting analysis regarding the cost relationships  
7 between small and large TS customers. Consequently,  
8 I recommend maintaining a single TS class in this  
9 case so as to minimize the disruption of TS customers  
10 while further analysis is conducted.

11 And that concludes my summary.

12 **Q. Thank you, Mr. Higgins.**

13 MR. RUSSELL: Mr. Higgins is available for  
14 cross-examination and Commission questioning.

15 CHAIRMAN LEVAR: And I think I'll start with  
16 Mr. Mecham.

17 Do you have any questions for Mr. Higgins?

18 MR. MECHAM: Yes, thank you. I've got a  
19 few.

20  
21 CROSS-EXAMINATION

22 BY MR. MECHAM:

23 **Q. Hello, Mr. Higgins.**

24 A. Hi, Mr. Mecham.

25 **Q. In your surrebuttal, around lines 41 to 45,**

1 you say that -- well, you just noted that you don't  
2 want to split the TS class at this time, and you say  
3 there are discordant analyses defining the cost  
4 relationships between the smaller and large customers  
5 in the TS class.

6 Did I characterize that correctly?

7 A. Yes, you did.

8 Q. Are you referring to the evidence in this  
9 case?

10 A. I'm referring, to a certain extent, at  
11 evidence in this case. I'm starting with -- and  
12 certainly there's been discussed, at some length, in  
13 this case the data responses prepared by the company  
14 that show, according to the company's cost of service  
15 analysis, that the rates of return for smaller  
16 customers were greater than for larger customers. So  
17 that's one piece of evidence that has been discussed.

18 You know, in addition to that, in the  
19 company's direct case, you know, the company raised  
20 concerns about cost implications of smaller  
21 customers. And over the years, I've seen analysis  
22 prepared by the company that -- and it has been  
23 referred to as cost curve analysis -- that shows the  
24 declining cost to serve customers as they grow  
25 larger.

1           And so to me, from my perspective, I think  
2           it would be useful and important to try to understand  
3           the relationship between the cost of service results  
4           that the company prepared in response to discovery  
5           and its prior analysis that shows significantly  
6           declining cost to serve transportation customers as  
7           they get larger.

8           Q.     Okay. Thank you.

9           You agree that in this case, at least in the  
10          initial filing, the company didn't split the class or  
11          provide any cost of service analysis with respect to  
12          the TS class in a divided way?

13          A.     Yes.

14          Q.     And so in response, actually, to your data  
15          request, they came back using their model. And it  
16          showed, as you've already indicated, that the small  
17          customers were providing a 9.11 percent return; is  
18          that correct?

19          A.     Yes.

20          Q.     Is there anything -- has anyone other than  
21          Mr. Oliver -- excuse me -- provided cost of service  
22          analyses with respect to that division?

23                 I mean, is that the only thing on the record  
24          in this case?

25          A.     I would say that I suppose it depends on how

1 one -- where one draws the line in the record. I  
2 mean, the company has provided discovery to the  
3 Office of Consumer Services that shows it's declining  
4 cost curves for customers as they are -- get larger.  
5 So I don't know that anyone's introduced that  
6 discovery response into the record, per se, but it's  
7 certainly been subject matter that's been addressed  
8 as part of the proceeding, at least through  
9 discovery.

10 Q. And you may have heard, when you were  
11 listening, that Mr. Summers indicated that the  
12 narrative that he provided in his direct -- and  
13 actually, well before that -- has changed, that  
14 it's -- at least based on the information in this  
15 case, it -- the narrative was wrong.

16 Did you hear that?

17 A. I did.

18 Q. Okay. And again, in your surrebuttal, on  
19 lines 146 to 148, you talk about inconsistent  
20 information. Is that really the same sort of thing  
21 you're talking about, that the company's providing  
22 inconsistent information and you think, therefore,  
23 it's premature to move?

24 A. Yes.

25 Q. And I know I'm getting specific here, but

1 with respect to the evidence that we've seen in this  
2 case -- and I'm really referring to Mr. Oliver's  
3 exhibits that go to -- really to your data  
4 request 201, there really isn't anything else that  
5 we're -- that I'm aware of that shows how those cost  
6 relationships are between the small and the large  
7 customer; correct?

8 A. Well, I'm referring to it right here in this  
9 surrebuttal that you're discussing with me.

10 Q. And what do you mean?

11 A. In this surrebuttal, I'm referring to the  
12 Dominion TS cost curve analysis, which indicates a  
13 significant decline in the cost per dekatherm for TS  
14 customers as customer size increases.

15 Q. I'm not aware that that's on the record.

16 A. That statement's on the record.

17 Q. Okay. I agree with that. It's in your  
18 surrebuttal. But as far as the backup data, I'm not  
19 aware that that's there.

20 A. I did not submit the data response itself as  
21 part of my testimony. Well, actually, hang on a  
22 minute.

23 It actually is. Well, no. I'm just --  
24 actually, I just footnote to it. So I don't actually  
25 have the data response in my testimony.



1 Q. And in that same response to your data  
2 request 201, it shows pretty significant  
3 underperformance for the larger customers above  
4 35,000 dekatherms, does it not?

5 A. Yes.

6 Q. .75 percent; correct?

7 A. Correct.

8 Q. Did you hear Mr. Summers testify in -- or  
9 did you read in his rebuttal, actually, that he  
10 didn't use cost curves for TS customers in this case?

11 A. Yes.

12 Q. Okay. And would you agree that Dominion's  
13 cost curves do not address variations in customer  
14 load factors?

15 A. I agree.

16 Q. Okay. And then I'm turning back to your  
17 surrebuttal, lines 41 to 45. You suggest that a  
18 single TS class should be maintained to minimize the  
19 disruption to TS customers.

20 What do you mean by that?

21 A. What I mean by that is that I am not  
22 prepared to recommend to the Commission that the  
23 entirety of any rate increase to the TS class should  
24 be just assigned to larger customers, as Mr. Oliver  
25 has recommended. And I -- again, we've talked about

1 why I believe that is. The -- you know, it's not an  
2 appropriate recommendation, at least at this time.

3 And so, you know, what I'm recommending,  
4 essentially maintaining the class and providing a  
5 proportionate increase to the demand in volumetric  
6 charges in my initial step. And then, you know, I've  
7 also recommended keeping the docket open to further  
8 explore the way in which the revenue requirement  
9 should be proportioned in Steps 2 and 3. Yet at the  
10 same time, if the Commission does not want to keep  
11 the docket open, then I have a default approach that  
12 is proportionate throughout the class.

13 And, you know, part of that is the fact that  
14 reaching full cost, whether it's at UAE's recommended  
15 revenue requirement or at -- you know, even at the --  
16 you know, the cost allocation that I'm recommending,  
17 it's still going to be a substantial rate impact on  
18 TS customers. And I'm recommending to the Commission  
19 that they not do anything to exacerbate that rate  
20 impact by making it worse for some sectors of the  
21 class than for others.

22 **Q. I appreciate that.**

23 **Now, given the evidence in this case, if we**  
24 **do nothing, there's no splitting of the class and a**  
25 **moratorium is imposed. Doesn't that leave the small**

1 customers producing above the average system return  
2 and the large customers producing under, and  
3 therefore there's a subsidy in the class from the  
4 smaller to the larger?

5 Is that a correct assessment?

6 A. That is potentially the case. However, at  
7 the same time, the data response that you're  
8 referring to was performed at current rates, which  
9 have current administrative costs, you know, embedded  
10 in the analysis. And the company, as you know, has  
11 proposed to significantly reduce those administrative  
12 costs, which I support, and which provides,  
13 proportionately, a smaller percentage increase on  
14 smaller customers, all things being equal, because  
15 the admin cost is a larger charge -- a portion of  
16 their bill.

17 So there will be some mitigation for the  
18 smaller customers just as a result of reducing the  
19 admin fee as proposed by the company. Whether  
20 there's a continuing subsidy beyond that really, I  
21 believe, should be, you know, part of the subject of  
22 future analysis.

23 Again, I haven't seen a mapping that  
24 reasonably connects the company's cost of service  
25 analysis to the declining usage per customer cost

1 curves that the company has developed, and I think it  
2 would be useful to have some time to explore and  
3 understand that.

4 **Q. But in that time, there are a lot of**  
5 **customers that won't be able to move to the TS class**  
6 **if this moratorium is imposed?**

7 A. Potentially. And let me -- I -- you know, I  
8 think I was probably the first person in this case to  
9 use the term "moratorium," and maybe I can clarify  
10 that a little bit.

11 I use -- I suggested a moratorium as an  
12 alternative to a prohibition because I understood the  
13 company's original proposal was simply to prohibit  
14 customers with less than 35,000 dekatherm usage from  
15 moving, in the future, to the TS class. I suggested  
16 a moratorium which, by the way, I don't believe would  
17 last three years, but would be two years under my  
18 proposal, because I proposed that it would go away  
19 when the TS class was at full cost rates.

20 Which, even though it's three steps, would  
21 actually occur in two years because the -- you know,  
22 there would be an immediate first step, followed by a  
23 second step and a third step, and that actually takes  
24 place over two years starting from March 1st of 2020.

25 So -- but my notion of the moratorium was

1 really for the Commission's consideration, because I  
2 feel that the more important issue in the larger  
3 scheme of things is to adopt a three-year phase-in of  
4 moving to full cost. And to the extent that the  
5 Commission would be concerned that a three-year  
6 phase-in would cause customers to migrate who  
7 otherwise would not migrate at full cost, then I  
8 suggested that a moratorium might be appropriate in  
9 combination with a three-year phase-in.

10           You know, if the Commission's not concerned  
11 about that, then I -- you know, I personally would  
12 see that the moratorium would not be necessary. But  
13 it was really to defend the notion of having a  
14 three-year phase-in and address any concerns the  
15 Commission might have about allowing migration to the  
16 class during that three-year phase-in which, as I  
17 said, would -- I don't believe would be a two-year --  
18 a three-year moratorium, but rather a two-year  
19 moratorium.

20           **Q. The assumption is that the rates are going**  
21 **to go up even for the small customers, small TS**  
22 **customers; correct?**

23           A. The block rates would go up; the admin  
24 charge would come down.

25           **Q. Correct. But that movement in rates could**

1 **dissuade people from making the move, even without a**  
2 **moratorium?**

3 A. Potentially.

4 Q. **But a moratorium is going to shut down what**  
5 **little competition we have in this -- with this**  
6 **utility completely for however long the moratorium**  
7 **lasts; isn't that correct?**

8 A. Well, I don't know that it shuts down  
9 competition. I would agree that it would remove a --  
10 or blunt a competitive incentive for customers who  
11 have not elected to move to -- you know, to the TS  
12 class up to this date. Certainly, for customers who  
13 already elected that option, they would still, of  
14 course, be participating in the competitive market.

15 But I would agree that it would certainly  
16 impede customers who are currently GS customers and  
17 would desire to -- you know, to migrate to TS in the  
18 next couple of years. I would agree it would be an  
19 impediment to that.

20 MR. MECHAM: That's all I have. Thank you.

21 THE WITNESS: Thank you.

22 CHAIRMAN LEVAR: Major Kirk or  
23 Captain Friedman, do you have any questions for  
24 Mr. Higgins?

25 MAJOR KIRK: Just a couple quick questions.

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

CROSS-EXAMINATION

BY MAJOR KIRK:

Q. Sir, would you agree that demand or capacity costs don't vary with throughput or angle usage?

A. Yes.

Q. And although the peak and average methodology is recognized in the NARUC manual, would you agree that the NARUC manual doesn't advocate for its use?

A. Correct.

MAJOR KIRK: That's all. Thanks.

CHAIRMAN LEVAR: Thank you.

Mr. Snarr, do you have any questions for Mr. Higgins?

MR. SNARR: No questions.

CHAIRMAN LEVAR: Thank you.

Mr. Jetter?

MR. JETTER: I have no questions. Thank you.

CHAIRMAN LEVAR: Okay. Ms. Clark or Mr. Sabin?

MR. SABIN: No questions. Thank you.

CHAIRMAN LEVAR: Okay. Any redirect?

(No response.)

1 CHAIRMAN LEVAR: No?

2 Commissioner White, any questions?

3 COMMISSIONER WHITE: No questions. Thank  
4 you.

5 CHAIRMAN LEVAR: Commissioner Clark?

6 COMMISSIONER CLARK: No questions. Thank  
7 you very much.

8 CHAIRMAN LEVAR: I don't have any questions  
9 either. Thank you for your testimony this afternoon.

10 THE WITNESS: Thank you.

11 CHAIRMAN LEVAR: Mr. Russell, is Mr. Swenson  
12 here, or should we move on to --

13 MR. RUSSELL: Mr. Swenson is here. I would  
14 like a very brief moment to talk to him before we put  
15 him on the stand. I don't know if it's time for a  
16 break or if you wanted to go through to the end of  
17 the day.

18 CHAIRMAN LEVAR: Well, yeah, why don't I go  
19 ahead and ask the parties about that. And we could  
20 go off the record for this, although it doesn't hurt  
21 to stay on, I suppose.

22 You know, we have a public witness hearing  
23 at 6:00. So we could take a brief break and go till  
24 about 5:30, if there is no objection. On the other  
25 hand, if we're going to be back tomorrow anyway, if



1 parties prefer to wrap up and have a little bit  
2 longer day tomorrow, I think from our end there's  
3 no -- there's no preference either way.

4 And if there's no preference from anyone  
5 else, I think we will just plan to go till about  
6 5:30, unless anyone indicates that that's -- that  
7 they object to doing that.

8 (No response.)

9 CHAIRMAN LEVAR: And I'm not seeing any  
10 objections. So why don't we take about 15 minutes  
11 right now, and then we'll plan to go until about 5:30  
12 and then break for about a half an hour before the  
13 public witness hearing.

14 (A brief recess was taken.)

15 CHAIRMAN LEVAR: Okay. We can go back on  
16 the record. And at this point, we'll go back to  
17 Mr. Russell for US Magnesium's witness.

18 MR. RUSSELL: Thank you. On behalf of  
19 US Magnesium, I call Roger Swenson.

20 CHAIRMAN LEVAR: Good afternoon,  
21 Mr. Swenson. Do you swear to tell the truth?

22 THE WITNESS: Yes, I do.

23 CHAIRMAN LEVAR: Thank you.

24  
25 ///

1 DIRECT EXAMINATION

2 BY MR. RUSSELL:

3 Q. Good afternoon, Mr. Swenson. Could you  
4 state your name and identify yourself for the record,  
5 please?

6 A. My name is Roger Swenson. I'm an energy  
7 consultant that works for US Magnesium through my  
8 firm, E-Quant Consulting.

9 Q. And on behalf of US Magnesium, you submitted  
10 prefiled testimony in this proceeding; correct?

11 A. Yes, I did.

12 Q. And specifically, you submitted direct  
13 testimony that's been labeled as US Magnesium  
14 Exhibit 1.0, along with an Exhibit 1.1 that was  
15 attached thereto, as well as surrebuttal testimony  
16 that's been submitted and marked as Exhibit 1.0S;  
17 right?

18 A. Yes.

19 Q. And do you adopt that prefiled testimony as  
20 your testimony in this proceeding?

21 A. Yes, I do.

22 Q. And if asked the same questions, would you  
23 respond the same way today?

24 A. Yes, I would.

25 MR. RUSSELL: Okay. And at this point, I

1 will move for the admission of that referenced  
2 testimony.

3 CHAIRMAN LEVAR: Okay. If anyone objects to  
4 that, please indicate to me.

5 (No response.)

6 CHAIRMAN LEVAR: And I'm not seeing any  
7 objections, so the motion is granted.

8 (US Magnesium Exhibits 1.0, 1.1, and  
9 1.0S were admitted.)

10 BY MR. RUSSELL:

11 **Q. Mr. Swenson, have you prepared a summary of**  
12 **your prefiled testimony?**

13 A. Yes, I have.

14 **Q. Please proceed.**

15 A. The changes in gas transportation rates, as  
16 proposed, were very much a surprise to me. And  
17 that's not a good thing. My role with US Magnesium  
18 is to keep them from being surprised by energy cost  
19 changes.

20 Energy costs represent a very large part of  
21 the cost of producing US Mag's product. US Magnesium  
22 contracts to sell its production out into the future  
23 years at a time. When we're surprised by a potential  
24 price increase of over \$1 million a year to  
25 US Magnesium, the effects can be devastating to a

1 company that cannot simply pass costs along.  
2 US Magnesium is not in a position to absorb that kind  
3 of a cost increase.

4 For the rates to be so much different than  
5 what the company had been suggesting as needed change  
6 just a few years ago suggests a very different  
7 philosophy concerning developing rates based on costs  
8 that are caused by specific customers' usage on this  
9 system.

10 The rates now, as proposed, seem to be  
11 moving toward less of a direct cost causality, from  
12 the size of a pipe needed to serve a peak need to how  
13 much volume a customer uses. The volume of use is  
14 not the cost causality driver. The size and the cost  
15 of pipe in the ground is the cost causality driver.

16 Shifting to cost allocation based on higher  
17 costs to throughput acts as a means to transfer costs  
18 from high load factor customers to low load factor  
19 customers. If that's the intent of these changes  
20 driving rates higher, it would have been good to have  
21 the basis called out clearly. Of course, there's  
22 been called out in testimony by others in this case,  
23 customer groups with various load profiles all want  
24 the lowest cost to fall to their shoulders. I will  
25 not suggest that US Magnesium is any different. But

1 if the philosophy to not base costs on direct cause  
2 and move towards customer subsidization, it is  
3 something that we need to understand. And again, so  
4 that we're not surprised as we move further on this  
5 path.

6 As I said in my surrebuttal testimony,  
7 US Mag and all customers need to take into account  
8 the pricing signal that has been provided in this  
9 case. US Mag will take the price signal from the  
10 cost increase derived in this case with the cost  
11 allocation methods, and we'll respond to those  
12 signals, as I expect many other large transport  
13 customers will have to do.

14 I expect reduction in the firm contract  
15 quantity to reduce costs. We just ask for time to  
16 make these adjustments to rates to be in effect with  
17 the two-year transition, as proposed by Mr. Higgins,  
18 until the final highest rate would be imposed. This  
19 will give US Mag time to change its operation back to  
20 high levels of alternative fuels to drop the firm  
21 transport levels to much lower levels.

22 We would also like to see a proceeding to  
23 investigate the changes in cost allocations and a  
24 proceeding to determine pass forward for rates. And  
25 from that, develop pass forward for customers to take

1 away clear price signals from those rates. The most  
2 important thing I want to get across to the  
3 Commission, from US Mag's perspective, is that  
4 without access to a competitive market for gas  
5 supplies, US Magnesium would not be economically  
6 viable. We appreciate having that access.

7 The other thing that I see as somewhat  
8 surprising in this case is about restricting access  
9 to lower cost competitive markets to serve the  
10 customers. While it doesn't affect US Magnesium,  
11 it's something that we need to be -- if it's  
12 something we need to be wary of, I need to be  
13 understanding that and taking that message to  
14 US Magnesium, if there's some sort of prohibition  
15 that lurks somewhere in the subtext somewhere.

16 That's it.

17 **Q. Thank you.**

18 MR. RUSSELL: Mr. Swenson is available for  
19 cross-examination and Commission questions.

20 CHAIRMAN LEVAR: Okay. Thank you.

21 Mr. Snarr, do you have any questions for  
22 Mr. Swenson?

23 MR. SNARR: No. We have no questions.

24 CHAIRMAN LEVAR: Thank you.

25 Mr. Jetter?

1 MR. JETTER: I have no questions.

2 CHAIRMAN LEVAR: Thank you.

3 Major Kirk or Captain Friedman?

4 CAPTAIN FRIEDMAN: No, sir, no questions.

5 CHAIRMAN LEVAR: Mr. Mecham?

6 MR. MECHAM: Maybe a couple.

7

8 CROSS-EXAMINATION

9 BY MR. MECHAM:

10 Q. Mr. Swenson, do you --

11 CHAIRMAN LEVAR: And your microphone's not  
12 picking you up.

13 MR. MECHAM: It's on. It's -- I'm just too  
14 far away, apparently.

15 BY MR. MECHAM:

16 Q. Do you have Mr. Oliver's testimony in front  
17 of you?

18 A. I do not.

19 Q. Okay. Well, let me see if I can do it  
20 without that, and we'll see how this goes. If it  
21 doesn't go well, we'll take another -- take up  
22 another topic.

23 In your surrebuttal, on lines 28 and 29 on  
24 page 2, you are rebutting Mr. Oliver's testimony.  
25 And you say that: "Mr. Oliver suggests in his

1 rebuttal testimony that the rates, as provided, are  
2 devoid of price signals."

3 Is that a correct statement?

4 A. That's what I took from his testimony.

5 Q. Okay. Well, let me read what it says, and  
6 then we'll go from there. It says -- and this is on  
7 lines 238 to 241 in his rebuttal where it says:  
8 "While correct price signals may be an appropriate  
9 rate design consideration, the record of this  
10 proceeding lacks any evidence regarding what price  
11 signal should be conveyed to customers."

12 If it says that, that's not exactly how you  
13 represented it, is it?

14 A. Well, I -- I don't want to put words in  
15 Mr. Oliver's mouth. When I read it, I got the  
16 implication that there was a void of price signals  
17 being sent. And as you can tell, I respond to that  
18 void of price signals in a way that I hope comes  
19 across. Because we got the signal. So I'm not  
20 arguing that if he -- if he was saying that there are  
21 price signals.

22 Q. Okay. No, no. We understand your testimony  
23 that you are taking price signals where, perhaps, the  
24 company thinks you shouldn't be. But when rates go  
25 up, no matter what it is, it's going to have this



1 effect. Anyway, let me simplify.

2 I know that you -- I suspect that you looked  
3 at your own answer to USM 2.01; correct?

4 A. Yes.

5 Q. And it showed that the -- and you had asked  
6 for a -- an analysis of the returns for customers who  
7 take more than 800,000 dekatherms and those who take  
8 fewer than 800,000 dekatherms; is that correct?

9 A. Yes.

10 Q. And the result was that those customers who  
11 were taking over 800,000 produced a negative return  
12 of 2.54.

13 Is that your recollection?

14 A. I don't remember the number exactly, but  
15 there was -- it was a surprising result to me, based  
16 on what I'd been given as earlier data about what  
17 rate increases were going to come to large customers.

18 Q. Okay. So I'm looking at ANGC Exhibit 2.02R,  
19 where Mr. Oliver compared the various requests of the  
20 Division, UAE, USM. And I'm just referring now to  
21 your request, which, subject to check, it produces a  
22 negative 2.54 percent for those taking more than  
23 800,000 dekatherms.

24 A. Subject to check.

25 Q. Okay. And I note -- well, you may have

1 heard -- and I'm not sure what point you entered, but  
2 UAE's 2.01 shows that those taking fewer than 35,000  
3 dekatherms produce a return of 9.11 percent.

4 Does that sound familiar to you?

5 A. I think I heard Mr. Higgins say something  
6 about that, but I don't know.

7 Q. Okay.

8 MR. MECHAM: I think I'll leave it at that.

9 CHAIRMAN LEVAR: Okay. Thank you,  
10 Mr. Mecham.

11 Ms. Clark or Mr. Sabin, any --

12 MR. SABIN: No questions. Thank you.

13 CHAIRMAN LEVAR: No questions.

14 Okay. Any redirect, Mr. Russell?

15 MR. RUSSELL: No, thank you.

16 CHAIRMAN LEVAR: Okay. Commissioner Clark,  
17 any questions?

18 COMMISSIONER CLARK: No questions. Thank  
19 you.

20 CHAIRMAN LEVAR: Commissioner White?

21 COMMISSIONER WHITE: No questions. Thank  
22 you.

23 CHAIRMAN LEVAR: And I don't have any  
24 either. Thank you for your testimony this afternoon.

25 THE WITNESS: Thank you very much.

1 CHAIRMAN LEVAR: Okay. I think we will go  
2 to -- you don't have anything else, Mr. Russell, do  
3 you?

4 MR. RUSSELL: I do not. Thank you.

5 CHAIRMAN LEVAR: We will go, then, next to  
6 the Federal Executive Agencies for your witness.

7 MAJOR KIRK: Mr. -- FEA calls  
8 Mr. Brian Collins to be sworn in and testify.

9 CHAIRMAN LEVAR: Mr. Collins, do you swear  
10 to tell the truth?

11 THE WITNESS: I do.

12 CHAIRMAN LEVAR: Thank you.

13  
14 DIRECT EXAMINATION

15 BY MAJOR KIRK:

16 Q. Good morning. Mr. Collins, would you please  
17 state your name and occupation?

18 A. Brian C. Collins. I am a principal with  
19 Brubaker & Associates, Incorporated.

20 Q. And you were hired by the Federal Executive  
21 Agencies to provide testimony in this case; is that  
22 true?

23 A. That's correct.

24 Q. Have you had a chance to review the filings  
25 of the other parties regarding the Phase II portion

1 of this hearing?

2 A. I have.

3 Q. And have you created and caused to be filed  
4 two different testimonies in this case? First, a  
5 direct testimony labeled FEA Exhibit 2.0 and  
6 Appendix A, and also your surrebuttal testimony  
7 labeled FEA Exhibit 4.0?

8 A. Yes.

9 Q. Do you have any changes or corrections to  
10 those prefiled testimonies?

11 A. I do not.

12 Q. And if you were asked the same questions  
13 today, would your answers be the same?

14 A. Yes.

15 MAJOR KIRK: FEA moves to enter into the  
16 record FEA Exhibit 2.0 and Appendix A and FEA  
17 Exhibit 4.0.

18 CHAIRMAN LEVAR: If anyone objects to the  
19 motion, please indicate to me.

20 (No response.)

21 CHAIRMAN LEVAR: And I'm not seeing any  
22 objections, so it's granted.

23 (FEA Exhibits 2.0, Appendix A, and 4.0  
24 were admitted.)

25 MAJOR KIRK: Thank you.

1 BY MAJOR KIRK:

2 Q. Mr. Collins, have you prepared a summary of  
3 your testimony?

4 A. I have.

5 Q. Thank you. Please present that.

6 A. Thank you.

7 Good afternoon, Commissioners. A summary of  
8 my direct and surrebuttal testimonies is as follows:

9 After the utility's overall cost of service  
10 or revenue requirement is determined, a class cost of  
11 course service study is used to allocate a total cost  
12 of service among the utility's customer classes.

13 To the extent possible, a utility's rates  
14 for its classes should be based on each class's  
15 respective cost of service. However, in the  
16 instances where a full movement to cost of service  
17 would cause rate shock for a particular class or  
18 classes, gradualism can be used to mitigate the  
19 impacts on customer classes.

20 The company's class cost of service study  
21 used to allocate costs to customer classes does not  
22 best reflect class cost service because of its  
23 reliance on annual usage or commodity volumes to  
24 partially allocate the cost of distribution mains to  
25 its classes. Specifically, the cost associated with

1 large-diameter intermediate higher-pressure mains are  
2 allocated on throughput by the company, and the costs  
3 associated with high-pressure feeder mains are  
4 allocated using the peak and average method by the  
5 company, along with the costs associated with  
6 regulators, compressors, and related equipment.

7           In the method that I referred to that they  
8 used for the feeder mains is commonly referred to as  
9 the peak and average method. And in this case, the  
10 company has weighted the peak or design day component  
11 of that composite allocator by 60 percent, originally  
12 in its filed case, and 40 percent on throughput. And  
13 I think those numbers have now been changed and are  
14 using the system load factor.

15           As a result, I recommend my proposed class  
16 of cost of service study be used as a guide for the  
17 company's cost revenue allocation. Under my proposed  
18 class revenue allocation guided by my class cost of  
19 service study, TS class would receive an increase of  
20 approximately 4.17 percent, much closer to the system  
21 average increase.

22           In my testimony, I discussed how costs are  
23 incurred by the company with respect to capacity.  
24 Capacity costs do not vary with annual usage. When a  
25 gas distribution utility is considering whether to

1 engage in a particular expansion of its distribution  
2 mains capacity, it must first determine the proper  
3 size and cost of the expansion.

4 In making this determination, the key  
5 consideration is the customer classes' expected usage  
6 of the mains on the system peak design day. The  
7 expected usage on the system peak day dictates the  
8 need for expansion as well as the proper size of the  
9 expanded mains, which, in turn, dictates the total  
10 cost of the project.

11 The cost of the expansion is a function of  
12 the anticipated peak day usage, and that cost is the  
13 same regardless of when customers are expected to use  
14 gas. For example, the cost is the same regardless of  
15 whether customers are expected to use gas throughout  
16 the year or during only a part of the year; for  
17 example, the winter months.

18 It is important that a class cost of service  
19 study reflect class cost causation. A study does  
20 this by allocating costs in a way that reflects how  
21 the system is designed. Annual usage is not a design  
22 criterion for a typical gas utility. Annual usage or  
23 commodity throughput is certainly a factor that  
24 should be and is considered in identifying the  
25 variable costs of operating the gas system.

1           However, annual usage does not determine the  
2 amount of system peak capacity that is necessary to  
3 provide firm or non-interruptible service to every  
4 customer every day of the year. Rather, the actual  
5 physical size of the mains, the regulators, the  
6 compressors, and other related equipment is based on  
7 customers' contributions to the system design day  
8 demand.

9           The system's capacity must be sized for  
10 design day demands so that all customers can utilize  
11 that system's capacity to receive a firm,  
12 uninterrupted supply of gas every day of the year,  
13 including the day of the system peak demand. As a  
14 result, design day demand is appropriate to allocate  
15 demands and capacity-related costs to customer  
16 classes.

17           I do not dispute that after the system is  
18 designed and constructed to meet design day demand,  
19 customers use the system to receive volumes of gas  
20 throughout the year. However, if customers expect  
21 supply sufficient to meet their design day demand,  
22 then they should pay for adequate distribution  
23 capacity to allow gas to be delivered every day to  
24 meet their expected demands, including days with  
25 above-average demands. Otherwise, they will not be



1 allocated adequate capacity to deliver gas on days  
2 with above-average usage, which would be most cold  
3 days, and their service would be interrupted on all  
4 those days.

5           If the distribution system can meet design  
6 day demand, they can meet the firm demand of its  
7 customers on every single day of the year. Daily  
8 needs must be met, but the only way to ensure that  
9 will happen is through a system designed to meet the  
10 design day demand.

11           My proposed class of cost service study uses  
12 100 percent of design day demand to allocate the  
13 costs of large-diameter intermediate high-pressure  
14 mains as well as the cost of high-pressure feeder  
15 line mains to customer classes. Because design day  
16 demand reflects how the system is designed, this best  
17 reflects class cost causation. And my cost study is  
18 appropriate to guide class revenue allocation.

19           I would also like to point out that it has  
20 been my experience that many states -- personally,  
21 I've been around ten states that I've actually been  
22 involved with in my career -- utilize a 100 percent  
23 design day demand allocator to allocate cost of  
24 capacity, and they usually couple that with a  
25 customer component.

1           It is important to recognize that the peak  
2 and average cost allocation method used by the  
3 company to allocate certain capacity-related costs  
4 results in customers paying different costs of  
5 capacity on a per-unit basis. That's with respect to  
6 design day demand. By introducing usage into the  
7 allocation of capacity-related costs, higher load  
8 factor customers such as the TS class are allocated  
9 too much cost for capacity and pay a higher per-unit  
10 cost for capacity as compared to the system average  
11 per-unit costs.

12           As an example in this rate case, provided in  
13 my surrebuttal testimony, TS customers are allocated  
14 a much higher gross plant cost for feeder mains on a  
15 per-unit of design day demand as compared to the  
16 system average. This is shown on Table 4 of my  
17 surrebuttal testimony, where the system average cost  
18 is approximately \$709 per unit of design day demand  
19 while the TS class is allocated a cost of  
20 approximately \$1,064 per unit of design day demand,  
21 which is about 50 percent higher than the system  
22 average per-unit cost. In contrast, the lower load  
23 factor GS class is allocated a cost that's cheaper  
24 than the system average, or approximately \$652 per  
25 unit of design day demand.

1           An allocation method that results in a  
2 different cost of capacity on a per-unit of design  
3 day capacity basis for classes isn't appropriate.  
4 The company does not incur a different cost of  
5 capacity to serve different customer classes. Under  
6 100 percent design demand allocation, feeder main  
7 gross plant costs, all firm classes are allocated the  
8 same per-unit cost of capacity as the system, or \$709  
9 per unit of design day demand. This is also shown in  
10 my Table 4 of my surrebuttal testimony. This is  
11 appropriate and reflects cost causation.

12           It should be also recognized that if the P&A  
13 allocator is applied to the systems design day demand  
14 capacity, the GS class would not have enough capacity  
15 to meet its design day demand. This is shown in  
16 Table 5 of my testimony.

17           It should also be recognized that any  
18 concerns about impacts on customer classes resulting  
19 from 100 percent design day demand allocation can be  
20 handled with class revenue allocation gradualism. It  
21 is first appropriate to allocate costs to classes as  
22 accurately as possible, and then gradualism can be  
23 utilized to temper any impacts that are of concern.

24           My proposed class revenue allocation is  
25 based on the company's fully requested revenue

1 requirement in my direct testimony, and I recommend  
2 that my proposed classroom allocation be used to  
3 determine class revenue responsibility. Again, this  
4 is appropriate because my proposed class revenue  
5 allocation is guided by my cost of service study,  
6 which better reflects class cost causation with  
7 respect to the allocation of distribution main costs.  
8 My proposed classroom allocation is shown in Table 2  
9 of my surrebuttal testimony.

10 This concludes my summary. Thank you.

11 MAJOR KIRK: We don't have any further  
12 questions for Mr. Collins at this time. He's  
13 available for Commission questions and  
14 cross-examination.

15 CHAIRMAN LEVAR: Okay. Thank you.

16 Mr. Russell, do you have any questions for  
17 Mr. Collins?

18 MR. RUSSELL: No questions. Thank you.

19 CHAIRMAN LEVAR: Mr. Mecham?

20 MR. MECHAM: I have none either. Thank you.

21 CHAIRMAN LEVAR: Mr. Jetter?

22 MR. JETTER: I have no questions. Thank  
23 you.

24 CHAIRMAN LEVAR: Mr. Snarr?

25 MR. SNARR: Yes, I have some questions.

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

CROSS-EXAMINATION

BY MR. SNARR:

Q. Good afternoon, Mr. Collins.

A. Good afternoon.

Q. In your direct testimony, at page 14, you address the question of how cost associated with the distribution system mains and related facilities should be allocated to customer classes; is that correct?

A. You said on page 14?

Q. I believe it's on page 14, yes.

A. Yes, I believe that's correct.

Q. At lines 3 through 13 on that page of your testimony, you quote the NARUC Gas Distribution Rate Design Manual at pages 23 and 24 as it defines distribution mains as a demand or capacity-related cost; is that correct?

A. Yes.

Q. Let me --

MR. SNARR: If I may?

CHAIRMAN LEVAR: Sure.

MR. SNARR: I have a copy of excerpts of that manual I'd like to share and talk about some of the provisions there.

1 I represent to you that this -- I'd like to  
2 have this marked as OCS Cross Exhibit 1.

3 (OCS Cross Exhibit 1 was marked for  
4 identification.)

5 BY MR. SNARR:

6 Q. And I represent to you that it -- are  
7 excerpts from that NARUC Gas Distribution Rate Design  
8 Manual.

9 Do you recognize it, Mr. Collins?

10 CHAIRMAN LEVAR: I'm sorry. Can we make  
11 sure to get a copy to the court reporter, too?

12 MR. SNARR: Yes.

13 CHAIRMAN LEVAR: If we didn't already.

14 BY MR. SNARR:

15 Q. Mr. Collins, do you recognize this as being  
16 excerpts from the manual?

17 A. Yes.

18 Q. All right. Let me direct your attention to  
19 page 25 of the NARUC Gas Distribution Rate Manual.

20 Under the heading "Demand or Capacity  
21 Costs," the first sentence states: "Demand or  
22 capacity costs are allocated to customer classes  
23 based upon analysis of system load conditions and how  
24 each customer class affects such costs."

25 Did I read that correctly?

1 A. Yes.

2 Q. Okay. Could you now turn to page 27 of the  
3 manual? And.

4 I'd like you to read out loud the first  
5 sentence on that page.

6 A. Page 27?

7 Q. Yes.

8 A. "The most commonly used demand allocations  
9 for natural gas distribution utilities are the  
10 coincident demand method, the non-coincident demand  
11 method, the average and peak method, or some  
12 modification or combination of the three."

13 Q. All right. And in the sections just  
14 following that, there's some definition provided, am  
15 I correct, on those three methods that have been  
16 called out; is that right?

17 A. That's right.

18 Q. All right. With respect to the coincidental  
19 demand method, isn't it true that that allocates  
20 demand costs based on system peak?

21 A. It says "at the time of system peak" in the  
22 first sentence under Section B, "Coincident Demand  
23 Method."

24 Q. All right. And with respect to the  
25 non-coincidental demand method, I'd like you to look

1 at that or review it briefly, and then I have a  
2 question for you.

3 A. Okay.

4 Q. Okay. With respect to that method, is it  
5 fair to say that the non-coincidental demand method  
6 allocates costs to all classes of customers,  
7 including interruptible customers, based upon their  
8 actual peak, regardless of the times of the  
9 occurrence of that peak?

10 A. That's correct.

11 Q. Okay. Now let's further move on to the  
12 average and peak.

13 A. Okay.

14 Q. And isn't true that most of the parties in  
15 this proceeding have advocated the use of some form  
16 of the average and peak method as described on  
17 page 27, subparagraph D?

18 A. Right. Either advocated or not opposed --

19 Q. All right.

20 A. -- I believe would be a --

21 Q. And --

22 A. -- good description.

23 Q. Okay. Let's read together, then,  
24 subparagraph D. Could you read that section,  
25 "Average and Peak Demand Method"?



1           A.     Sure.

2                     "This method reflects a compromise between  
3 the coincident and non-coincident demand methods.  
4 Total demand costs are multiplied by the system's  
5 load factor to arrive at the capacity costs  
6 attributed to average use and are apportioned to the  
7 various customer classes on an annual volumetric  
8 basis. The remaining costs are considered to have  
9 been incurred to meet the individual peak demands of  
10 the various classes of service and are allocated on  
11 the basis of the coincident peak of each class. This  
12 method allocates cost to all classes of customers and  
13 tempers the apportionment of the costs between the  
14 high and low load factor customers."

15           **Q.     Now, just a couple of follow-up questions**  
16 **here.**

17                     **With respect to that portion of this hybrid**  
18 **allocation method, with respect to the portion that**  
19 **is tied to annual volumetric throughput, that would**  
20 **include an assessment of the throughput associated**  
21 **with interruptible service; is that correct?**

22           A.     That's correct.

23           **Q.     All right. And with respect to the other**  
24 **section which is allocated based upon peak demand,**  
25 **that would not have any consideration for the**

1       **interruptible users; is that right?**

2           A.     That's correct.

3           **Q.     So let me just summarize and see if you**  
4       **agree with my summary here.**

5                   Using some form of the average and peak  
6       demand method would assign a portion of the  
7       demand-related costs to be recovered from all firm  
8       service -- that is sales and transportation customer  
9       classes -- consistent with their peak demands, while  
10      also recovering a share of the demand costs from all  
11      customer classes, including interruptible customers,  
12      according to their throughput; isn't that correct?

13          A.     That sounds correct.

14          **Q.     All right. Thank you.**

15                 MR. SNARR: That's all I have.

16                 CHAIRMAN LEVAR: Thank you, Mr. Snarr.

17                 Ms. Clark or Mr. Sabin?

18                 MS. CLARK: We have no questions. Thank  
19      you.

20                 CHAIRMAN LEVAR: Okay. Thank you.

21                 Major Kirk, any redirect?

22                 MAJOR KIRK: Briefly.

23

24      ///

25      ///

1 REDIRECT EXAMINATION

2 BY MAJOR KIRK:

3 Q. Mr. Collins, regarding interruptible  
4 customers, under your proposed methodology, what  
5 would be the fair way to charge interruptible  
6 customers for their cost of service?

7 A. Just hypothetically?

8 Q. What's your proposal?

9 A. What's my proposal? If I recall correctly  
10 from my testimony, I believe I held the interruptible  
11 class, the IS class, at current rates. You know,  
12 give them no increase.

13 I believe both of the cost of service  
14 studies that -- you know, the company's study that  
15 uses partial allocation of through -- partial  
16 allocation of main costs using throughput resulted in  
17 a decrease for that class. And I think the  
18 100 percent design day demand allocation also  
19 resulted in that kind of decrease for the  
20 interruptible sales, IS class. So my proposal was  
21 just to hold that class at current rates.

22 Q. And what did you suggest, hypothetically,  
23 could be done to figure out what the cost of the  
24 interruptible customer is to the system?

25 A. Well, with respect to the IS class, I think

1 there's only, I believe, ten -- ten customers in that  
2 class. So if you were concerned about assigning, you  
3 know, some cost of mains to that class, I think I  
4 said in my testimony that you could maybe do a  
5 special study where you basically do a direct  
6 assignment of cost to that class. Because there is a  
7 cost to connect, you know, the interruptible sales  
8 class to the system, but that cost isn't very well  
9 represented by either the design day demand or a  
10 throughput allocator.

11 **Q. I also wanted to ask you briefly about the**  
12 **NARUC model and the different models described in**  
13 **here that you just read.**

14 **And just to clarify, does the NARUC model**  
15 **advocate for one particular method over the other?**

16 A. I don't believe it does. I believe the main  
17 purpose of the manual is just to put a summary  
18 together of methods that are commonly used by  
19 utilities throughout the United States.

20 **Q. And in your experience, there's how many**  
21 **other states that follow the design day model?**

22 A. States that I have personally been involved  
23 in, I've come across about ten that, again, use the  
24 design day demand allocation coupled with a customer  
25 component allocation of mains. With respect to peak

1 and average, there's really two states that come to  
2 mind that I've experienced that model being used, and  
3 that's Illinois and Washington.

4 **Q. Thank you, sir.**

5 MAJOR KIRK: No other questions.

6 CHAIRMAN LEVAR: Thank you.

7 Any recross, Mr. Snarr?

8 MR. SNARR: No.

9 CHAIRMAN LEVAR: Okay. Thank you.

10 Commissioner White, do you have any  
11 questions?

12 COMMISSIONER WHITE: I have no questions.  
13 Thank you.

14 CHAIRMAN LEVAR: Commissioner Clark?

15 COMMISSIONER CLARK: I have none. Thank  
16 you.

17 CHAIRMAN LEVAR: And I don't either. Thank  
18 you for your testimony this afternoon.

19 THE WITNESS: Thank you very much.

20 CHAIRMAN LEVAR: Major Kirk, anything else  
21 from the Federal Executive Agencies?

22 MAJOR KIRK: Nothing further, sir.

23 CHAIRMAN LEVAR: Thank you.

24 Mr. Mecham?

25 MR. MECHAM: Thank you, Mr. Chair. ANGC

1 calls Mr. Curtis Chisholm.

2 CHAIRMAN LEVAR: Mr. Chisholm, do you swear  
3 to tell the truth?

4 THE WITNESS: I do.

5 CHAIRMAN LEVAR: Thank you.

6 THE WITNESS: Thank you.

7

8 DIRECT EXAMINATION

9 BY MR. MECHAM:

10 Q. Mr. Chisholm, could you state your name and  
11 business address for the record, please?

12 A. Yes. My name is Curtis Ralph Chisholm. My  
13 business address is 201 South Main.

14 Q. Thank you.

15 And did you prepare or have prepared under  
16 your direction testimony in this proceeding, direct  
17 testimony consisting of six pages which we've marked  
18 as ANGC 3 and filed on November 14th, and then  
19 surrebuttal filed on January 6th of this year  
20 consisting of four pages which we've premarked as  
21 ANGC 3SR?

22 A. Yes, I did.

23 Q. And if I were to ask you the questions that  
24 are contained therein, would your answers be the  
25 same?

1 A. They would.

2 Q. Are there any corrections that you're aware  
3 of that need to be made?

4 A. I know of no corrections.

5 Q. Okay. Have you prepared a summary of your  
6 testimony?

7 A. I have.

8 Q. Why don't you go ahead and give it, please.

9 A. Okay.

10 I'm really concerned about competition in  
11 this natural gas market, and I would love to see a  
12 rate structure that's based on actual costs than what  
13 it has been in the past.

14 It feels like -- such as the admin fee that  
15 is currently \$4,500 per year per meter, meters that  
16 are tied to parcels, the secondary meters can be  
17 reduced down to like half price. But we've seen some  
18 of our customers pay over \$250,000 a year in meter  
19 fees. One customer with, you know, 50-plus meters.  
20 And yet you have large industrials burning 5 Bcf of  
21 gas a year paying \$4,500. It's not cost based. It's  
22 not economical for these small industrial customers  
23 to be paying these high admin fees that we don't see  
24 in other states, in other utilities.

25 Also, we believe that Dominion's idea of

1 freezing the transportation rate, you know, not  
2 allowing customers to join the TS class that don't  
3 burn 35,000 or more, is anticompetitive. We believe  
4 it's baseless and serves only to penalize industrial  
5 companies from joining a class that serves them  
6 better and more fully recognizes their cost  
7 structure. Where I believe it's been shown that  
8 customers burning less than 35,000 MBtu a year  
9 provide an over -- a rate over the utility's required  
10 rate, keeping customers in the GS class would  
11 essentially penalize them if they feel like they  
12 should join the TS class.

13           The other anticompetitive feature in their  
14 current structure is the one-time per year transfer  
15 between classes. We don't face this in any other  
16 market we have seen in the United States, having a  
17 restriction in that regard, and it is not cost  
18 effective for the utility or us.

19           And I -- we -- in dealing with their  
20 employees, they don't like it because they have a lot  
21 of paperwork that hits them all at once. And also,  
22 setting up all those customers that come over to the  
23 TS rate is a -- they have not been able to hit the  
24 deadlines because of the burden in the past. And so  
25 it doesn't really serve anyone well.



1           Also, any increase in these lower tiers of  
2 gas use, you know, the 200 -- the first 200 or the  
3 first 1,800, because our -- the smaller industrials  
4 are paying the required rate, any increase will add  
5 to their burden. I think it will -- it's, you know,  
6 actual -- obviously would increase the rate to the  
7 utility above where they are now.

8           The other issue is the SNG costs I believe  
9 that Dominion is now asking from the TS class of  
10 customers. I believe that cost is covered in the  
11 imbalance fees, and so if they added another cost to  
12 the TS class, an SNG cost, that would be a  
13 duplicative cost.

14           And that, I think, is essentially my  
15 testimony.

16           **Q. Thank you.**

17           MR. MECHAM: Now we would move the admission  
18 of ANGC 3 and ANGC 3SR.

19           CHAIRMAN LEVAR: If anyone objects to that  
20 motion, please let me know.

21                           (No response.)

22           CHAIRMAN LEVAR: I'm not seeing any  
23 objections, so the motion is granted.

24                           (ANGC Exhibits 3 and 3SR were  
25 admitted.)

1 MR. MECHAM: Thank you. So Mr. Chisholm is  
2 available for cross-examination.

3 CHAIRMAN LEVAR: Okay. I'm going to go to  
4 Mr. Russell first.

5 MR. RUSSELL: No questions. Thank you.

6 CHAIRMAN LEVAR: Major Kirk?

7 MAJOR KIRK: No questions, sir.

8 CHAIRMAN LEVAR: Mr. Jetter?  
9

10 CROSS-EXAMINATION

11 BY MR. JETTER:

12 Q. I do have just a brief line of questions for  
13 you.

14 A. Uh-huh.

15 Q. Your -- as part of your job, you work for a  
16 company that provides gas supply to TS customers; is  
17 that correct?

18 A. That's correct.

19 Q. And are you currently engaging with current  
20 GS customers to show them the options that they might  
21 have to move to the TS class?

22 A. We are. Yes.

23 Q. How many customers would you expect if the  
24 rate remains open and similar to what it is today to  
25 move to that class over the next three years?

1 A. It's a hard thing to estimate. But --

2 Q. Would you say that --

3 A. -- over the next three years, maybe 4- or  
4 500.

5 Q. Okay. And would you -- I think that answers  
6 the question. Thank you.

7 A. Okay.

8 CHAIRMAN LEVAR: Thank you, Mr. Jetter.

9 Mr. Snarr?

10 MR. SNARR: We have no questions.

11 CHAIRMAN LEVAR: Okay. Thank you.

12 Ms. Clark or Mr. Sabin?

13 MS. CLARK: We have no questions. Thank  
14 you.

15 CHAIRMAN LEVAR: Any redirect, Mr. Mecham?

16 MR. MECHAM: I have none.

17 CHAIRMAN LEVAR: Okay. Commissioner Clark?

18

19 CROSS-EXAMINATION

20 BY COMMISSIONER CLARK:

21 Q. Your estimate of 4- to 500 customers moving  
22 in the next three years, what is your assumption  
23 about the relationship of rates to cost of service in  
24 that answer?

25 In other words, are you answering at current

1 rates or --

2 A. At current rates.

3 Q. And so if -- if the Commission were to  
4 accept one of the proposals -- one of the several  
5 proposals to -- in a phased way, to move to full cost  
6 of service for the TS class in the next two to three  
7 years, does that affect your estimate at all?

8 A. I guess it depends if our rates increase.  
9 Like, I think we are at full cost of service, you  
10 know, for the smaller industrials. So I guess if it  
11 significantly increases, it might bring that down,  
12 but I wouldn't expect it to.

13 Q. Thank you.

14 COMMISSIONER CLARK: No further questions.

15

16 CROSS-EXAMINATION

17 BY CHAIRMAN LEVAR:

18 Q. I just want to follow up on that.

19 I mean, do most of your customers view these  
20 costs and commodity costs separately and get to that  
21 level of granularity, or do most of your customers  
22 look at combined rates, including all the costs we're  
23 dealing with here and commodity costs combined?

24 A. It depends on the sophistication of the  
25 customer, obviously, but a lot of them understand the

1 costs incurred at the utility level versus the  
2 commodity costs.

3 Q. Okay.

4 A. Mm-hmm.

5 Q. I'm assuming commodity cost is the primary  
6 driver --

7 A. Right.

8 Q. -- we're talking about here?

9 A. Mm-hmm.

10 Q. Okay.

11 CHAIRMAN LEVAR: That's all I have.

12 Commissioner White, do you have any  
13 questions?

14 COMMISSIONER WHITE: I don't. Thanks.

15 CHAIRMAN LEVAR: Okay. Thank you for your  
16 testimony this afternoon.

17 THE WITNESS: Thank you.

18 CHAIRMAN LEVAR: Mr. Mecham?

19 MR. MECHAM: All right. ANGC calls  
20 Mr. Bruce Oliver.

21 CHAIRMAN LEVAR: Mr. Oliver, do you swear to  
22 tell the truth?

23 THE WITNESS: I do.

24 CHAIRMAN LEVAR: Thank you.

25

DIRECT EXAMINATION

BY MR. MECHAM:

Q. Mr. Oliver, would you state your name and business address for the record, please?

A. My name is Bruce Richard Oliver. My business address is 7103 Laketree Drive, Fairfax Station, Virginia.

Q. Thank you.

And did you prepare and have to cause filed direct testimony in this proceeding consisting of 67 pages, which we've marked as ANGC 2, with attached Exhibits ANGC 2.01 through 2.04 and Attachments A and B; as well as rebuttal testimony filed December 13th consisting of 39 pages, which we've marked as ANGC 2R, with ANGC 2.01R through 2.05R; and surrebuttal testimony filed on January 6th of this year consisting of 37 pages, which we've marked as ANGC 2SR, with Exhibits ANGC 2.01SR through 2.03SR?

A. I did.

Q. If I were to ask you the questions that are in those three pieces of testimony, would your answers be the same?

A. I would, with a couple corrections.

Q. Okay.

A. First -- now, it's just one typo and a

1 couple labeling considerations.

2 First, there was a typo in my rebuttal  
3 testimony -- lost my place. I don't know where it  
4 is. Bear with me just a minute.

5 At -- I'm sorry. It's in my surrebuttal  
6 testimony. It's page 22, line 458. The weighting  
7 for design day and annual throughput for DEU as  
8 proposed at that time was -- is shown as 60/60. It  
9 should have been 60/40.

10 There's also a minor typo in my direct  
11 testimony on the next to the last line where it says:  
12 "Does this conclude your direct testimony?" It  
13 should say rebuttal testimony.

14 In addition, I'd like to clean up some  
15 labeling considerations on a couple of my exhibits.  
16 First on Exhibit ANGC 2.02, to be consistent with  
17 some of the other exhibits, under where it says "TS  
18 and TSL," I would put the notation under TS, "less  
19 than 120,000 dekatherms"; and under TSL, I would put  
20 "greater than 120,000." And I would also put a  
21 notation above the heading -- or below the "Cost of  
22 Service Summary and Allocations to Rate Classes" that  
23 says "From DEU's Response to DPU Data Request 11.01,  
24 Attachment 5, COS Summary."

25 I also would note that in my rebuttal

1 testimony, Exhibit ANGC -- or ANGC Exhibit 2.01, on  
2 the second page should be 2.01R as opposed to just  
3 2.01. Left off an R there. And those are the  
4 corrections.

5 Q. Okay. Thank you.

6 So with those corrections, do you adopt that  
7 as your testimony today?

8 A. I do.

9 Q. Have you prepared a summary of your  
10 testimony?

11 A. I have.

12 Q. Why don't you go ahead and give it, please.

13 A. Okay. I ask you to bear with me because  
14 during the course of things, I think we eliminated a  
15 little bit, and I've tried to adjust what I drafted.  
16 So I have some marginal notes I'll try to work in.

17 The company's pricing and policies for  
18 transportation services are a key element of the cost  
19 of service and rate design issues in this proceeding.  
20 Essentially all of the parties have accepted that the  
21 TS rates may need to be adjusted significantly  
22 upward, but how much upward is going to depend, in  
23 part, on the revenue requirement that the Commission  
24 approves. If the Commission cuts back the company's  
25 cost of capital, for example, that could have a



1 noticeable impact on the overall increase and how  
2 much increase would need to be applied to TS  
3 customers or large TS customers, and therefore how  
4 much you would have to phase in.

5           It's possible that if the overall revenue  
6 requirement is much closer to, maybe, the Division's  
7 position, or lower, as some others have recommended,  
8 that we wouldn't need a phase-in, or we could do it  
9 in a two-step phase-in and have reasonable rate  
10 impacts. On the other hand, if the -- if you elect  
11 to approve the company's entire increase request, it  
12 may be appropriate to phase that increase over more  
13 than a three-year period.

14           The increases that result even under  
15 Mr. Higgins' proposal, which I think has some appeal,  
16 are still fairly sizable increases. And I know most  
17 commissions would hesitate asking residential  
18 customers to bear three increases, year after year,  
19 of that magnitude, and so I think we need to be  
20 sensitive to how it impacts all sizes of customers.  
21 But that won't necessarily be a function of what the  
22 overall revenue requirement is.

23           ANGC has presented multiple cost of service  
24 analyses in this proceeding, all of which support a  
25 finding that small TS customers who use less than

1 35,000 dekatherms per year are providing a greater  
2 than system average rate of return. Not just  
3 slightly greater, but a rate of return in the  
4 magnitude of 9 percent, where the system average at  
5 present rates is less than 7 percent.

6 Each of the analyses I presented were either  
7 prepared directly by DEU in response to data requests  
8 from UAE, the Division, or US Magnesium, or they  
9 reflect sensitivity analyses that I have developed  
10 based on DEU's cost of service analyses to test the  
11 sensitivity of the cost of service results for large  
12 and small TS customers.

13 Again, all of those studies find small TS  
14 customers substantially outperforming large TS  
15 customers from a cost of service perspective. The  
16 return on rate base derived from small TS customers  
17 using less than 35,000 dekatherms a year is  
18 consistently in the range of 9 percent. In some  
19 cases, it's even a little higher. The rates of  
20 return for the large TS customers, in the most  
21 favorable scenario, was 1.5 percent, and may even be  
22 negative, depending upon what scenario you look at.  
23 When the weighting of design day and annual  
24 throughput advocated by OCS, by DEU, and by other  
25 parties are considered, the rates of return for the

1 small TS customers remain positive.

2           Although the TS rate issues and TS cost  
3 recovery concerns are addressed by almost every party  
4 in testimony, ANGC is the only party that has  
5 presented and discussed actual cost of service  
6 results separately for large and small TS customers.  
7 We've done that for various segments of the TS class,  
8 cutting at 35,000, at 120,000, at 800,000, and we've  
9 shown how they stack up. And the more you isolate  
10 the larger customers, the worse their return gets.  
11 The more you isolate smaller customers, the higher  
12 their return gets.

13           That information, in and of itself, with the  
14 very strong differences between the small TS customer  
15 rates of return and those for larger TS customers  
16 should be a compelling reason for segregating the  
17 classes. But my analysis doesn't stop there. I have  
18 presented analyses that show changes in use per  
19 customer for different size customers within the TS  
20 class. I have presented cluster analyses to see what  
21 groupings within the TS class are reasonably  
22 homogeneous. I have presented cost of service by  
23 segment. And I've provided, as I mentioned,  
24 sensitivity analyses to show how the cost of service  
25 would vary if you look at some of the different cost

1 allocation proposals that have been presented.

2           Again, the conclusion is consistent that  
3 small TS customers are more than paying their way.  
4 Witness Summers, this morning, essentially told the  
5 Commission that despite what's been a fairly  
6 reasonable time between rate cases, there are a lot  
7 of unresolved -- and acknowledgment of unresolved  
8 issues from those earlier proceedings.

9           That the company has not performed hardly  
10 any of the analyses necessary to address a split of  
11 the TS class or to redesign TS rates, I find that  
12 troublesome. They know that there's an issue there,  
13 and their answer is, "Well, we'll look at it for the  
14 next case." And when we get to the next case, what  
15 will the answer be? Will we really have any  
16 progress, or will it be, once again, "Let's look at  
17 it in the next case"?

18           There are significant inequities within the  
19 current rate design, both on an interclass basis and  
20 an intraclass basis that need to be addressed. The  
21 proposals that the company now supports and  
22 Mr. Higgins is presenting only address part of it.  
23 They are moving classes toward their cost of service,  
24 but there's very little evidence to support a  
25 conclusion that the charges within the classes and

1 what gets charged to each individual customer within  
2 the class is reflective of their cost of service  
3 responsibilities.

4 The challenge of rate design and the  
5 objective should be to have rates that are fair and  
6 equitable for all customers within a class. We've  
7 been told that, "Oh, no. We can't do that because  
8 there's too much uncertainty" when we have customers  
9 migrating. Well, if you'll forgive me, I'm getting  
10 in the vernacular, let's get real. Things are always  
11 changing.

12 We have evidence already presented by the  
13 various parties that say if the rate proposals that  
14 have been presented are adopted, US Magnesium may  
15 substantially change its demands. We're going to  
16 have, on average, 46 percent increases in TS customer  
17 volumetric charges. Customers respond to price  
18 increases of that magnitude. And not only that, any  
19 economist will tell you that customers not only  
20 respond immediately to the change, but there's a  
21 lagged response, and you can expect it to continue to  
22 have effects on how customers use their gas in the  
23 next several years.

24 We've also been told that with changes in  
25 the rate design, we may expect TBS -- TBF customers

1 to come to the TS rate. There are lots of things  
2 that are going to change even if you don't allow  
3 migration.

4 And this idea that we're going to stop the  
5 world and have this pristine examination of a set of  
6 costs just is not realistic. Every utility in the  
7 country deals with constantly evolving customer class  
8 composition. This system and this area of the  
9 country has grown substantially. We need to be  
10 moving with it, not just trying to freeze it where we  
11 were and make some arbitrary determinations.

12 I mean, we even have a problem in this case  
13 in that the company's cost of service analysis  
14 assumes that more than 150 customers will shift from  
15 firm service rates, firm gas sales rate schedules, to  
16 TS service in 2020. That's built into their cost of  
17 service analysis. If we adopt a moratorium or  
18 restriction on movement, it undermines the very  
19 premise of their cost of service study. Nobody's  
20 discussed that. They've already assumed they're  
21 going to have it, and now they're going to take that  
22 back. Well, yeah, you can't stop the world. You  
23 can't stop progress.

24 The proposals from the company to restrict  
25 movement are, at best, arbitrary, capricious, and, in

1 my assessment, unduly discriminatory, and they should  
2 not be adopted.

3 The company's case with respect to TS rate  
4 schedule -- or TS rate structure is really built on a  
5 house of cards. They started the case with a  
6 perception that small TS customers weren't paying  
7 their way, that the growth in the number of customers  
8 was the problem in the TS class, and that wasn't the  
9 case at all.

10 In fact, as more smaller customers have come  
11 into the class, we're finding that class is -- the  
12 small customers are more than earning their rate of  
13 return. They're not dragging down the class.  
14 They're not causing the subsidy to increase. And  
15 I'll accept some of the statements that, "Oh, well,  
16 the small customers don't have a big impact on the  
17 overall TS class." But it's not hurting them. Why  
18 do we need to block it?

19 The inclusion of small, nonresidential TS  
20 customers in the TS class is not the source of the  
21 company's TS cost of recovery problems. The cost of  
22 service studies, including those that were performed  
23 by DEU for US Magnesium, show that large TS customers  
24 are where the under-recovery is.

25 Coincidentally, none of the parties that

1 requested this cost of service studies for segments  
2 of the TS class -- not US Magnesium, not UAE, not the  
3 Division -- presented the results of those studies.  
4 If we're trying to find the answers to questions or  
5 at least guide the Commission as to what next steps  
6 should be, why isn't that put before you? It was  
7 only ANG that put it together in some kind of  
8 systematic format so that you could see what the  
9 story was, and the story is you don't need to be  
10 restricting small TS customers and further movement  
11 to that class.

12 DEU's rate structure proposals focus on  
13 three key issues. The need to move to full cost of  
14 service and eliminate interclass and intraclass  
15 subsidies, the second part of which they push off to  
16 the future. You know, if you were a customer and you  
17 feel that you're not paying your fair rates, is that  
18 a very satisfying answer to say, "Well, we'll address  
19 that three years from now maybe"?

20 The second was to block customer transfer so  
21 that we could stabilize this class, which I submit to  
22 you won't have that result.

23 And the third is to reduce subsidization  
24 within the GS class. And the company has taken a  
25 very minimal first step in that direction. But



1 really to address that, you have a class that, once  
2 again, has huge diversity within the class and needs  
3 to be segmented. Almost all other utilities that  
4 I've dealt with have several breakdowns of their  
5 nonresidential customer service. And to take the GS  
6 class and split it just residential/nonresidential is  
7 a first step in that direction.

8           Now, unfortunately, the company hasn't come  
9 forth with the data that would allow any other party  
10 to make an affirmative recommendation in that case --  
11 in that -- on that issue. But it needs to be done,  
12 and it needs to be done near term, not in the next  
13 rate case.

14           I also note that there's some questions  
15 about how the company has designed its rate  
16 proposals. In Witness Summers' surrebuttal  
17 testimony, he presents a table on page 5 that  
18 purports to show rate increases for different sizes  
19 of TS customers. Well, I looked at that, and the  
20 first thing that struck me was, how do you have one  
21 rate increase for each size?

22           I've presented analyses in my direct  
23 testimony that document that there's huge diversity  
24 in the load factors for customers within the TS  
25 class. There are more than 100 customers that have

1 load factors over 100 percent. There are over 90  
2 customers that have load factors less than  
3 20 percent. Yet within the company's largest 100  
4 customers, you see load factors ranging from  
5 23 percent to over a 1,000 percent. How does that  
6 happen? Because -- it happens because of non-firm  
7 load. But it is an actual result, and it makes sense  
8 when you recognize the non-firm load.

9 But there's a large diversity. The same  
10 thing is true when you examine the load factors for  
11 smaller customers. Well, on average, their load  
12 factors may be in the 25 or 30 percent range. There  
13 are customers of reasonably small size that can have  
14 50 and 70 percent load factors. There are customers  
15 in that range that may take interruptible service and  
16 have even higher load factors. Load factor is a very  
17 important consideration. And Witness Summers'  
18 surrebuttal table in his testimony doesn't address  
19 any of that.

20 When I looked further as to what was going  
21 on in that exhibit -- or in that table, I realized I  
22 had to reference his surrebuttal Exhibit 4.01SR. And  
23 in the detail of that, I found some surprising  
24 things. In the underlying data from which those rate  
25 impacts were calculated, there was an assumed

1 34 percent decrease in the fourth block volumetric  
2 charge for TS customers. That's a block that only  
3 applies to the largest customers, which are the  
4 customers that have been shown to have the worst  
5 rates of return.

6 Now, when I go through a rate filing and  
7 there's a change of that magnitude, I would expect it  
8 to be discussed explicitly in the testimony. There's  
9 no mention of it. How can we do that? Now, the  
10 company says, "Well, you know, we have reduction  
11 there, but we ultimately get to the higher rate."  
12 But that means a 55 percent increase in the tail  
13 block charge for these customers in the last step.  
14 I'll guarantee you, when it comes to the time that  
15 they -- we get that charge, they're going to be  
16 saying, "Hey, that's too much. We can't bear it."

17 Now, yeah, there's a reduction that several  
18 people have mentioned in the administrative charge  
19 that does reduce costs for smaller TS customers, but  
20 there's a key difference here. The reduction in the  
21 administrative charge is based on the company's  
22 representation of a reduction in its cost for  
23 providing administrative services. Now, I still  
24 think they're overstated, but they -- at least there  
25 was some cost foundation for that change.

1           The change that's been -- that was in that  
2 analysis and in the company's Exhibit 4.01SR for the  
3 fourth block of the volumetric charges has no cost of  
4 service foundation. Rather, it's directly counter to  
5 the cost of service.

6           MS. CLARK: I don't mean to interrupt, and I  
7 am trying not to interrupt your flow, recognizing how  
8 late we are in the day, but we've got some live  
9 sur-surrebuttal happening with regard to Mr. Summers'  
10 surrebuttal testimony. And recognizing that that's  
11 not appropriate, I would move to strike prior  
12 testimony related to that exhibit. And I would also  
13 request a Commission directive that further live  
14 sur-surrebuttal on Mr. Summers' testimony not be  
15 permitted.

16           CHAIRMAN LEVAR: Mr. Mecham, do you want to  
17 respond to her motion?

18           MR. MECHAM: Yeah, I -- well, when else  
19 would he respond to the surrebuttal? It's just -- so  
20 that's the final word? Or do we get an opportunity  
21 in hearing to be able to express our position on the  
22 surrebuttal, which is new stuff?

23           I think it's completely within the -- I  
24 think it's completely proper, and I don't know when  
25 else you would get a chance to do it.

1           And, in fact, we have hearing exhibits that  
2 actually address directly his phase-in; that is,  
3 Mr. Summers' phase-in. So, I mean, unless you're  
4 going to have surrebuttal always be the final word,  
5 you're not going to allow parties to really be able  
6 to flesh out the positions appropriately.

7           CHAIRMAN LEVAR: Does any other party want  
8 to weigh in on this objection?

9           MR. SNARR: I have a comment.

10          CHAIRMAN LEVAR: Mr. Snarr, go ahead.

11          MR. SNARR: Surrebuttal, from my experience,  
12 is the final word. However, surrebuttal is subject  
13 to cross-examination by all the parties as part of  
14 the proceeding. But we probably ought to recognize  
15 the difference between the opportunity to cross  
16 surrebuttal and instead invent an opportunity to  
17 provide a sur-surrebuttal.

18          CHAIRMAN LEVAR: Thank you, Mr. Snarr.

19          Before I come back to Dominion, any other  
20 party want to comment on the objection?

21          MR. JETTER: I'd just like to, I guess, add  
22 a comment somewhat mirroring Mr. Snarr's comment.  
23 The Division has fairly consistently, over time,  
24 opposed to live sur-surrebuttal unless it's been  
25 previously approved by the Commission.

1 CHAIRMAN LEVAR: Okay. You want to add  
2 anything final to --

3 MS. CLARK: I do.

4 CHAIRMAN LEVAR: -- your objection?

5 MS. CLARK: I want to emphasize again what  
6 Mr. Snarr has, I think, ably pointed out, and that  
7 is, the hearing exhibits that were offered previously  
8 in this hearing were in the nature of cross. And I  
9 think that is appropriate. I think in a witness  
10 summary, live sur-surrebuttal clearly is not. It's a  
11 standard that I think all the parties here have been  
12 held to in the past, and would ask the Commission to  
13 do so now.

14 MR. MECHAM: May I respond?

15 CHAIRMAN LEVAR: Sure.

16 MR. MECHAM: In my experience, there has  
17 been live surrebuttal in order to ensure that the  
18 record has been fleshed out. They can still -- they  
19 can cross-examine Mr. Oliver on anything he said  
20 here. But without it, I think you're going to have  
21 an inadequate record.

22 CHAIRMAN LEVAR: Anything further?

23 MR. MECHAM: No.

24 CHAIRMAN LEVAR: Considering the time,  
25 considering that I don't want to put -- once we move

1 past this, I don't want to put any party in the  
2 position of feeling like they need to rush their  
3 cross-examination. I think we're going to be here in  
4 the morning. I don't see any avoiding that, and so  
5 I'm going to take the easy way out and defer ruling  
6 on this motion until first thing in the morning when  
7 we reconvene at 9:00 a.m.

8 With that, anything else that we need to  
9 address before we adjourn until tomorrow and for  
10 tonight's public witness hearing?

11 MR. MECHAM: No.

12 CHAIRMAN LEVAR: Okay. We are adjourned --  
13 well, not -- I'm sorry -- not adjourned. Recess.  
14 Recess. Big difference.

15 (Proceedings were recessed at  
16 5:25 p.m.)

17 \* \* \*

18  
19  
20  
21  
22  
23  
24  
25

REPORTER'S CERTIFICATE

STATE OF UTAH            )  
                                  )  
COUNTY OF UTAH        )

I, KIMBERLY A. HARMON, a Certified Shorthand Reporter and Registered Professional Reporter, hereby certify:

THAT the foregoing proceedings were taken before me at the time and place set forth in the caption hereof; that the witnesses were placed under oath to tell the truth, the whole truth, and nothing but the truth; that the proceedings were taken down by me in shorthand and thereafter my notes were transcribed through computer-aided transcription; and the foregoing transcript constitutes a full, true, and accurate record of such testimony adduced and oral proceedings had, and of the whole thereof.

I further certify that I am not a relative or employee of any attorney of the parties, nor do I have a financial interest in the action.

I have subscribed my name on this 24th day of January, 2020.



Kimberly A. Harmon, RPR, CSR



Evidentiary Hearing Day 1  
January 15, 2020

Index: \$1..1st

		<b>10:50</b> 84:15
<u>\$</u>	<u>-</u>	<b>11</b> 95:17 140:19 141:6
<b>\$1</b> 250:24	<b>-o0o-</b> 8:2	<b>11.01</b> 286:23
<b>\$1,064</b> 87:18 265:20		<b>112</b> 37:3,5
<b>\$1.2</b> 158:14	<u>0</u>	<b>117</b> 60:19
<b>\$1.42</b> 142:7	<b>07-057-13</b> 210:7	<b>12</b> 138:14
<b>\$1.6</b> 72:9		<b>120,000</b> 68:16 286:19,20 290:8
<b>\$10</b> 102:2	<u>1</u>	<b>13</b> 211:12 268:14
<b>\$12</b> 107:17	<b>1</b> 14:24 29:3 33:2,9 56:8, 13 77:19 86:4 90:4 95:24	<b>132</b> 14:3
<b>\$12.05</b> 222:2,8 223:19	98:6 110:19 137:9	<b>13th</b> 206:17 285:13
<b>\$125</b> 138:13	139:13 167:24 217:15, 16,22,25 234:3 269:2,3	<b>14</b> 76:3 86:1 92:16 268:6, 11,12
<b>\$15</b> 83:7	<b>1,000</b> 100:22 190:13 192:8 204:7 297:5	<b>14.6</b> 95:5
<b>\$19.2</b> 157:21	<b>1,093</b> 14:3 18:6	<b>145</b> 158:20
<b>\$2</b> 215:12	<b>1,800</b> 280:3	<b>146</b> 238:19
<b>\$2.19</b> 75:9	<b>1.0</b> 249:14 250:8	<b>148</b> 238:19
<b>\$20</b> 102:2 137:10 144:19	<b>1.0DIR</b> 184:14	<b>14th</b> 206:15 277:18
<b>\$250,000</b> 278:18	<b>1.0S</b> 249:16 250:9	<b>15</b> 22:6 211:13 248:10
<b>\$3,000</b> 22:1	<b>1.0SR</b> 184:14	<b>150</b> 59:8,9 100:6 105:11 293:14
<b>\$4,500</b> 21:25 278:15,21	<b>1.1</b> 249:14 250:8	<b>17</b> 89:19,20 96:2 97:1
<b>\$4.47</b> 75:9,14	<b>1.5</b> 289:21	<b>17.5</b> 158:1
<b>\$40</b> 103:4	<b>10</b> 88:13,25	<b>185</b> 214:6 215:19
<b>\$5</b> 72:13 195:10	<b>10,000</b> 61:12 201:25	<b>19</b> 59:9
<b>\$5.43</b> 221:7	<b>100</b> 13:19 117:19 161:19 177:3,8 198:14 204:16 222:4,19 231:2 264:12, 22 266:6,19 274:18 296:25 297:1,3	<b>19-057-T05</b> 139:18
<b>\$54,000</b> 214:25 215:17 219:23	<b>100,000</b> 201:25	<b>19-57-2</b> 8:6
<b>\$6.58</b> 221:12 222:8	<b>100.9</b> 76:5	<b>192</b> 214:16
<b>\$652</b> 87:4,14 265:24	<b>104</b> 75:9,14	<b>1:15</b> 135:1,3
<b>\$709</b> 87:1 89:11 265:18 266:8		<b>1st</b> 56:10,11,20 243:24
<b>\$753</b> 88:15		
<b>\$8</b> 107:16		

<hr/> <b>2</b> <hr/>	190:15 297:3	113:13 116:17 117:4 125:3 286:6
<b>2</b> 15:5 30:8 33:2 56:17 79:6 86:14 87:6 90:7 93:17 94:6 95:24 110:19 137:15 167:24 234:6,7, 13,15 241:9 254:24 267:8 285:11	<b>200</b> 204:16 280:2	<b>223</b> 88:16
<b>2.0</b> 227:9 228:5 259:5,16, 23	<b>2005</b> 138:3	<b>23</b> 113:8 268:16 297:5
<b>2.01</b> 62:10 68:10 139:19 256:3 257:2 285:12 287:1,3	<b>2007</b> 35:5 39:2,4 45:4 133:2,11 215:23 218:11	<b>230</b> 19:5 41:11 50:8 51:21 228:19,20 229:1 230:14
<b>2.01R</b> 33:1,9,13 61:24 62:1,11 108:13,15,18 110:23 111:25 118:3 285:15 287:2	<b>2008</b> 70:21 80:24 104:7	<b>233</b> 78:12
<b>2.01SR</b> 285:18	<b>2009</b> 39:10 44:20 45:5 80:24 133:11,16,20	<b>238</b> 255:7
<b>2.02</b> 286:16	<b>201</b> 239:4 240:2 277:13	<b>24</b> 113:8 268:16
<b>2.02R</b> 68:12 256:18	<b>2010</b> 14:3 122:14	<b>241</b> 255:7
<b>2.03SR</b> 285:18	<b>2012</b> 81:2	<b>25</b> 234:4 269:19 297:12
<b>2.04</b> 285:12	<b>2013</b> 45:11 52:8,9 65:4 133:5 221:6,13,16 222:4	<b>27</b> 270:2,6 271:17
<b>2.05R</b> 285:15	<b>2014</b> 28:25 29:8,20 138:5	<b>28</b> 105:2 254:23
<b>2.0R</b> 227:11 228:5	<b>2015</b> 105:1	<b>29</b> 254:23
<b>2.0S</b> 227:13 228:6	<b>2016</b> 18:5 105:2 120:2,5	<b>2R</b> 285:15
<b>2.1</b> 227:10	<b>2017</b> 20:25 49:7	<b>2SR</b> 285:18
<b>2.18</b> 216:1,4,10,13 217:8, 23 218:1,4	<b>2018</b> 17:15 59:9 105:23	<hr/> <b>3</b> <hr/>
<b>2.1R</b> 227:11	<b>2019</b> 14:4 17:17 18:6 72:8 105:25 120:2,14 123:18 139:18 195:10 206:16,17	<b>3</b> 79:7 86:20 87:3,9 95:16,24 98:3 137:25 167:24 170:14 179:13, 15,22 205:5 234:6,7,13, 15 241:9 268:14 277:18 280:18,24
<b>2.2R</b> 227:12 228:5 234:20	<b>202</b> 38:7,14	<b>3.62</b> 171:20
<b>2.3</b> 234:19	<b>2020</b> 56:20 57:14 206:19 243:24 293:16	<b>30</b> 31:22 297:12
<b>2.4</b> 227:10 228:5 234:19	<b>2021</b> 56:17	<b>300</b> 204:17
<b>2.54</b> 68:21 256:12,22	<b>2022</b> 56:13 123:20	<b>31st</b> 139:18
<b>20</b> 29:4 88:12,23 134:12	<b>207</b> 39:9	<b>32</b> 131:3 181:16 209:5 231:3,12
	<b>209</b> 39:9	<b>33</b> 74:21 135:19
	<b>21</b> 29:20	<b>33.3</b> 210:25
	<b>21.2</b> 221:13	
	<b>21.9</b> 95:2	
	<b>22</b> 13:23 14:1 18:3 59:7 69:2,3,4 104:10,23	

<b>333</b> 135:23	<b>4.04R</b> 12:8 24:5,14	86:24 89:9,16,18 90:1
<b>34</b> 77:20 79:5,19,23 80:16 298:1	<b>4.05</b> 94:1	92:11,12 93:1 94:25
<b>35</b> 74:22	<b>4.06</b> 33:2	138:6 158:4 167:15
<b>35,000</b> 13:23 15:25 16:5, 23 23:18 32:15 33:25 34:6 58:11 60:2 61:1 68:15 81:16,21 121:6,8 122:5,7,9,11,21,24,25 123:7 139:10 140:20 141:1 155:4 186:1 200:14 201:24 212:4,11 240:4 243:14 257:2 279:3,8 289:1,17 290:8	<b>4.0SR</b> 12:11 24:7,15 85:18	266:16 278:20 286:24 296:17
<b>37</b> 285:17	<b>4.12</b> 22:3	<b>5,000</b> 61:11
<b>37.91</b> 170:11 171:16	<b>4.14</b> 76:1 117:18	<b>5-10</b> 142:6
<b>38.6</b> 79:6	<b>4.17</b> 261:20	<b>5-11</b> 140:19
<b>39</b> 285:14	<b>4.18</b> 12:6 24:4,14 43:16	<b>5.0</b> 136:9,16,23
<b>3SR</b> 277:21 280:18,24	<b>4.1D</b> 207:11	<b>5.01</b> 136:10,17,23
<hr/> <b>4</b> <hr/>	<b>4.1SR</b> 207:12	<b>5.02</b> 136:10,17,23
<b>4</b> 34:16 76:2 77:18,19 85:25 86:14,20 89:9 90:10 92:10,13,16 93:7, 12 94:7 96:5 138:4 167:24 265:16 266:10	<b>4.2D</b> 216:5 217:10	<b>50</b> 25:24 58:23,25 62:14 64:1 100:8,22 106:9 107:18 154:1 192:10 209:7,8,14 265:21 297:14
<b>4-</b> 75:25 282:3,21	<b>4.2SR</b> 207:12	<b>50-plus</b> 278:19
<b>4.0</b> 12:5 24:4,14 259:7, 17,23	<b>4.3D</b> 207:11 211:9	<b>50/50</b> 53:21 69:11 130:10 151:12,25 152:20,24 156:22 157:8 166:16 172:5 213:10,18,21,22 231:17,24
<b>4.01</b> 12:6	<b>40</b> 52:3 65:10,20 181:15, 18 208:20,25 209:5 211:11 228:23 230:16 261:12	<b>500</b> 100:23 190:13 192:7 282:4,21
<b>4.01R</b> 12:9	<b>40-some-odd</b> 100:9	<b>51</b> 33:15
<b>4.01SR</b> 12:11 24:7,15 297:22 299:2	<b>40-year</b> 83:19	<b>54-4-13.1</b> 222:14
<b>4.02R</b> 12:9 24:6,15	<b>41</b> 235:25 240:17	<b>55</b> 298:12
<b>4.04</b> 142:6	<b>42</b> 30:11,12,13	<b>55.7</b> 79:7
	<b>45</b> 31:22 173:12 180:12 231:20 235:25 240:17	<b>563</b> 18:6
	<b>45.45</b> 171:13	<b>575</b> 125:4
	<b>450</b> 100:7,12,23 190:13	<b>5:30</b> 247:24 248:6,11
	<b>458</b> 286:6	<hr/> <b>6</b> <hr/>
	<b>46</b> 30:12 199:4 292:16	<b>6</b> 41:10 47:18 61:8 95:25 97:3 138:10 158:6 173:25
	<b>4D</b> 207:11	
	<b>4SR</b> 207:11	
	<hr/> <b>5</b> <hr/>	
	<b>5</b> 34:16 37:3,5 74:1 76:2	

<b>6.0</b> 148:18		<b>above-average</b> 263:25 264:2
<b>6.0DIR</b> 149:13	<hr/> <b>7</b> <hr/>	<b>absence</b> 152:11
<b>6.0SR</b> 148:19 149:13	<b>7</b> 89:22 90:7 93:3,11 94:6 95:5 138:19 171:25 175:6 289:5	<b>absent</b> 152:5
<b>6.3</b> 165:2,12 166:14,21, 23 170:5 173:11 179:6 215:6	<b>7,700</b> 61:2	<b>absolute</b> 78:13 79:25
<b>6.4</b> 166:6 167:4,7 168:10, 17	<b>70</b> 112:22 113:9 297:14	<b>absolutely</b> 27:7 61:22 104:25 112:9 113:18 114:5 119:3 127:9 229:8
<b>6.5</b> 166:9 167:4 168:18	<b>70/30</b> 53:14 130:12	<b>absorb</b> 144:21 251:2
<b>6.7</b> 148:18	<b>7103</b> 285:6	<b>accept</b> 12:17,18 60:23 158:3 221:8,14,18,21 283:4 294:15
<b>6.7DIR</b> 149:13	<b>72</b> 65:8,19 66:3 73:23	<b>acceptable</b> 210:22
<b>6.93</b> 64:2	<b>73.7</b> 90:12 93:7,19	<b>accepted</b> 150:12 173:8 287:20
<b>60</b> 52:2 65:7,19 69:7 208:18 230:16 261:11	<b>75</b> 68:8 240:6	<b>accepts</b> 173:6
<b>60-day</b> 83:12	<b>77</b> 61:16	<b>access</b> 154:6 174:17 253:4,6,8
<b>60/40</b> 19:6 51:24 53:5,8, 23 54:6 69:8,11 86:9,11, 17 129:25 130:5,16 153:4,13 172:12 174:22 181:8 182:4,8,14 214:2 231:16,22,24 286:9	<hr/> <b>8</b> <hr/>	<b>accompanying</b> 136:9,16
<b>60/60</b> 69:7 286:8	<b>8</b> 38:6,14 139:2,13 167:15	<b>accomplish</b> 99:11 146:7
<b>61.63</b> 221:17	<b>80.2</b> 89:23 90:8 93:4,17 94:2 96:6,22	<b>account</b> 35:8,9,15,19 55:13 58:8 126:11 163:4 168:9 252:7
<b>631</b> 32:13	<b>800,000</b> 68:17,19 256:7, 8,11,23 290:8	<b>accounted</b> 37:19
<b>634</b> 32:13	<b>83</b> 222:3	<b>accounting</b> 137:25
<b>64</b> 98:8	<hr/> <b>9</b> <hr/>	<b>accounts</b> 37:10,19 95:20,22
<b>67</b> 285:11	<b>9</b> 139:7,14 289:4,18	<b>accurate</b> 12:12 18:13 25:4,23 35:2 76:15 86:19 94:12 95:9,22 96:16 99:7 100:1 155:11 179:14 198:9 199:1
<b>67/33</b> 52:11	<b>9.11</b> 62:15 109:17 237:17 257:3	<b>accurately</b> 105:14,15 266:22
<b>68</b> 131:1 231:12	<b>90</b> 113:21 297:1	<b>achieve</b> 191:16 195:7
<b>68/32</b> 19:7 43:14 69:10 86:12 94:23 129:25 130:17,19,22 182:4	<b>919</b> 205:25	
<b>6:00</b> 8:11 247:23	<b>99.8</b> 96:20	
<b>6th</b> 84:25 206:19 277:19 285:16	<hr/> <b>A</b> <hr/>	
	<b>ability</b> 105:14 200:15	

<b>achieved</b> 151:7	<b>additionally</b> 233:1	<b>admit</b> 24:3 27:4 160:7
<b>acknowledge</b> 14:11 159:18	<b>address</b> 19:18 20:11 23:12 36:21 37:7 57:9 135:17,18,23 145:5,8 189:10 202:23 205:23,24 234:5 240:13 244:14 268:7 277:11,13 285:4,6 291:10,22 295:18 296:1 297:18	<b>admitted</b> 24:8,16 136:24 149:14 184:15 207:12 228:6 250:9 259:24 280:25
<b>acknowledged</b> 222:11		<b>adopt</b> 107:12 136:12 198:19 227:15 244:3 249:19 287:6 293:17
<b>acknowledgment</b> 291:7		<b>adopted</b> 19:7 213:22 231:18 233:9 292:14 294:2
<b>act</b> 194:19	<b>addressed</b> 37:1 139:14 152:15 238:7 290:3 291:20	<b>adopting</b> 213:21
<b>acted</b> 175:16	<b>addresses</b> 228:14	<b>advance</b> 82:13
<b>acting</b> 82:15	<b>addressing</b> 167:14	<b>advantage</b> 44:10 80:15 115:24
<b>action</b> 125:13 203:24	<b>adequate</b> 263:22 264:1	<b>adversely</b> 222:8
<b>activity</b> 138:11 197:5	<b>adhere</b> 102:10	<b>advocate</b> 246:9 275:15
<b>acts</b> 251:17	<b>adjust</b> 22:24 287:15	<b>advocated</b> 230:15 271:15,18 289:24
<b>actual</b> 26:25 49:13 109:24 128:10,12 129:17 151:14 153:16,17 154:3, 9,14,19 160:15,16,23 161:4,24 177:21,23 217:11 263:4 271:8 278:12 280:6 290:5 297:7	<b>adjusted</b> 22:22 287:21	<b>advocates</b> 53:19
<b>add</b> 59:6 67:8,21 280:4	<b>adjusting</b> 162:4	<b>affect</b> 37:12 74:20 139:5 253:10 283:7
<b>added</b> 123:15 141:2 280:11	<b>adjustment</b> 162:2 213:13	<b>affects</b> 40:8 269:24
<b>adder</b> 142:7,19	<b>adjustments</b> 163:10 165:16,17 252:16	<b>affirmative</b> 296:10
<b>adding</b> 65:25 73:1 100:23 105:10 137:9 138:10,19,23 142:18 188:21	<b>admin</b> 75:3 128:3 242:15,19 244:23 278:14,23	<b>afternoon</b> 85:5 145:2 147:25 184:23 188:11,12 203:6 205:20,21 220:22, 23 225:23 226:15,24 228:13 247:9 248:20 249:3 257:24 260:7 268:4,5 276:18 284:16
<b>addition</b> 64:15 138:21 139:17 142:13 172:17, 19,21 185:6 212:14 219:16,20 225:11 236:18 286:14	<b>administrating</b> 138:25	<b>Agencies</b> 9:21 258:6,21 276:21
<b>additional</b> 19:17 34:9 68:13 139:20 147:11 162:13,15 163:3,5 169:19 185:4 186:19,20, 24 190:13,23 191:25	<b>administration</b> 139:9	<b>aggregate</b> 49:16 126:24
	<b>administrative</b> 18:25 21:23 22:9 70:5 109:10 110:2,4 118:7 126:2,9 127:12,15,17,21,23 187:14 242:9,11 298:18, 21,23	<b>agree</b> 26:24 45:21 56:1,3 67:14 78:18 80:20 85:20, 24 92:21 94:22 95:12
	<b>admission</b> 136:16 141:14 207:5 227:22 250:1 280:17	

103:2 113:19,23 118:6  
141:24 161:19 176:15,22  
177:3 178:10,15 221:5,  
10,15,25 233:10 237:9  
239:17 240:12,15 245:9,  
15,18 246:4,9 273:4  
**agreed** 19:9 52:10,18,24  
54:1 65:5 100:14 122:24  
132:4 141:11 145:14  
213:22  
**agreement** 82:2 130:14  
145:23 191:12  
**agrees** 34:5  
**ahead** 12:25 58:4 62:7  
134:25 135:3 149:20  
170:25 184:21 247:19  
278:8 287:12  
**aimed** 172:25  
**aims** 150:20  
**Air** 9:20,23 102:3,7  
**aligned** 150:21  
**allegations** 18:16  
**allergy** 207:23  
**allocate** 19:25 35:8,22,23  
37:18 42:4 45:13 47:11  
50:12,18,24 51:3,22  
155:12 177:24,25 215:21  
217:3 220:2 228:20  
233:1 260:11,21,24  
263:14 264:12,23 265:3  
266:21  
**allocated** 33:20 34:24,25  
36:13 39:11 40:23 41:14,  
17,25 42:7 45:16 51:4,6  
53:12 54:22 86:15 88:4,  
5,8 89:10,14 90:9 94:3  
208:19,21 209:2,12,22,  
24 214:24 223:15 224:14  
233:5 261:2,4 264:1  
265:8,13,19,23 266:7  
268:9 269:22 272:10,24  
**allocates** 51:11 232:19  
270:19 271:6 272:12  
**allocating** 19:18 20:23  
25:11 31:15 37:13 52:20  
66:1,2,4 88:19 107:25  
152:21 166:25 210:4  
230:3 232:23 233:3  
262:20  
**allocation** 19:5 20:12,16,  
18,23 25:15 34:15,18  
35:10,18,21 36:1,5,14,  
15,19 37:9 38:1,23 40:3,  
9 41:5 43:6 44:4 50:7,12  
51:15 52:2,6,7 53:12  
54:4 68:25 76:16 87:7  
93:9 94:23 95:13 96:18  
108:6,10 112:2 125:11  
127:5 128:9 129:23  
133:3,23 134:6,17 150:1,  
13 151:13,15,21 152:1,  
20 153:18,21 154:4  
156:17 157:1,5,9 159:13  
160:10,14,24 162:23  
172:12 174:20 181:9,23  
182:1 186:14 187:15  
206:7 208:12,14 209:17,  
18,25 210:2 214:18,23  
215:10 218:8,9,17,20  
219:24 223:17 225:6  
228:14,16,18,19 229:1  
230:14,19 231:6 233:8  
241:16 251:16 252:11  
261:17,18 264:18 265:2,  
7 266:1,6,19,20,24  
267:2,5,7,8 272:18  
274:15,16,18 275:24,25  
291:1  
**allocations** 20:10 37:11  
38:10 53:22 88:17 108:2  
157:8 201:13 223:18  
252:23 270:8 286:22  
**allocator** 19:5 20:9 40:5,  
8 41:4,11,21 42:17 43:4,  
14,24 44:16 45:17 47:16  
51:21 156:9 161:4  
208:19,21 209:13 261:11  
264:23 266:13 275:10  
**allocators** 35:4 41:19  
96:15 223:11  
**allowed** 104:24  
**allowing** 244:15 279:2  
**alluding** 165:6  
**along.'** 120:18  
**alternative** 160:25 187:7  
194:19 243:12 252:20  
**alternatives** 76:25 152:2  
**altogether** 101:6 127:21  
**American** 10:5  
**amount** 11:2 27:19  
49:14,15 89:14 110:1  
122:25 162:17 229:20  
230:25 235:1 263:2  
**amounts** 96:22 98:6  
**analogous** 132:17  
**analogy** 102:1  
**analyses** 236:3 237:22  
288:24 289:6,9,10  
290:18,20,24 291:10  
296:22  
**analysis** 13:22 14:5,18  
15:7,21 16:12,15 17:11,  
24 58:1,6,7 63:1 65:1,21  
66:24 67:5 68:4 70:1,6  
71:15 81:10 96:13 98:4,  
24 99:1,4 105:21 106:2,  
7,10 110:15,18,21  
112:16 119:18,25 121:21

122:18 123:6,14 126:13  
127:4 130:7 150:10  
151:4 152:4 154:23  
158:13 162:18 171:5  
172:11 177:10 185:7,9  
186:3,7,19,20,24 187:5,  
10 189:7 192:2 193:15,  
24 194:2 196:5,8 198:13  
201:22 223:23 234:9  
235:6,10 236:15,21,23  
237:5,11 239:12 242:10,  
22,25 256:6 269:23  
290:17 293:13,17 299:2

**Analyst** 136:6

**analytical** 52:25 126:6  
127:6

**analyze** 14:8 18:1 30:21  
202:23

**analyzed** 49:9,11,12 67:2  
119:23 196:13

**analyzing** 193:2

**and/or** 174:4

**anecdotal** 127:2

**ANG** 295:7

**ANGC** 10:7 22:1 23:4  
33:1,9,13 52:15 61:24  
68:12 118:3 127:20  
209:4 231:7 256:18  
276:25 277:18,21  
280:18,24 284:19  
285:11,12,15,18 286:16  
287:1 288:23 290:4

**angle** 246:5

**annual** 22:15 155:20  
168:3 169:3 233:24  
260:23 261:24 262:21,22  
263:1 272:7,19 286:7  
289:23

**answering** 164:15  
282:25

**answers** 47:17 129:14  
149:1 184:4 207:1  
227:20 259:13 277:24  
282:5 285:22 295:4

**antici-** 10:19

**anticipated** 55:10 211:4  
262:12

**anticipation** 57:10 111:7

**anticompetitive** 14:7  
19:3,8 72:4 197:5 279:3,  
13

**anymore** 138:3

**anyone's** 238:5

**apologize** 33:10 40:21  
91:2 92:1,4

**apparently** 254:14

**appeal** 288:15

**appearance** 8:17

**appearances** 8:13

**appears** 33:9 78:12  
98:10

**Appendix** 259:6,16,23

**apple** 204:21

**applicability** 139:5

**applicable** 137:7

**application** 8:6 157:22  
183:17 185:17 189:2  
208:17 223:18

**applied** 25:8 109:3 157:6  
175:9,13 180:1 230:13  
266:13 288:2

**applies** 298:3

**apply** 234:22

**apportioned** 228:25  
272:6

**apportionment** 272:13

**Appreciating** 42:25

**approach** 13:20 14:9,23  
15:11 23:16 52:10 55:19  
57:2 58:2 65:5 80:7,9  
107:13,16 108:9 120:9  
125:22 127:7 146:25  
210:21 234:19 241:11

**approached** 137:21

**appropriately** 11:7 18:18  
141:18

**approval** 173:7

**approve** 34:6 234:18  
288:11

**approved** 29:7 210:5,19,  
23 217:7 221:2

**approves** 287:24

**approximate** 60:16

**approximately** 157:20  
214:25 221:12 228:22  
261:20 265:18,20,24

**arbitrary** 54:9,10,11,14  
151:21 230:17,23  
231:16,17 293:11,25

**area** 138:4 157:14  
196:15,18 293:8

**areas** 63:5 119:14 151:10  
156:4

**argue** 66:25 190:1,6,8  
191:15 193:16

**argued** 106:14

**argues** 22:2

**arguing** 255:20

**argument** 38:2 39:6

<b>arguments</b> 54:15 210:8	24	<b>aware</b> 23:2 44:15 83:20, 21 132:15,20,25 133:21 134:5,17 224:24 225:2, 14,15 239:5,15,19 278:2
<b>arisen</b> 57:9	<b>assurance</b> 194:12	
<b>Arizona</b> 152:16	<b>attached</b> 149:6 234:20 249:15 285:11	
<b>arms</b> 192:12	<b>attachment</b> 216:10 217:9 218:3 286:24	<hr/> <b>B</b> <hr/>
<b>arrive</b> 272:5	<b>Attachments</b> 285:12	<b>back</b> 22:24 26:12 28:2,25 37:13 41:18 58:16 59:1 65:20 70:8,21 71:16 83:22 84:14 90:23 91:5,7 92:14 98:3,11 101:25 103:16,18 111:20 115:19,23 120:4 121:22 122:13 138:2,5 153:12 164:25 170:5 173:11 204:9 205:7 212:7 217:2 224:18 231:22 237:15 240:16 247:25 248:15,16 252:19 287:24 293:22
<b>articulate</b> 130:2 202:13	<b>attempt</b> 230:5	
<b>articulated</b> 224:24	<b>attempting</b> 78:13	
<b>aspect</b> 44:4 56:4 214:14	<b>attempts</b> 209:20	
<b>aspects</b> 202:16	<b>attention</b> 30:7 62:13 63:18 84:23 269:18	
<b>assertion</b> 152:7	<b>attorney</b> 9:2,13 177:19	
<b>assessed</b> 28:3,4	<b>attributed</b> 272:6	
<b>assessment</b> 242:5 272:20 294:1	<b>audio</b> 90:16	
<b>assign</b> 273:6	<b>audits</b> 82:25	
<b>assigned</b> 44:16 46:15, 18,21 232:8 240:24	<b>Austin</b> 8:23 11:11,23 140:24 161:6 205:25 207:23	<b>back-of-the-envelope</b> 109:22
<b>assigning</b> 232:9 275:2	<b>authority</b> 37:21	<b>background</b> 35:3
<b>assignment</b> 275:6	<b>authorize</b> 169:11	<b>backing</b> 53:4
<b>assistant</b> 9:13	<b>availability</b> 160:2 212:3	<b>backup</b> 239:18
<b>associate</b> 163:22	<b>Avenue</b> 205:25	<b>bad</b> 177:15
<b>Associates</b> 10:1 258:19	<b>average</b> 39:11 41:12 51:6 52:17 54:2 60:16, 18,24 61:16,20 63:7 64:1 66:19 67:11 69:12 73:20 80:11 86:10,25 87:12,13 93:9 95:3 117:4 131:1 188:16,22 191:18 230:20,22 242:1 246:7 261:4,9,21 265:2,10,16, 17,22,24 270:11 271:12, 16,25 272:6 273:5 276:1 289:2,4 292:16 297:11	<b>balancing</b> 151:1
<b>Association</b> 10:11	<b>averaging</b> 232:17	<b>ban</b> 18:11
<b>assume</b> 31:11		<b>bankruptcy</b> 138:11
<b>assumed</b> 74:6,8,22 158:11 162:17 293:20 297:25		<b>barbershop</b> 88:11
<b>assumes</b> 55:11 293:14		<b>base</b> 61:4 62:15 69:9 102:3,7,8 109:5,25 165:14,20,22 166:23 170:10 171:8 215:8,9 231:3 252:1 289:16
<b>assuming</b> 101:8 119:16 127:10 145:23,24 284:5		<b>based</b> 15:24 17:21 26:6,9 31:3 40:14,19 41:2,20 49:5 50:25 51:4,11 52:8, 12,14,20 54:8 61:17
<b>assumption</b> 244:20 282:22		
<b>assumptions</b> 158:7,22 165:8 169:6 170:23 171:7 173:10 174:4,12,		



66:1,2,8,16 73:2 81:15  
104:14 114:25 121:6,8  
122:6,13 123:14 128:18  
143:22 150:16 152:7  
154:9 157:8 160:1  
170:19,22 180:23 193:11  
198:5,11,12,14,22  
200:22 203:16 208:5  
209:24 219:2,23 224:3  
229:3 230:3 232:4  
238:14 251:7,16 256:15  
260:14 263:6 266:25  
269:23 270:20 271:7  
272:24 278:12,21 289:10  
298:21

**baseless** 279:4

**basic** 64:2 75:4 106:22  
107:21 228:24

**basically** 44:9 88:24  
115:24 126:10 162:21  
275:5

**basing** 16:1

**basis** 21:18 28:1 42:16  
48:1 63:2 82:12 87:22  
88:20 116:24 126:22  
151:15 153:23 155:12  
172:13 175:2 204:15  
212:12 251:21 265:5  
266:3 272:8,11 291:19,  
20

**Bcf** 278:20

**bear** 55:16 176:16 286:4  
287:13 288:18 298:16

**bearing** 75:2

**begin** 129:3 140:21  
228:15

**beginning** 29:3 198:24

**behalf** 9:20 10:11,12,13,  
14 43:5 185:9 226:13

227:4 248:18 249:9

**behavior** 21:12

**believes** 44:7 186:19

**beneficial** 111:15

**benefit** 15:18 20:5 37:24  
46:12 72:17 73:17  
103:25 134:15 154:2,4,  
15 195:1,3,12

**benefits** 160:5 194:25

**bias** 150:23

**biased** 182:13

**big** 15:1,4 58:18,19 59:2,  
5 60:6 67:24 100:10,23  
113:24 116:25 118:21,23  
119:8 126:8 233:15  
294:16

**bigger** 106:25 233:18

**bill** 115:14 138:14 179:21  
242:16

**billing** 179:17

**bills** 47:25 211:11,12

**birds** 36:11

**bit** 15:11 19:19 35:3 50:8,  
11 91:1,18 97:6 98:20  
110:10 133:12 134:24  
135:2 141:10 153:9  
156:13 160:7 164:8  
170:8 179:9 182:8  
202:15 203:22 214:10  
243:10 248:1 287:15

**bite** 204:21,22

**blends** 230:19

**block** 31:20,21 77:18,19  
78:15 79:4,8 80:3,16  
131:10 146:21 167:24,25  
168:25 244:23 294:18  
295:20 298:1,2,13 299:3

**blocks** 78:14 163:2,25  
234:13

**blunt** 245:10

**bottom** 63:12 109:6  
158:4 166:14 218:25

**break** 31:20,21 84:12  
123:3 135:1 205:4  
247:16,23 248:12

**breakdown** 169:24

**breakdowns** 68:13 296:4

**breakouts** 176:24

**Brian** 9:25 84:24 85:18  
138:5 258:8,18

**bridge** 162:21

**briefly** 40:25 114:6 156:8  
176:5 271:1 273:22  
275:11

**bright** 13:4

**bring** 61:20 67:10,12  
83:3 118:7 156:12  
177:12 185:14 186:18  
222:1 283:11

**bringing** 23:16 67:15  
176:11 199:6

**brings** 14:24

**brought** 18:16 67:18  
83:1 132:21 158:18

**Brubaker** 10:1 258:19

**Bruce** 10:7 284:20 285:5

**bucket** 61:11

**bucks** 88:13,23,25

**budget** 102:10

**build** 101:15

**building** 172:25

**built** 41:2 44:9 55:7  
229:10 230:8 232:11  
293:16 294:4

**bundled** 212:7

**burden** 45:21 186:10  
279:24 280:5

**burn** 279:3

**burning** 278:20 279:8

**burns** 21:7

**business** 135:17 202:19  
205:24 277:11,13 285:4,  
6

**bypass** 101:11,15,22  
110:24 111:5,8,14,16,17,  
19 233:23

**bypassing** 211:17

---

**C**

---

**calculate** 22:12 123:1

**calculated** 92:22 109:7  
130:23 185:14 219:3  
297:25

**calculates** 216:15

**calculating** 90:3 107:15  
128:18

**calculation** 109:22  
112:10 185:25 218:8  
219:22 220:4 222:5

**calculations** 22:3,5  
89:12 111:24 112:8  
161:17

**calculator** 104:24

**call** 9:8 10:13,15 27:20  
28:11 54:10 63:18  
147:17 183:1 201:8  
205:12 224:21 226:13

229:22 248:19

**called** 20:5 27:12 28:12  
52:16 165:20 251:21,22  
270:16

**calling** 83:9 167:20

**calls** 11:10 135:7 258:7  
277:1 284:19

**Cameron** 8:20

**cap** 82:7

**capability** 229:11,13

**capacity** 26:7,9 85:21  
87:1,4,9 89:10,23 90:4,  
11 92:19 93:5,8 94:10,  
11,15,16 95:3,5,8 246:4  
261:23,24 262:2 263:2,9,  
11,23 264:1,24 265:5,9,  
10 266:2,3,5,8,14  
269:20,22 272:5

**capacity-related** 174:18  
263:15 265:3,7 268:17

**capital** 287:25

**capricious** 293:25

**caps** 202:18

**Captain** 9:22 84:20,22  
85:9,14 91:7,25 92:6,8  
98:2 123:25 124:2  
143:20 176:1 197:24  
220:13 245:23 254:3,4

**cards** 294:5

**career** 264:22

**carried** 79:1

**carries** 52:25

**case** 13:10,14,19 14:10,  
12,15 15:2,18 17:2,14,19  
18:24,25 23:7,13 28:25  
29:7 30:17,20 32:3 33:25  
35:5,25 39:10 42:2 44:21

45:11,13 46:8 50:22  
52:8,9 53:3,22 54:1  
57:10 58:1 59:14 65:2,9  
69:11 80:10 98:18 100:5  
101:2 105:7,24 106:4  
111:8 112:14 119:20,22  
120:4 121:3,24 123:18  
132:22 133:2,5,16,18  
139:22 143:14 150:2,17,  
21 151:19 152:16,17,18,  
23 153:3,22 155:3,16  
158:24 160:10,11,12,19,  
20 161:12,15 162:3,16,  
20 163:15 165:14,21,23  
166:23 170:10 171:8  
177:22 178:20 181:20  
182:11 185:13 186:13  
187:9,12 191:2,4 194:4  
198:25 201:14 203:12  
208:4,13 210:6,8,15  
215:8,9 230:1,15,18  
231:10,22 232:3,13  
235:9 236:9,11,13,19  
237:9,24 238:15 239:2  
240:10 241:23 242:6  
243:8 251:22 252:9,10  
253:8 258:21 259:4  
261:9,12 265:12 291:14,  
17 293:12 294:3,5,9  
296:10,13

**cases** 15:3 20:15,18 38:8  
108:7 152:8 153:1 177:5  
207:19,22,25 225:7  
289:19 291:6

**categories** 126:25

**causality** 251:11,14,15

**causation** 18:21 262:19  
264:17 266:11 267:6

**caused** 66:6 206:11  
251:8 259:3

**causing** 64:18,22 67:17

76:17 98:21 124:15 192:22,23 294:14	283:17 284:11,15,18,21, 24 299:16	17,21,23,24 128:1,4 138:4 139:9 142:17,19 143:2,10,13,15 169:3 192:25 229:17 235:1 242:15 244:24 274:5 298:2,13,15,18,21
<b>caveat</b> 47:17 158:15	<b>challenge</b> 173:9 193:9 194:22 204:11 292:4	<b>charged</b> 21:2,22 102:24 292:1
<b>center</b> 156:10	<b>challenges</b> 204:3	<b>charges</b> 8:7 20:24,25 21:9 47:7 49:8 70:3,5 71:2 126:2 127:16 142:16 168:3 169:20 234:12 241:6 291:25 292:17 299:3
<b>cetera</b> 40:4 113:2	<b>chance</b> 86:2 120:13 204:4 206:6 258:24 299:25	<b>chart</b> 13:24 14:2 18:3 59:7 61:5 84:1 104:5,10, 14,21 116:16,21 117:3 165:22 167:13 171:10,18 179:12
<b>Chair</b> 59:19 124:2 276:25	<b>chances</b> 72:19 128:24	<b>cheaper</b> 265:23
<b>Chairman</b> 8:4,15,24 9:10,17 10:2,8,16 11:1, 12,14,17 23:25 24:9,12, 19 28:16 49:21 59:17 63:10,15,19,22 84:12,17, 20,22 85:3 90:14,17,22 91:5,17,25 92:7 102:12 116:3,6,8,11 123:24 124:3,19 132:9,14 134:23 135:5,9,12,20 136:18,21 140:1,6,9,11 143:17,19,22 144:1,4,7, 11 145:1,7,16,20,22 146:9,12,15,17 147:10, 13,15,18,21 149:8,11 156:1,12 159:5 173:18 175:25 176:3 178:23 180:22 181:1 182:18,21 183:3,6 184:9,12 187:22 188:2,5 197:23 199:25 200:4,22,25 203:2 205:1, 4,7,13,16 207:6,9 212:21 213:1 217:18 220:9,12, 15 223:3 224:2,5 225:19, 22 226:1,4,8,11,15,20 227:25 228:3 235:15 245:22 246:13,17,21,24 247:1,5,8,11,18 248:9, 15,20,23 250:3,6 253:20, 24 254:2,5,11 257:9,13, 16,20,23 258:1,5,9,12 259:18,21 267:15,19,21, 24 268:22 269:10,13 273:16,20 276:6,9,14,17, 20,23 277:2,5 280:19,22 281:3,6,8 282:8,11,15,17	<b>change</b> 17:4 19:7 31:8, 24 32:4 39:8 45:8,20,22 57:16 58:18,19 59:13 62:25 65:11,19 66:7 70:20 72:11 78:1 81:13 104:19 106:8 108:5,10 109:23 110:3,5 112:2 119:11,13 133:20 139:19,21 141:22 163:12 164:12 166:24 168:9 171:23 172:15 186:11 195:2 196:2 210:4,9 215:7 229:12 251:5 252:19 292:15,20 293:2 298:7,25 299:1	<b>check</b> 25:25 42:21 44:2 60:20,23 73:23 103:2 113:19 133:18 221:5,8,9, 11,15 222:1 256:21,24
	<b>changed</b> 22:22 32:20 39:3,6 64:25 65:13 78:22 82:21 86:12 98:20,22 120:6 188:14 232:2 238:13 261:13	<b>Chisholm</b> 10:6 277:1,2, 10,12 281:1
	<b>changing</b> 14:4 17:2 18:2 19:5,16 22:25 100:14 109:9 120:1 170:9 199:18 214:23 292:11	<b>Chisholm's</b> 72:5
	<b>characterize</b> 54:6 104:12,19 236:6	<b>choice</b> 191:5 204:9
	<b>charge</b> 19:1 20:24 21:3, 24 22:2,5,9,11 71:9 75:6, 8,20,23 76:24 109:10 110:2,4 117:19 118:7 121:19 126:9 127:12,13,	<b>choir</b> 82:23
		<b>choose</b> 137:24 230:1
		<b>chose</b> 198:19
		<b>circulate</b> 145:12
		<b>circumstance</b> 70:19
		<b>circumstances</b> 132:22 190:9
		<b>citations</b> 152:12
		<b>cited</b> 222:14

**City** 135:24  
**claim** 152:4  
**clarification** 43:2 147:11  
156:4 157:17 185:5  
219:18  
**clarified** 159:16 164:7  
**clarify** 10:17 41:9 44:2  
63:11 97:6 160:12  
161:19 178:7 179:8  
217:24 243:9 275:14  
**clarity** 146:4  
**Clark** 8:18,19 97:15  
124:21,23 125:2 131:19  
132:1,6 135:7,15 136:1,  
15,25 137:1 139:24  
141:8,14,17,21,23 142:2  
143:24 144:4,5 145:4,8,  
19,21 146:15,16,19  
147:5,6,14 176:3 181:3,7  
182:16 200:1,3 201:1,3,6  
202:25 220:15,17,21  
223:1 224:4,6,10 225:17  
246:21 247:5,6 257:11,  
16,18 273:17,18 276:14,  
15 282:12,13,17,20  
283:14 299:6  
**class** 13:16,21,25 14:4,  
17 15:6,13,14,24 16:7,13  
17:3,4,7,10,11 18:13,19  
19:15,19,21,22 20:8  
23:11,17 29:15,21 30:17,  
24 31:2,4,6,9,14,15,16,  
19,21 34:10 35:17,22,24  
36:20 43:5 44:5,17 46:6,  
15,18,21 47:5 48:2,11,  
14,20 57:22 58:14,15,21,  
25 59:4,10 60:3,17,18  
61:10,16,19 62:5,20,25  
63:4 66:1,6,20,23,25  
67:9,12,16 68:3,19  
69:18,20 70:7,9 71:1,7,  
21 73:1,7,10,13,21 74:17  
80:22,23 81:21 84:3,5  
86:5,16,22 87:3,15,17,24  
88:1,15,16 89:22 90:9  
92:20 93:4,18 94:3,10,25  
96:1,2,5,19,20,25 98:4,5,  
6,15,22 99:2,13,18,23  
100:4,6,13,18,24 101:4,5  
104:8,16 105:11 106:10,  
16,19,21 107:20 110:25  
111:3,12,16,17,21 112:2,  
5,19,21 114:9 115:7,20,  
21 116:20 119:12 120:1,  
5,10,12,23 121:13  
122:10,11,20 123:2,8,9,  
10,15 125:8,21 126:1  
127:6 128:24 134:10,11  
139:9,22 141:1 143:15  
149:22 150:1 155:2  
158:25 162:8,10 163:2  
167:14,25 171:14,19,23,  
24 172:1,8,16,17 173:12  
175:13 176:11,16  
178:13,14 179:11,16  
185:14,16,19,21,22  
186:9,15 187:8,11 189:4,  
10 190:3,12,14 191:7,16  
192:1,10,17 193:10,14  
195:19 196:22 197:10  
198:7,8 199:1,5,13,15,17  
200:12,14 204:14 207:20  
209:2,3,20,23 211:2,15  
212:1,15 214:24 215:13  
216:16,19,20,21,24  
217:4 219:8,24 221:1,6,  
11 222:9,13 223:13  
229:22 230:7 231:19,21  
233:22,23 234:6 235:4,8  
236:2,5 237:10,12  
240:18,23 241:4,12,21,  
24 242:3 243:5,15,19  
244:16 245:12 260:10,  
17,20,22 261:15,18,19  
262:18,19 264:11,17,18  
265:8,19,23 266:14,20,  
24 267:3,4,6 269:24  
272:11 274:11,17,20,21,  
25 275:2,3,6,8 279:2,5,  
10,12 280:9,12 281:21,  
25 283:6 290:7,20,21  
291:11 292:2,6 293:7  
294:8,11,13,17,20 295:2,  
11,21,24 296:1,2,6,25  
**class's** 260:14  
**class?"and** 65:14  
**classes** 13:14 15:12,15  
20:8 23:19 30:16 58:9  
64:3,6 73:5 85:23 88:17  
89:10 99:14,15,17  
106:18 125:7 128:24  
137:16 178:9 180:1  
186:7,18 197:17 199:7  
207:22 210:14 212:16  
216:24 218:10,21 224:19  
228:25 229:14 260:12,  
14,18,19,21,25 263:16  
264:15 266:3,5,7,18,21  
268:9 269:22 271:6  
272:7,10,12 273:9,11  
279:15 286:22 290:17  
291:23,25  
**classes'** 262:5  
**classification** 156:17  
208:13  
**classifications** 228:25  
**classified** 208:17,20  
**classify** 209:7  
**classroom** 267:2,8  
**clean** 77:25 137:5 286:14  
**cleanup** 138:2  
**clear** 50:9 54:20 76:23  
79:22 160:8 176:25  
177:14 178:4 179:18

190:2 202:13 230:20 232:13 253:1	<b>collective</b> 112:21	22 161:2 163:11 169:11
<b>clearer</b> 141:10	<b>collectively</b> 146:5	173:4,9 174:3,15 175:17, 18 177:4,13 178:11
<b>CLERK</b> 90:20	<b>collects</b> 80:1 127:23	182:6 183:21 187:4
<b>client</b> 83:11	<b>Collins</b> 9:25 84:24 85:8, 18 86:1 92:22 95:10,19	193:20 194:14,18 197:8 198:19 199:11 201:10
<b>clients</b> 132:2 150:20	198:15 258:8,9,16,18	202:8 210:6,9,19 211:23
<b>clock</b> 84:15 135:2,3 205:5	260:2 267:12,17 268:4 269:9,15 274:3	212:11,15 217:7 222:18 228:18 230:11 233:14
<b>clock's</b> 135:2	<b>Collins'</b> 89:12 91:9 93:12,18 94:7,19	234:14,18 235:14 240:22 241:10,18 244:5,15
<b>close</b> 81:20 82:16 83:8 101:11,14 117:10	<b>column</b> 86:4,14,20,24 87:3,6,9 89:9,16,22 90:4, 7,10 92:11 93:3,7,11,12, 17 94:7 95:5,25 96:5 97:3	253:3,19 267:13 283:3 287:23,24 291:5 295:5 299:13
<b>closer</b> 53:14,21 67:12 109:24 113:8,16 130:12 261:20 288:6	<b>columns</b> 94:6 95:24	<b>Commission's</b> 142:2 215:22 218:10 220:2 244:1,10
<b>closure</b> 156:13	<b>combination</b> 244:9 270:12	<b>Commissioner</b> 97:15 124:21,23 125:2 131:19 132:1,6,9,10 144:1,2,4,5 146:15,16,19 147:6
<b>cluster</b> 290:20	<b>combined</b> 283:22,23	181:3,7 182:16,18,19 201:1,3,6 202:25 203:2,5 204:24 224:6,10 225:17, 19,20 247:2,3,5,6
<b>CO2</b> 138:1	<b>Combining</b> 23:15	257:16,18,20,21 276:10, 12,14,15 282:17,20 283:14 284:12,14
<b>Code</b> 222:14,15	<b>comfortable</b> 57:1 223:20	<b>commissioners</b> 91:24 184:23 260:7
<b>coincidence</b> 232:3	<b>commencing</b> 29:4 37:3,5 38:7	<b>commissions</b> 150:5 288:17
<b>coincident</b> 85:22 270:10, 22 272:3,11	<b>comment</b> 11:1 47:19	<b>commit</b> 82:12 229:19
<b>coincidental</b> 270:18	<b>comments</b> 155:21	<b>committed</b> 81:12
<b>Coincidentally</b> 294:25	<b>Commerce</b> 205:25	<b>commodity</b> 70:25 72:11 76:20 77:8,12 115:18 179:19 180:9 208:20 260:23 262:23 283:20,23 284:2,5
<b>cold</b> 229:24 264:2	<b>commercial</b> 16:7 155:13 185:20	<b>common</b> 39:4
<b>collaborating</b> 67:6	<b>commission</b> 8:5 20:17 23:13 29:7 34:5 37:8 38:9,18,22 39:8 44:21 45:2 82:24 85:2,7 125:10 129:15 132:16 139:25 141:8,10 146:10,13 148:16 150:14,22 152:20,24 153:19,23 155:25 158:22 160:4,18,	
<b>collaborative</b> 14:18 15:7 16:17,19 31:23 81:5 105:17 194:9		
<b>collapse</b> 190:18		
<b>collect</b> 47:14 79:13 128:5 162:15		
<b>collected</b> 143:2 170:12, 15		
<b>collecting</b> 79:12 80:4		

**commonly** 209:9 261:8  
270:8 275:18

**communicated** 231:8

**companies** 118:22,23  
119:17 132:21 150:5  
155:8 279:5

**company** 8:22 15:2  
16:18 18:16,19 21:24  
22:15,20 25:7 27:17  
28:24 32:22,25 35:5,11  
36:23 38:8 39:10 40:15  
41:7 43:5 44:6 45:24  
46:16 47:25 48:5 51:8,  
11,24 53:9,22 54:7,20,24  
55:11 56:22 76:14 80:22,  
25 85:20 87:23 108:3  
114:13 118:18,25 131:17  
135:7 136:15 138:6,8  
143:5 144:17 160:18  
161:6,22 162:15 167:22  
168:7 172:24 173:7  
175:22 176:16 177:22  
178:8,10 184:25 185:3,  
12,24 186:10,14 187:3,4,  
6 188:18 189:9 190:15  
191:2 192:25 194:15,23,  
24 196:5,7 197:4 201:17  
202:2,14,19 210:7  
224:16 233:14 236:13,  
19,22 237:4,10 238:2  
242:10,19 243:1 251:1,5  
255:24 261:2,5,10,23  
265:3 266:4 281:16  
291:9,21 293:24 295:24  
296:8,15 298:10

**company's** 19:25 23:10,  
15 32:8 39:6 45:12,25  
47:21 48:2,24 55:19 62:4  
90:6 93:11,16 94:5  
130:12 137:6 138:21  
145:10 160:13 162:3,5  
174:25 175:7 177:9

186:17 198:12 202:3  
211:10 236:14,19 238:21  
242:24 243:13 260:20  
261:17 266:25 274:14  
287:17,24 288:11 293:13  
294:3,21 297:3 298:21  
299:2

**company-owned** 82:5  
187:2

**comparable** 177:11

**comparatively** 117:2

**compare** 83:16 86:7,18  
167:4 168:16

**compared** 16:12 54:15  
67:24 89:6 95:8 179:25  
186:2 256:19 265:10,15

**comparing** 96:8 130:16,  
18 133:25

**comparison** 89:8 168:21

**comparisons** 106:3

**compelling** 153:24  
181:24 290:16

**compensated** 103:22

**competition** 18:17 19:10  
70:12,18 196:19 245:5,9  
278:10

**competition's** 197:2

**competitive** 245:10,14  
253:4,9

**complete** 187:5

**completed** 28:25 188:17

**completely** 21:8 31:5  
62:24 72:20 89:4,5  
106:8,9 118:24 123:21  
170:24 245:6 299:23,24

**complexity** 30:15

**component** 18:22 26:11  
41:6 44:3 51:14 152:21  
172:22 177:5 179:19  
209:1 230:23 232:18,24  
261:10 264:25 275:25

**components** 22:21 41:14  
228:24

**composite** 261:11

**composition** 212:2 293:8

**compression** 50:14

**compressor** 228:21

**compressors** 261:6  
263:6

**comprise** 228:22

**comprised** 113:1

**compromise** 130:18  
272:2

**compromised** 175:1

**computed** 74:21

**Conceivably** 118:13

**concept** 176:11 203:9

**concern** 98:14,17 193:5  
212:9 223:10 266:23

**concerned** 62:5 73:18  
77:11 80:22 81:1,3,4  
123:11 244:5,10 275:2  
278:10

**concerns** 78:11 137:12  
138:9 190:23 194:1  
236:20 244:14 266:18  
290:3

**conclude** 30:2 286:12

**concludes** 23:21 49:20  
132:7 139:23 155:21  
159:3 182:16 187:18  
235:11 267:10

**conclusion** 57:7 101:25  
203:11 231:10 291:2,25

**concur** 231:13

**condition** 154:1,14 197:7

**conditions** 154:4,9  
174:19 269:23

**conducted** 235:10

**conferred** 145:10

**confidence** 194:8

**confident** 233:18

**confidential** 11:2,5 63:13

**confirm** 10:21 176:10

**conflicting** 186:12 235:6

**conform** 174:3

**confused** 21:4 160:7

**connect** 275:7

**connecting** 211:17

**connection** 32:23 147:3  
206:5

**connects** 242:24

**cons** 203:8

**consensus** 145:13,24

**consequence** 149:24  
197:7

**consequences** 202:10  
203:15

**consideration** 151:18  
154:5,21 155:17 172:22  
182:13 244:1 255:9  
262:5 272:25 297:17

**considerations** 160:21  
286:1,15

**considered** 64:10,14  
71:11 122:11 137:18

153:9 157:2 158:17,21  
262:24 272:8 289:25

**consistency** 37:25  
138:25

**consistent** 14:7 18:8,21  
36:4,18 69:25 104:15  
105:3,10 129:6,7,10  
146:22,24 153:18 154:11  
155:6,15 157:3 160:2,4  
164:2,5 215:22 218:10  
220:2 223:19 273:9  
286:16 291:2

**consistently** 20:14 53:9,  
17 229:6 289:18

**consisting** 277:17,20  
285:10,14,17

**constantly** 14:5 18:2  
100:16 120:1 293:7

**constituencies** 150:19

**constraint** 26:10

**construct** 233:16

**constructed** 229:24  
230:6 263:18

**construction** 153:21  
159:19,23 174:11

**consultant** 148:2 173:5  
183:13 227:3 249:7

**Consulting** 185:7 249:8

**consume** 81:3

**consumed** 81:3 231:1

**Consumer** 9:14 206:3  
238:3

**consumption** 212:4

**contained** 148:25 277:24

**contemplated** 42:10

**contemplation** 46:22

**contend** 233:15

**contents** 136:12

**contested** 208:12 210:15

**context** 114:1 150:25  
157:19 178:19

**continue** 92:1 100:4  
105:6 137:23 292:21

**continues** 105:12

**continuing** 158:6 242:20

**contract** 19:14 21:1,19  
71:25 115:3 163:4 168:3  
169:3 195:25 219:2,9,12,  
13,14 229:16 235:2  
252:14

**contracted** 39:21 114:23  
206:2

**contracts** 114:24 115:4,8  
143:7 250:22

**contractually** 229:20

**contractual** 164:1

**contrast** 115:18 229:19  
231:15 265:22

**contrasted** 128:10

**contributing** 47:12 67:11  
73:3 116:1

**contributions** 263:7

**conversation** 132:2

**conveyed** 255:11

**conviction** 201:15

**convinced** 121:6 122:4  
212:13

**Copies** 91:15

**copy** 85:10 91:23 167:8,  
13,16 214:3 216:6 217:6,  
18 268:23 269:11

**correct** 12:4,13 25:9,10,  
16,18,19 27:11,17 29:8,  
9,17,18,25 30:1,2,6 32:6,  
18,19 34:3,4,20,21 37:16  
38:12 39:1,20,25 40:20  
42:1 44:23,24 50:16  
51:9,13 52:1,4,5,22  
54:23 56:15 61:18 62:6,  
12,15,16 68:8,9 73:2,15  
74:4,5 75:10,15 86:6,8,  
22,23 87:4,16,19 89:11,  
24 93:6,14 99:21 102:5  
103:7 106:13 107:5,7  
108:8,16 112:23 115:17  
117:12 118:5,12 129:19  
147:1 148:20 157:23  
158:1,8 159:1 160:1  
161:4,18 162:10 163:5  
164:1,2 165:18,19,25  
167:4,22 168:1,25  
169:14 170:12 171:14,21  
172:2,9,18 176:12  
189:13,16,18 190:8  
191:24 196:25 197:2  
199:5 201:24 202:4  
206:20 213:14,15,18,19,  
24 214:1 215:24 216:12,  
22 221:3,4 222:15  
223:23 227:6,13 229:8  
237:18 239:7 240:6,7  
242:5 244:22,25 245:7  
246:11 249:10 255:3,8  
256:3,8 258:23 268:10,  
13,18 270:15 271:10  
272:21,22 273:2,12,13  
281:17,18

**correcting** 107:6

**correction** 69:6

**corrections** 12:14 139:4  
148:21 183:24 206:22  
259:9 278:2,4 285:23  
287:4,6

**correctly** 73:15,16 77:17  
93:13 95:20 111:10  
176:21 236:6 269:25  
274:9

**correspond** 166:3,14

**corresponds** 166:6,9  
230:25

**COS** 286:24

**cost** 13:2,8,13,16,17  
14:16,25 16:18 17:13,20  
18:13,21,22 19:5 23:11,  
17 25:12 30:18,22 33:20  
34:15 35:1,3 36:20 38:24  
39:22 40:19 43:6 44:8,22  
51:22 57:21,22,25 58:3,6  
59:3 62:5 65:6,7,8,22  
66:1,3 67:13 72:13,14  
73:4,18 74:17 76:15 81:2  
83:3 86:5,15,16,21,25  
87:10,18,23 88:2,19  
89:11 92:20 96:15 98:1  
105:24 106:22,25 108:24  
111:14,23 117:15 120:10  
125:6,11,18 126:9 127:5  
137:17 138:19,24  
144:15,22 149:22 150:1,  
3,11,13 151:9 153:10  
154:23 156:17,25 157:1  
159:14 160:6 162:18,23  
168:15 170:1,12,15,22  
172:8,12,17,18,23 174:9  
175:3 176:12,17 177:15  
179:16,25 180:9,14,17  
185:15,25 186:5,14,18  
188:19 190:5,7 191:16  
199:1,7,8,12,16,18  
201:13,17 206:7 208:6,8,  
9,18,22 209:2 215:13  
223:12,17,18 225:6  
228:14,16,18 230:5,10  
231:6,19 232:23 233:8  
235:6 236:3,14,20,23,24

237:3,6,11,21 238:4  
239:5,12,13 240:10,13  
241:14,16 242:15,24,25  
243:19 244:4,7 250:18,  
21 251:3,11,14,15,16,24  
252:10,23 253:9 260:9,  
10,11,15,16,20,22,24,25  
261:16,17,18 262:3,10,  
11,12,14,18,19 264:11,  
14,17,23 265:2,9,10,14,  
17,19,22,23 266:2,4,8,11  
267:5,6 268:7,18 272:12  
274:6,13,23 275:3,6,7,8  
278:21 279:6,17 280:10,  
11,12,13 282:23 283:5,9  
284:5 286:21 287:18,25  
288:23 289:10,11,15  
290:2,5,22,24,25 291:23  
292:2 293:13,16,19  
294:21 295:1,13 298:22,  
25 299:3,5

**cost-based** 18:21 22:2,4,  
11 127:24 233:22

**costs** 16:14 19:18 20:1  
21:1,21 22:4 25:12  
31:10,11,15 34:18,19,23,  
25 35:22 36:10 37:9,18  
38:10 39:11,24 40:9  
41:17 42:1,3,5,7,13  
44:12,17 45:14,15 46:15,  
18,20,23,25 47:11,12,13  
50:13,18 51:3,4,6,11,15  
53:11 54:17,18,21 65:16  
66:10 67:1 76:13,17,18  
87:7 88:15 90:8 94:2  
107:14,25 111:10 112:1  
115:8 116:1 127:23,24  
134:18 155:12 159:23  
161:14 162:13,15,22  
163:5,21 165:24 166:25  
168:22 169:13,18 171:12  
187:15 208:14,15,21  
209:1,12,20,23 210:2,5



214:12,18,21,24 215:11,  
21 217:4 219:24 220:2  
223:14 224:12 228:22  
230:3 232:8,9,19 233:1,  
3,5 242:9,12 246:5  
250:20 251:1,7,17 252:1,  
15 260:21 261:2,5,22,24  
262:20,25 263:15 264:13  
265:3,4,7,11 266:7,21  
267:7 269:21,22,24  
270:20 271:6 272:4,5,8,  
13 273:7,10 274:16  
278:12 280:8 283:20,22,  
23 284:1,2 293:6 298:19

**Council** 10:5

**counsel** 8:19,20 9:5  
131:20 132:3

**counter** 299:4

**country** 293:7,9

**couple** 32:9 58:10  
106:15 116:12 140:12  
156:3 157:17 200:5  
220:17 245:18,25 254:6  
264:24 272:15 285:23  
286:1,15

**coupled** 275:24

**court** 90:20 217:19  
269:11

**Courtesy** 91:23

**cover** 138:16

**covered** 29:2,11 70:16  
93:22 280:10

**covering** 13:5 65:16 66:9  
67:1 111:10

**create** 109:1 148:15  
183:20

**created** 108:22 259:3

**credible** 177:1

**credit** 103:17 231:12

**crept** 147:2

**criteria** 150:12

**criterion** 262:22

**critical** 58:13

**cross** 84:21 155:24  
187:21 217:15,16,22,25  
269:2,3

**cross-examination**  
23:24 24:22 28:19 50:1  
59:21 84:14 85:13 91:3,  
14,19 92:1 125:1 132:13  
139:25 140:15 144:10  
156:6 159:10 173:23  
176:7 181:6 188:9 198:3  
200:1 201:5 203:4  
212:20 213:4,9 220:20  
224:9 235:14,21 246:2  
253:19 254:8 267:14  
268:2 281:2,10 282:19  
283:16

**crunch** 169:8

**current** 33:18 138:22  
158:7,21 169:15 174:3  
186:3 222:3 242:8,9  
274:11,21 279:14 281:19  
282:25 283:2 291:19

**Curtis** 10:6 277:1,12

**curve** 236:23 239:12

**curves** 238:4 240:10,13  
243:1

**customer** 15:25 16:12,13  
25:13 30:3,24 44:7 46:4,  
5,10,13 48:2 58:8 60:11,  
17,24,25 61:15,16 62:14,  
21 63:7 64:5,18,21 69:12  
70:25 71:5,6,19 72:21  
74:10,13,15 76:17 84:8  
85:22 88:22,24 89:13

95:19,22 101:1,13,15  
102:9 103:9,11 106:5  
111:12 113:5,7 117:5  
121:14 122:14 126:3,10,  
22 127:7 134:3 137:21,  
24 138:16 140:20 151:2  
154:14,20 161:23 167:14  
177:7 179:14,16,20  
185:14 186:15,18 191:11  
199:6 201:18 207:20,22  
209:3,20 210:14 211:4,  
24 212:1,8,15 218:9,17,  
18,20 219:15,19 233:10  
235:4 239:7,14 240:13  
242:25 251:13,23 252:2  
260:12,19,21 262:5  
263:4,15 264:15,25  
266:5,18 268:9 269:22,  
24 272:7 273:8,11  
274:24 275:24 278:19  
283:25 290:14,19 292:1,  
16 293:7 295:16,20  
296:5

**customer's** 30:22 137:13

**customers** 14:3 17:6,7,8,  
10 18:6,14,19 19:2,12,13  
20:2,3,24 21:2,4,14,18,  
20,22 22:10,15,20 23:4  
25:3,9 26:1,3,6 27:10,14,  
20,24 28:7,9 29:16 31:12  
32:11,16 33:19 34:2,8,9,  
19 38:6,10,23 39:3,12,  
13,14,16,17,18 40:9,16,  
17,18 41:5,16,24 43:6  
44:13,22 45:9,14,16  
47:8,14 48:1,17,22 49:3,  
17 51:18 53:15,20 54:18,  
19,22,25 55:7,12,14  
56:24 57:2 58:5,14,23,25  
59:8,9 60:1,7,8,9,14  
61:10,19 62:22 64:11  
65:15 66:9,18 67:3,10,  
16,19,20 68:20 69:20,23,

25 70:8,19,23 71:18  
72:3,15 73:5 74:3 76:9,  
10,19 77:7,10 78:17  
81:21 82:9 83:4,25 84:1,  
6 89:4,6 96:10,16,20  
98:7,14,21 99:3,4,7,12,  
13,15,17,23 100:6,7,11,  
12,15,16,22,23,25  
101:10,11,19,20 102:1,  
21,24 103:4,14,16,18,20,  
24 104:16 105:11 106:23  
107:1,4 108:23 109:16  
110:13,24 111:2,5,8,13,  
19 113:1,3,11,12,15,17,  
25 114:8 115:7,10,11,12,  
13,14,16,23,25 116:18  
117:7,11,23 118:9,25  
119:1 121:10,19 123:11,  
15 124:10,11 125:7,20  
126:4,11,15,16,18,20  
127:11,16,25 128:21  
130:8 131:2 132:18  
133:4,6 134:12,14  
137:10,20 138:10,14  
139:1 142:18 150:24  
154:2,7,15 155:2,3,6,10,  
13 158:25 159:14,24  
160:3,15 161:15 162:9,  
13 163:4,25 168:22  
169:14,20 170:12,16  
172:21 174:17 178:19  
180:8 182:3 185:16,18,  
19,20 186:1,2,4,6,9,13  
187:14,16 188:15,18,23  
189:3,5 190:3,4,11,13,15  
191:8,17,22 192:1,4,8,  
10,14,20 193:12,14,18  
195:2,11,15,17,23  
196:23 198:6,7,8,18,19  
199:15,18 200:11,13  
204:5,8,14,16,18 210:3,5  
211:8,15,19,21 212:4,7,  
17 214:13,19,22 215:12,  
22 216:16,20,23 229:15,

19,21 230:9 231:1 232:7,  
9,12,14,20,21,22,24  
233:2,4,12 235:7,9  
236:4,16,21,24 237:6,17  
238:4 239:14 240:3,10,  
19,24 241:18 242:1,2,14,  
18 243:5,14 244:6,21,22  
245:10,12,16 251:18,19  
252:7,13,25 253:10  
255:11 256:6,10,17  
262:13,15 263:10,19,20  
264:7 265:4,8,13 271:6,7  
272:12,14 273:11 274:4,  
6 275:1 278:18,22 279:2,  
8,10,22 280:10 281:16,  
20,23 282:21 283:19,21  
288:3,18,20,25 289:12,  
14,15,16,20 290:1,6,10,  
11,15,19 291:3 292:6,8,  
17,19,22,25 293:14  
294:6,7,10,12,16,20,23  
295:10 296:19,24,25  
297:2,4,11,13,14 298:2,  
3,4,13,19

**customers'** 113:20  
163:22 211:11,12 251:8  
263:7

**cut** 47:2,3

**cuts** 287:24

**cutting** 290:8

---

**D**

---

**daily** 27:18 48:1,22  
128:20,21 137:15,22  
264:7

**dampen** 125:13,14

**Daniel** 9:16 34:17 36:3  
205:12,13,20,24 207:14  
212:19,23 220:24 223:9  
224:6,7 225:25

**Daniel's** 36:15 37:8  
107:12,16 108:9

**data** 14:8 15:8 17:12,15,  
18,21,23 18:1,2,8 30:21  
32:22 48:2 57:12 59:13  
62:8,9,18 63:1,3 64:7  
66:8 68:23 81:15 90:21  
98:25 99:9 105:19,20,23,  
25 108:21,25 109:1,3  
123:1,18 124:16 130:19,  
21,22 152:6 154:20  
155:15 161:9 166:21  
169:8 176:25 177:21,23  
178:9,13,18 185:4,24  
188:17 189:12 193:2,3,8  
194:23 198:5 215:25  
216:4,7 217:23 218:1  
219:7 236:13 237:14  
239:3,18,20,25 240:1  
242:7 256:16 286:23  
289:7 296:9 297:24

**date** 160:13 229:4 245:12

**day** 19:18 20:1 21:19  
25:7,12,14,21,22 26:2  
27:1,3,7 38:11,24 41:12  
42:3,6,11,14 43:7,24  
45:13,15 47:19,20,22  
48:7,9,14,16,25 49:4,5,9,  
13,17 50:25 52:3,20  
54:17,18,21 55:6,11  
68:25 86:4,10,22 87:1,4  
89:10,23,24 90:4 92:19  
93:23 94:2,11,12,17  
95:4,9,20,23 96:6,23  
128:9,10,12,18,19,24  
129:1,2,3,4,8,10,17,18,  
21 134:18 151:12,14  
153:25 154:8,10,13,20  
159:20,24 160:16,23  
161:4,14 162:3 165:23  
166:10,25 168:15,22  
169:13,18 171:9,10,12  
172:25 177:21,23 178:9,

14,18 198:15 208:19  
209:8,13,17 215:11  
218:8 219:1,9,24 229:3,  
7,9,25 230:3,4,6,8 232:8,  
9,12,15 233:1,3,17  
247:17 248:2 261:10  
262:6,7,12 263:4,7,10,  
12,13,14,18,21,23 264:6,  
7,10,12,15,23 265:6,15,  
18,20,25 266:3,9,13,15,  
19 274:18 275:9,21,24  
286:7 289:23 299:8

**day's** 85:22

**day/throughput** 40:5,8  
41:4,21 43:3 47:15 156:9  
208:11

**days** 55:4 263:24 264:1,  
3,4

**deadlines** 279:24

**deal** 15:1,4 59:12 85:6  
100:23 123:22 131:23  
167:11

**dealing** 89:3 196:21  
279:19 283:23

**deals** 293:7

**dealt** 296:4

**debate** 146:7

**decade** 14:2 17:6 18:4  
134:14

**December** 139:18 206:17  
285:13

**decide** 58:15,23,25 115:5

**decided** 20:17

**decides** 197:8

**decision** 14:19 19:13  
71:19 100:17 234:16

**decision-maker** 181:20,  
25

**decisions** 22:18,23  
82:11 176:23 177:1

**decline** 239:13

**declining** 107:21 236:24  
237:6 238:3 242:25

**decrease** 19:1 79:24  
109:10,25 170:15 171:19  
179:13 193:12 210:18  
274:17,19 298:1

**decreased** 221:16

**decreases** 209:1

**decreasing** 211:12

**deemed** 50:19

**deep** 16:17 177:9

**deeper** 182:12

**default** 241:11

**defend** 244:13

**defensible** 129:19

**defer** 182:11

**deferred** 163:15

**deferring** 234:16

**defined** 176:13

**defines** 268:16

**defining** 236:3

**definition** 147:8 270:14

**degree** 46:24 171:2

**dekatherm** 13:23 16:23  
23:18 32:15 33:25 34:6  
58:11 75:9 87:22 88:9,20  
103:4 107:17 121:6  
122:5,7,25 139:10 141:1  
169:3 192:19 200:14  
212:12 221:7,12 222:2,8  
235:1 239:13 243:14

**dekatherms** 15:25 16:5  
31:22 60:2 61:1,2 68:15  
74:3 81:16,21 117:5  
122:9 123:7 140:20  
155:4 186:2 195:19  
212:5 240:4 256:7,8,23  
257:3 286:19 289:1,17

**delay** 91:18 211:3

**delineation** 54:9

**deliver** 264:1

**deliverability** 229:9,23  
230:8

**delivered** 218:2 263:23

**deliveries** 154:3

**delivery** 229:11

**demand** 16:7 22:25  
39:11,24 43:8 44:17  
46:14,17,20,23,25 47:7  
54:21,25 55:6 64:11 70:3  
71:2,8 74:25 75:6,8,19,  
20,23 76:4,24 85:22  
86:10,22 89:10,23,24  
94:12,17 95:9,23 96:7,9,  
23 107:22 114:21  
117:15,19,20 121:10,18  
127:13 133:3,23 134:6  
142:19 152:21 153:17  
159:14,20 160:3,14  
161:23,24 163:4,23  
164:1 166:16 168:3,22  
169:3 172:5 208:19,23  
209:8,13,14,17 213:10,  
13 214:11,12 215:11  
217:3 219:2,9,12,13,14,  
16,20 229:1,2,7,8,17,20  
230:6,13,16,19 231:11  
234:11,25 235:2 241:5  
246:4 263:8,13,14,18,21  
264:6,10,12,16,23 265:6,  
15,18,20,25 266:6,9,13,  
15,19 268:17 269:20,21

270:8,10,19,20,22,25 271:5,25 272:3,4,24 273:6,10 274:18 275:9, 24	38:11,24 40:4,8 41:4,12, 21 42:3,5,6,10,14 43:3,7, 24 45:1,13,15 47:15,22 48:25 49:3,5,9,13 50:25 51:5 52:3,20 54:17,18,21 55:3,5,6,11 59:3 68:25 69:22 71:15 78:11 81:2 85:22 86:4,10,22 87:1,4 89:10,23,24 90:4 92:19 93:22 94:2,12,16 95:4,8, 20,23 96:6,22 105:15 106:2,18 120:14 127:14 128:6,9 129:1,3,4,10,18, 21 131:5 134:18 146:21 149:23 150:1,11,14 151:12 153:25 154:10, 13,24 155:12 156:8 157:16 159:20,24 160:13 161:14 162:3,19,24 165:23 166:10,25 168:15,21 169:6,13,18 170:2,24 171:9,10,12 172:25 173:7 175:21 177:8,16 178:18 198:14 206:8 208:11 209:7,13, 17 211:1,4,6 212:10 214:10 218:8 228:15 229:3,7,9,25 230:4,6,8 232:12,15 233:17,21 234:5,7,15,19 255:9 261:10 262:6,21 263:7, 10,14,18,21 264:5,10,12, 15,23 265:6,15,18,20,25 266:2,6,9,13,15,19 268:16 269:7 274:18 275:9,21,24 286:7 287:19 289:23 291:19 292:4,25	<b>designs</b> 85:21 234:13 <b>desire</b> 245:17 <b>detail</b> 43:13 203:7 297:23 <b>detailed</b> 48:16 186:21,25 187:5 <b>details</b> 17:1 26:15 <b>determination</b> 262:4 <b>determinations</b> 293:11 <b>determine</b> 28:2 48:5,8,9 88:1 114:22,24 218:16 234:15 252:24 262:2 263:1 267:3 <b>determined</b> 49:10,11,12 223:15 260:10 <b>DEU</b> 12:5,11 22:3 24:4,5, 7,14 25:20 43:16 45:2 78:13 94:1 117:18 136:9, 16,23 149:22 150:9 151:8,10,12,13,18 153:4, 13,25 154:8,13,16,19,23, 24 155:14 163:16 164:3, 9 165:7 169:6,9,10,12 174:10 208:4,17 209:20, 21 210:3 211:1,3,5,19, 22,24 212:2,15 215:20 220:25 224:22 286:7 289:7,24 294:23 <b>DEU's</b> 153:5 155:8 163:7 164:11 169:22 208:6,7 210:6,10 211:13,17 212:9,11 286:23 289:10 295:12 <b>devastating</b> 250:25 <b>develop</b> 129:16 154:19 161:4 252:25 <b>developed</b> 154:18 160:11 161:10,11 174:10 243:1 289:9
---	--	--

**developing** 128:11  
177:22 251:7

**devoid** 255:2

**devoted** 126:4

**dictates** 262:7,9

**difference** 46:3 73:6  
74:18 88:14 94:9 100:10  
113:24 116:23 118:23  
126:7,23 130:3 179:15,  
23 233:5 298:20

**differences** 16:7 20:2  
64:11 87:6 290:14

**differential** 121:18

**differentials** 78:13 79:25

**differentiate** 233:7

**differing** 170:23

**difficult** 91:18 192:11  
193:2 194:6

**diminished** 125:22

**direct** 11:19 12:2,7,22  
13:7,24 14:1 18:3 24:4  
29:3 30:7,15 32:13 33:15  
38:7,15,16 52:16 59:8  
65:17 85:17,25 86:11  
89:18 92:25 95:16,25  
104:6 122:22 125:4  
129:16 135:14 136:8  
147:23 148:17,18 149:5  
161:16 165:3 166:15  
167:10 183:8,21 184:7  
187:4 205:18 206:14  
211:20 213:11 214:3,7  
215:10 226:22 227:8  
234:20 236:19 238:12  
249:1,12 251:11 252:1  
258:14 259:5 260:8  
267:1 268:6 269:18  
275:5 277:8,16 285:1,10  
286:10,12 296:22

**directed** 38:22 61:23  
62:13 153:19 155:14

**direction** 31:7 38:9  
146:10 174:15 192:3  
194:17 277:16 295:25  
296:7

**directive** 299:13

**directly** 102:8 150:21  
196:10 211:17 289:7  
299:4

**disadvantage** 91:13

**disagree** 190:3

**disallow** 212:11

**discission** 47:23

**discontinued** 138:8

**discordant** 236:3

**discount** 37:14 211:19,  
22 220:25 222:23  
223:16,21 224:11,13,17

**discount's** 223:24

**discounted** 211:24

**discounting** 222:13

**discounts** 37:20,22

**discovery** 15:17,20  
17:21 18:24 23:8 32:2,5  
122:25 161:5,11 237:4  
238:2,6,9

**discriminatory** 294:1

**discuss** 29:21 31:24  
34:17 156:8

**discussed** 19:19 20:25  
21:11 22:7 29:16,24 31:3  
40:5 49:8 50:8 127:19  
142:15 160:21 161:6  
181:9 236:12,17 261:22  
290:5 293:20 298:8

**discusses** 40:25

**discussing** 16:15 92:10  
93:3 125:5 159:13  
197:15 224:12 239:9

**discussion** 40:2 47:24  
50:10 108:19 156:10  
199:14

**discussions** 16:21,22  
185:3

**dispute** 13:15 34:22  
263:17

**disruption** 78:16 235:9  
240:19

**disruptive** 134:25

**dissuade** 245:1

**distinct** 233:6

**distinction** 44:19,20 45:9  
216:17

**distinguish** 20:8 114:3  
130:2 219:11

**distinguished** 47:20

**distinguishes** 20:1

**distinguishing** 19:20,22  
25:11 46:3 134:16

**distinguishment** 134:19

**distribute** 51:15

**distribution** 8:7 25:18  
76:8 85:21 139:8 154:25  
179:19,25 180:8 208:15  
210:11 228:23 260:24  
261:25 262:1 263:22  
264:5 267:7 268:8,15,17  
269:7,19 270:9

**districts** 72:9 195:5,9  
197:18

**dive** 16:17 177:10

**diversity** 182:2,3 296:2,  
23 297:9  
**divided** 42:14 86:21  
237:12  
**division** 9:4,7 27:18 35:6  
62:4 82:24 130:9 147:16  
148:8 149:22 150:20,23  
158:13 165:16,17 168:11  
172:24 173:5,6 177:11  
182:25 183:13,16 184:23  
185:2,6,10 186:17 187:3,  
9,13 189:10 194:19  
196:14 199:4,6,20  
203:14,17,25 231:15,22,  
25 237:22 256:20 289:8  
295:3  
**Division's** 68:16 213:17  
215:8 288:6  
**DNG** 25:12 73:18 76:8,  
11,12,15 77:7  
**docket** 8:5,9 20:25 21:25  
39:2 49:8 51:25 55:6  
57:8,9 66:17 84:25 136:8  
137:3,8 139:18,22 148:9,  
12 171:3 173:14 183:18,  
22 210:7 213:7 215:23  
217:7 218:11 220:3  
227:6 234:10,17 241:7,  
11  
**dockets** 49:7  
**document** 108:13,21  
218:3,5 296:23  
**documents** 136:13  
206:6,23  
**dollars** 66:5 102:7  
**Dominion** 8:6,17,19,21  
11:8,10,24 12:1 69:7  
101:13 102:13 118:19,  
21,22,23,24 119:4,7  
136:3,5 145:3 157:20

159:18 229:5 230:15  
231:3,13,17,21 232:12  
233:15 239:12 280:9  
**Dominion's** 135:6  
240:12 278:25  
**double** 87:20 88:7  
133:18  
**doubt** 201:19  
**Douglas** 9:6 183:2,12  
184:8  
**down** 22:1 31:22 35:6  
61:20 62:17 65:3,10,20  
67:8 82:20 83:3 107:22  
109:19,24 117:6 118:7  
134:11 165:22 166:1  
167:12 168:2 171:10  
182:6 218:25 244:24  
245:4,8 278:17 283:11  
294:13  
**DPU** 148:19 149:13  
155:1 158:10 165:2  
184:14 209:6,9,11  
286:23  
**DPU's** 209:14  
**drafted** 287:15  
**drag** 82:15,17 83:9 194:5  
**dragging** 294:13  
**dramatically** 70:21  
**draws** 238:1  
**drill** 115:6  
**drilling** 22:19,22 23:3  
82:12 115:9  
**Drive** 285:6  
**driver** 170:2 251:14,15  
284:6  
**driving** 150:10 251:20

**drop** 79:5 252:20  
**dropped** 70:21  
**Dth** 168:3  
**due** 30:15 72:10 75:11  
77:7,8 138:8 211:4  
**duplicated** 93:17  
**duplicative** 280:13

---

**E**

---

**E-QUANT** 249:8  
**earlier** 16:25 45:7 47:17  
100:3 108:17 117:17  
142:15 161:9 164:21  
177:18 213:25 256:16  
291:8  
**early** 81:18  
**earning** 294:12  
**easiest** 165:1  
**easily** 48:10 105:10  
106:10  
**East** 118:24  
**easy** 17:22 65:13 81:14  
120:17 191:14 193:19  
**economic** 100:17 233:14  
**economical** 278:22  
**economically** 253:5  
**economics** 101:14  
107:21  
**economist** 292:19  
**edits** 183:24  
**effect** 37:14 56:9,13,20  
59:5 74:23 125:22 128:3  
200:11 231:18 252:16  
256:1

**effective** 279:18  
**effectively** 233:4  
**effects** 170:9 200:16  
250:25 292:22  
**effort** 31:24 169:18  
186:17  
**elect** 288:10  
**elected** 245:11,13  
**election** 81:25 204:7  
**electronic** 43:15,17  
85:11  
**element** 201:18 287:18  
**eliminate** 30:18 31:5  
208:1,5,7 210:21 295:14  
**eliminated** 30:20 287:14  
**eliminates** 233:4  
**eliminating** 210:12 212:6  
**embedded** 242:9  
**embracing** 37:8  
**emphasis** 63:21,22,23  
**empirical** 151:22 181:21  
**employ** 154:8 164:4  
**employed** 136:2 150:13  
151:10,25 152:20 153:1  
161:21 206:2,3  
**employee** 137:14 144:19  
**employees** 279:20  
**employment** 183:16  
**enables** 196:23  
**Enbridge** 83:6  
**encountered** 48:6  
**end** 36:7,19 58:14 60:16,  
24 72:1 123:10 145:14  
234:6 247:16 248:2

**ends** 163:11  
**energy** 8:6,19,21 10:11  
11:10,24 12:1 53:17  
101:13 119:4,7 136:3,5  
227:3 249:6 250:18,20  
**engage** 197:5 262:1  
**engaged** 31:23 194:3  
**engaging** 281:19  
**enjoyed** 154:2  
**enjoying** 191:8  
**ensure** 55:7 233:16  
264:8  
**enter** 115:4 149:5 184:6  
259:15  
**entered** 24:1 25:5 257:1  
**entering** 71:24  
**entertaining** 13:4  
**entire** 60:17 288:11  
**entirety** 201:12 240:23  
**enumerated** 118:16  
**envision** 105:17  
**equal** 78:16,20 79:17  
126:17 131:12 146:22  
210:24 234:24 235:1  
242:14  
**equally** 231:17  
**equipment** 27:25 50:15  
261:6 263:6  
**equitable** 150:15 292:6  
**equivocal** 201:8  
**error** 147:1  
**essence** 223:12  
**essential** 118:17  
**essentially** 27:1 158:18

177:25 241:4 279:11  
280:14 287:20 291:4  
**establish** 108:1 223:11  
**established** 150:16  
168:7 225:7  
**establishing** 45:23  
**estimate** 34:8,11 48:25  
49:4,5,6 128:23 282:1,21  
283:7  
**estimates** 128:15 154:10  
178:13,17  
**evaluated** 203:18,19  
**evenly** 74:13 155:20  
187:17  
**event** 26:18 49:1  
**events** 26:13,16  
**everybody's** 56:25  
111:10  
**everyone's** 145:23  
**evidence** 15:15 64:22  
66:16 80:10 150:9,17,20  
151:22 174:14 175:11  
177:14 181:21 188:15  
189:1 192:13 201:13  
236:8,11,17 239:1  
241:23 255:10 291:24  
292:12  
**evolved** 150:8  
**evolving** 293:7  
**exacerbate** 241:19  
**exact** 26:2 107:14 178:7  
186:7 192:1  
**examination** 11:19  
102:16 124:7 135:14  
147:23 179:1 182:17  
183:8 200:8 205:18  
223:7 226:22 234:11

249:1 258:14 274:1  
277:8 285:1 293:5  
**examine** 297:10  
**examples** 195:4 197:14  
**exception** 118:19,21  
**excerpts** 268:23 269:7,  
16  
**excuse** 12:6 26:7 49:11  
164:7 171:9 174:8  
186:23 207:23 216:4  
218:18 227:23 237:21  
**excused** 225:25  
**Executive** 9:21 258:6,20  
276:21  
**exercise** 95:1  
**exhibit** 12:8,11 22:3 24:7  
33:1,2,9,13 43:16 61:24  
62:11 63:12 68:8,12  
75:25 85:18 93:22,24  
94:1 95:11,15 96:12  
111:25 117:18 118:3  
136:9,16 148:19 165:2,  
12,14 166:6 167:4,15  
168:18 171:5 175:11,19  
179:6 211:9 215:6 216:5  
217:15,16,22,25 218:25  
227:9,11,13 249:14,16  
256:18 259:5,7,16,17  
269:2,3 286:16 287:1  
297:21,22 299:2,12  
**exhibits** 12:5,7,9 24:3,4,  
5,6,14 91:9 131:16  
136:10,17,23 137:5  
148:18 149:7,13 166:3  
184:14,25 185:1 206:12,  
16,18,19 207:5,11  
215:14 227:10,11,23,24  
228:5 234:19,22 239:3  
250:8 259:23 280:24  
285:12,18 286:15,17

**existed** 133:5,10  
**existing** 34:9 58:5 109:2,  
7,8 118:3 164:16 225:5  
**exists** 162:1  
**expanded** 262:9  
**expansion** 262:1,3,8,11  
**expect** 60:11 76:7 100:4  
105:6 111:19 195:14  
252:12,14 263:20 281:23  
283:12 292:21,25 298:7  
**expected** 89:24 262:5,7,  
13,15 263:24  
**expense** 207:21  
**expenses** 209:19,24  
210:1  
**experience** 150:3,6  
229:5 264:20 275:20  
**experienced** 25:21  
153:25 276:2  
**experiencing** 106:17  
**expert** 182:5  
**expired** 138:5  
**explain** 37:11 98:16  
114:16  
**explained** 118:16  
**explanation** 186:21,25  
**explicitly** 298:8  
**explore** 202:20 214:14  
241:8 243:2  
**explored** 170:3 202:16  
**exploring** 71:20  
**exposed** 46:17  
**express** 299:21  
**expressed** 222:12

**expressing** 129:13  
**extending** 234:17  
**extension** 138:4 234:9  
**extensions** 138:20  
**extensively** 40:6  
**extent** 37:20 41:19,21  
46:17 103:19 112:8  
164:2 170:1 178:8,12  
236:10 244:4 260:13  
**extraordinary** 128:11,13,  
17  
**extremely** 229:24  
**eye** 147:8

---

**F**

---

**F230** 129:23  
**face** 180:18 279:15  
**facilities** 25:18 43:8 44:8  
154:6,16 157:6 158:16  
161:21 174:18 268:8  
**fact** 13:15 20:3 52:6  
117:3,4,5 118:3 127:9  
154:13 164:11 172:17  
229:12 230:2 241:13  
294:10  
**factor** 16:9 19:21,23  
20:12,16 25:11,15 35:19  
36:5,19 50:8,12,25  
51:10,15 52:2,7,21  
53:12,16 54:4,7 68:25  
73:19,20 74:6,8,9,10,15,  
17,19,22,23,24,25 75:1,  
3,4 94:23 95:13 96:18  
112:19,21 113:4,6,7,8,  
16,20 114:1 121:16  
128:9,11,12,18 129:16,  
23 130:24 131:4 134:16  
151:12,13,16,21 152:20



153:18,21 154:9 157:5  
160:14,24 162:4 163:23  
164:1 165:23 166:17  
174:20 180:18 181:9,14,  
23 208:12,25 209:5,17  
213:11,14,18 214:11,23  
218:8 228:19,20 229:1  
230:14,19,24 231:2,3,5  
251:18 261:14 262:23  
265:8,23 272:5,14  
297:16

**factored** 110:6 111:1

**factors** 25:8 35:10,21  
38:1 64:12 74:18 115:2  
150:10 157:6 182:10  
240:14 296:24 297:1,2,4,  
10,12,14,16

**facts** 153:21

**failing** 103:14

**failure** 26:11 103:23

**fair** 54:16 73:8 97:20,25  
98:1 113:14 119:21  
150:15 162:17 186:5  
192:24 193:1 198:24  
232:19 271:5 274:5  
292:5 295:17

**Fairfax** 285:6

**fairly** 49:6 54:11 57:15  
97:21 173:3 288:16  
291:5

**fall** 45:23 56:18,23  
186:15 251:24

**falling** 155:3

**familiar** 22:17 156:16  
181:10 194:3 197:16  
257:4

**familiarize** 26:12

**faster** 67:13 191:17

**favorable** 289:21

**favorably** 233:25

**FEA** 51:1 102:3 209:6  
258:7 259:5,7,15,16,23

**feather** 36:11

**feature** 279:13

**federal** 9:21 150:4 258:6,  
20 276:21

**fee** 75:3,4 137:9 144:13  
187:14 242:19 278:14

**feed** 90:16

**feeder** 40:3 42:9 50:13  
65:23 86:15,21,25  
228:20 261:3,8 264:14  
265:14 266:6

**feel** 11:6 70:9 82:22  
244:2 279:11 295:17

**feels** 278:14

**fees** 278:19,23 280:11

**FERC** 35:7,9,15

**fewer** 56:24 60:2 256:8  
257:2

**fight** 53:10

**figure** 68:7 87:5 88:18  
132:23 141:5,15 166:22  
168:14 199:19 215:16  
274:23

**file** 59:14 155:15 191:2

**filed** 10:18 13:7 17:17  
33:4 43:15 45:4,11 76:1  
98:19 119:24 136:8  
148:15 150:9 152:19  
155:9,18 175:2 183:20  
199:10 259:3 261:12  
277:18,19 285:9,13,16

**files** 22:15 56:22

**filing** 62:4 78:1 130:11  
153:6,13 177:6 187:9,12  
189:9 199:3 237:10  
298:6

**filings** 56:22 148:12  
183:18 206:6 258:24

**final** 107:24 119:23  
234:16 252:18 299:20

**finally** 22:14 101:25  
154:8 155:17 235:3

**financial** 133:8,22 134:5

**find** 17:8 32:24 150:14  
181:23 289:13 291:11  
295:4

**finding** 153:22 181:22  
288:25 294:11

**findings** 150:25 153:19  
175:23 177:14

**fine** 13:18 80:8

**finished** 17:16 70:15

**firm** 17:7,8 20:3 21:2  
39:12,16,17,22 40:15,16  
42:15 44:13 46:5 47:8,14  
49:14,15 55:7 58:16 59:1  
82:9 99:16 103:10  
114:19 121:12,18,19  
137:16 139:19,21 142:19  
164:1 168:3 169:4,20  
219:11,12,14,16,20  
227:3 229:16,18,20  
233:5,7,16,23 234:25  
235:2 249:8 252:14,20  
263:3,11 264:6 266:7  
273:7 293:15

**fits** 207:24

**five-minute** 90:23

**fix** 13:8,9 14:10 120:7,10

**fixated** 152:13

**fixed** 51:15 121:3 232:19, 23  
**flawed** 208:8  
**flipped** 108:17  
**flock** 36:12  
**flood** 193:13,17  
**floor** 122:9,17,23  
**flow** 21:7 26:6,9 27:21,23 92:4 124:14 162:22 299:7  
**focus** 30:4 150:2 166:20 170:8 213:8 295:12  
**focusing** 28:23 214:22  
**folks** 26:15  
**follow** 18:20 56:21 91:19 275:21 283:18  
**follow-up** 29:14,23 30:4 124:2,20 200:20 272:15  
**footnote** 239:24  
**force** 9:20,23 31:3 102:3, 7  
**forecast** 114:19,20  
**forego** 195:11  
**forgive** 292:9  
**form** 15:7 175:18 227:11 271:15 273:5  
**format** 295:8  
**formatting** 139:3  
**formula** 40:14  
**forums** 150:17  
**forward** 79:1 83:1 98:24 99:5 105:18 109:4 119:13 121:13 122:2 194:15,18,20 233:11 252:24,25

**found** 45:17 152:2,9 153:7,11 297:23  
**foundation** 298:25 299:4  
**fourth** 20:19 79:4 80:15 298:1 299:3  
**frame** 131:22  
**framework** 151:2  
**fraudulent** 138:11  
**free** 11:6 97:13 115:24 229:15  
**freeze** 190:17 293:10  
**freezing** 279:1  
**freight** 110:13  
**Friedman** 9:22 84:20,22 85:9,14 91:7,25 92:6,8 98:2 123:25 124:2 143:20 176:1 197:24 220:13 245:23 254:3,4  
**front** 33:13 91:10,20 121:1 254:16  
**fruitful** 57:7  
**frustrating** 177:4  
**FS** 19:22 48:20 71:6 99:14 128:21,24 219:4  
**fuels** 252:20  
**full** 11:21 13:13,17 14:16, 24 18:13 23:11,17 30:22 31:8 57:22,25 58:3,6 65:6,7,8,22 66:1,3 67:12 73:4 75:13 81:11 106:22, 25 108:24 110:13 111:22 120:10 125:11,18 129:14 135:16 172:18 176:12,17 185:15 186:18 191:16 199:7,12 223:12 229:11, 23 233:21 241:14 243:19 244:4,7 260:16 283:5,9

295:13  
**fully** 103:22 229:17 266:25 279:6  
**fun** 105:16  
**function** 262:11 288:21  
**fundamental** 62:25 81:13 230:2 232:16  
**fundamentally** 17:9,10  
**future** 14:21 16:15 212:3 242:22 243:15 250:22 295:16

---

**G**

---

**G-01551A-16-0107**

152:18  
**gain** 190:2  
**gaps** 44:10  
**gas** 10:5 22:18 26:15 27:21,23 74:10,13,16 82:3,10,13 83:8 84:7 101:9 113:6 114:14,17, 18,23 115:3 137:17 142:25 150:3 152:16,19 154:3 179:17 180:1,14 196:23 212:4 229:6 231:1 250:15 253:4 261:25 262:14,15,22,25 263:12,19,23 264:1 268:15 269:7,19 270:9 278:11,21 280:2 281:16 292:22 293:15  
**gather** 17:12 18:1 48:16 105:19,25 193:8 194:21  
**gathered** 17:23  
**gathering** 17:15 98:25 167:8  
**gave** 54:9 131:7

**gears** 214:10  
**general** 9:13 17:13  
34:18,23,24 35:5 36:3,10  
99:15 133:2 137:16  
139:22 143:12 154:5,11  
176:14 187:9,12 191:3  
209:18,22,23,25 225:7  
233:25  
**General's** 9:2  
**generally** 163:6 164:8  
174:3,20  
**generated** 58:3  
**get allocated** 224:18  
**give** 35:3 53:7 67:25  
89:25 93:21,23 94:24  
129:21 137:10 196:7  
227:20 252:19 274:12  
278:8 287:12  
**giving** 33:11 37:14  
207:24  
**goal** 18:20 30:16 69:17  
**goals** 185:13  
**good** 8:4 9:1,19 10:4  
11:12,13 24:24,25 28:10,  
21,22 50:3,4 59:23,24  
67:5 71:15 85:15,16  
97:14 122:1 138:16  
147:25 177:14 184:23  
188:11,12 197:12 203:6  
205:20,21 220:22,23  
226:15,24 228:13 248:20  
249:3 250:17 251:20  
258:16 260:7 268:4,5  
271:22  
**goodness** 156:24  
**governed** 141:23  
**governs** 102:23  
**grace** 13:6

**gradual** 19:9 23:16  
125:21 208:2  
**gradualism** 13:17 55:19  
65:5 207:25 210:16,20  
260:18 266:20,22  
**gradually** 59:2 100:14,15  
208:1  
**grammatical** 139:4  
**granted** 24:13 136:22  
141:9 149:12 184:13  
207:10 228:4 250:7  
259:22 280:23  
**granularity** 283:21  
**gravitated** 231:24  
**great** 203:7  
**greater** 46:17 138:13  
153:3 155:11 236:16  
286:20 289:1,3  
**grew** 18:6  
**grocery** 60:14  
**gross** 36:2,3 86:15,20,25  
228:23 265:14 266:7  
**ground** 53:24 130:6,13,  
14 251:15  
**groundwork** 59:25  
**group** 69:23 88:7,8 99:19  
114:18 124:14 150:23  
155:10  
**groupings** 290:21  
**groups** 169:25 178:19  
235:5 251:23  
**grow** 236:24  
**grown** 293:9  
**growth** 13:25 14:2 18:4,7  
58:20 69:24 84:3,5 100:3  
104:15,18,20 105:2,9,10,

12 106:7,9 116:17,19  
117:13 120:11 123:14  
124:10 125:14 294:7  
**GS** 15:12,13 16:12 19:21  
30:3,24 31:2,4,6,9,13,15,  
18,21 48:19 59:4 60:17,  
18 61:16,19 71:6,19  
73:10,13 87:3,14 88:15  
89:22 90:9 93:3,17 94:3,  
10,12,15 95:25 96:2,5,20  
98:5,15 99:12,14 104:8  
107:4 115:13,20 128:21,  
23 137:16 155:2,6,14  
158:25 170:16 171:19,23  
179:11,14 185:20 186:22  
187:1,11 189:5 204:5  
209:2 211:1,2,6,8,11,12,  
14 212:8 214:24 215:13  
219:3 229:19 230:7  
245:16 265:23 266:14  
279:10 281:20 295:24  
296:5  
**GSU** 211:1  
**guarantee** 298:14  
**guess** 25:1 26:17 28:11  
58:16 77:24 79:7 141:1,7  
142:25 146:1 165:6  
166:2 179:8 217:2,24  
283:8,10  
**guide** 261:16 264:18  
295:5  
**guided** 261:18 267:5

---

**H**

---

**hair** 97:23  
**haircut** 88:12,23 97:8,10,  
11,13,22 102:1,2  
**haircuts** 89:8 97:17

**half** 134:24 167:9 231:20  
248:12 278:17  
**hand** 217:13 232:1  
247:25 288:10  
**handed** 217:21  
**handle** 11:6 190:18  
**handled** 266:20  
**handling** 84:21  
**hang** 182:8 239:21  
**happen** 14:17 26:3 27:4,  
7,8 36:24 96:18 105:6  
106:6 107:13 193:9  
195:14,18,25 264:9  
297:6  
**happened** 27:5 32:2  
35:13 39:1 49:13 65:11,  
21 83:6 100:3  
**happening** 31:14 58:11  
194:10 299:9  
**happy** 43:22 85:9  
**hard** 22:24 72:14 167:7,  
13,16 182:4 282:1  
**hat** 182:8  
**hate** 90:14  
**head** 40:12 73:22 127:10  
138:5  
**header** 167:20  
**heading** 269:20 286:21  
**health** 137:11  
**hear** 238:16 240:8  
**heard** 50:9 106:15  
176:19 189:17 197:13  
238:10 257:1,5  
**hearing** 8:5,9,10 9:8,24  
10:20 129:15 131:21  
185:10 200:18 247:22

248:13 259:1 299:21  
**heart** 169:22  
**heat** 113:6  
**hedge** 115:24  
**held** 274:10  
**helpful** 190:2  
**helps** 31:16 57:22 147:8  
**hesitate** 54:10 127:9  
288:17  
**heterogeneous** 155:10  
**Hey** 298:16  
**hide** 209:20  
**Higgins** 10:14 22:8 56:2  
77:22 78:18 79:24 80:20  
122:22 131:16 152:9,13  
226:14,16,24 227:2  
228:8 235:12,13,17,23  
245:24 246:15 252:17  
257:5 291:22  
**Higgins'** 56:5,7,17 57:2  
78:6 79:16 80:7 131:8  
146:23 153:8 288:15  
**high** 48:8 56:1 74:24  
75:2 113:4 117:8 129:8  
180:17 251:18 252:20  
272:14 278:23  
**high-pressure** 25:17  
26:7 40:3 50:13 138:20,  
23 208:15 261:3 264:13,  
14  
**High-risk** 138:14  
**higher** 53:16 74:15 82:19  
98:7 100:25 188:23  
251:16,20 265:7,9,14,21  
289:19 290:11 297:16  
298:11

**higher-pressure** 261:1  
**highest** 47:20 48:6 64:5  
128:18 129:1,8 138:13  
252:18  
**highlight** 171:1  
**highlighted** 63:12,15,17  
68:7 109:6  
**highly** 32:17 210:15  
**Hill** 102:3,6  
**hired** 148:8 185:6 258:20  
**histogram** 61:9  
**historical** 153:3,14  
**historically** 36:2 182:9  
**history** 30:15 53:7,25  
54:8 83:19 122:8,13  
138:17  
**hit** 14:5 18:9 279:23  
**hits** 279:21  
**hold** 117:1 136:5 274:21  
**holding** 21:7  
**home** 106:4  
**homogeneous** 290:22  
**hope** 145:12,15 194:13,  
14 226:16 255:18  
**hospitals** 60:5 113:1  
**hotels** 60:5  
**hour** 20:23 21:3,9,17  
49:8 134:24 143:1,4,8  
187:15 248:12  
**hourly** 28:1 128:20  
**house** 294:5  
**hovers** 113:20  
**Howard** 9:8 147:17 148:2  
185:8

**huge** 296:2,23

**hurt** 247:20

**hurting** 294:17

**hybrid** 51:10 151:13,21  
152:20 174:20 182:1  
272:17

**hypothetical** 88:23

**hypothetically** 125:9  
274:7,22

---

**I**

---

**i.e.** 209:25

**idea** 13:8 176:14 233:25  
278:25 293:4

**ideas** 121:20,24,25 122:1

**identification** 138:12  
217:17 269:4

**identified** 50:6 171:5  
185:15 207:5 215:9  
227:9,12,23,24

**identifies** 139:19

**identify** 56:3 170:7  
219:22 226:25 249:4

**identifying** 262:24

**ignore** 202:18 222:18  
230:1

**Ignoring** 154:4

**IHP** 208:15,18,22

**II** 8:9 206:7 228:13  
234:20 258:25

**III** 136:6

**Illinois** 276:3

**illogical** 232:10

**imagine** 101:2 195:20

**imbalance** 280:11

**immediately** 215:18  
292:20

**impact** 22:9 31:7 34:19  
59:3 67:19 102:7 105:14  
106:10 109:14 110:8,10  
112:6,7,11 115:20  
125:17,20 171:6 179:20  
186:22 187:1 192:1  
193:15 210:19 222:9  
241:17,20 288:1 294:16

**impact's** 192:7,9

**impact-on-customers**  
16:11

**impacted** 133:3

**impacts** 74:2 211:7  
260:19 266:18,23  
288:10,20 297:25

**impartial** 80:5

**impede** 245:16

**impediment** 245:19

**implement** 13:13 132:18

**implementation** 151:5

**implemented** 58:12  
155:20 157:2 175:21

**implementing** 33:25

**implements** 201:10

**implication** 178:3 255:16

**implications** 129:14  
191:11 233:9 236:20

**implicit** 153:13

**implicitly** 161:25 163:6  
231:23

**implied** 94:10,15 158:14

**important** 14:14 16:16  
18:10 45:8 57:12 62:18,

20 121:11 134:8 170:19  
232:6 237:2 244:2 253:2  
262:18 265:1 297:17

**impose** 54:17 159:23  
161:14 162:12 163:3,21  
165:23 168:15,21  
169:13,18 171:11 202:9  
214:12

**imposed** 163:23 193:22  
201:20 224:12 241:25  
243:6 252:18

**imposing** 169:19 214:21  
215:11

**improve** 112:5 191:25

**improvement** 192:5

**improvements** 151:7

**incentive** 125:6 133:4,8  
134:3,9 193:21 196:4,8  
245:10

**incentives** 133:22 134:6

**inception** 83:5

**inclined** 163:9

**include** 44:22 127:6  
132:2 154:19,25 161:23  
186:20,24 187:6 206:14  
272:20

**included** 22:4 38:9 61:5  
133:19 141:18 161:16  
180:2 216:9 227:16

**includes** 22:17,18 41:4  
70:2 86:4,14 165:15  
218:9

**including** 51:18 102:3  
109:23 118:19 139:2,8  
155:7 158:7 263:13,24  
271:7 273:11 283:22  
294:22

**inclusion** 165:9 294:19  
**inconsistent** 189:1  
238:19,22  
**Incorporated** 258:19  
**incorporates** 171:9,11  
**incorrect** 106:12  
**incorrectly** 209:21  
**increase** 8:7 19:9 56:8,  
19 57:14 59:2 75:20,22  
76:5,24 78:16,20 79:6,10  
80:1 97:2 98:8 100:7,8,9  
106:17 107:1,3,17,18  
117:10,19,20 118:8  
157:21 158:14 163:2,3  
168:24 169:2,11 170:11  
171:13,22 172:7,15,16  
173:12 175:8 179:13  
180:12 187:16 195:17  
199:5 210:18,24 211:10  
221:13 222:3,7,10,19  
231:20 233:22,23 234:3,  
4,24 240:23 241:5  
242:13 250:24 251:3  
252:10 261:19,21 274:12  
280:1,4,6 283:8 288:1,2,  
11,12 294:14 296:21  
298:12  
**increased** 36:20 235:1  
**increases** 56:6,12 75:8,  
11 76:7 79:17 100:24  
115:19 172:8 175:12  
195:22 210:14,17 239:14  
256:17 283:11 288:14,  
16,18 292:16,18 296:18  
**increasing** 110:9  
**incredible** 84:3  
**increment** 192:4  
**incremental** 67:25  
163:21

**incur** 266:4  
**incurred** 44:12 261:23  
272:9 284:1  
**incurs** 87:23  
**independently** 169:8  
231:10  
**indicating** 63:13 164:8  
**indication** 8:16 10:21  
181:2  
**indifferent** 186:15  
**indirectly** 196:10,12  
**individual** 35:7,15,16  
272:9 292:1  
**industrial** 16:8 53:15  
74:14 130:10 278:22  
279:4  
**industrials** 278:20 280:3  
283:10  
**industry** 154:12 155:7  
156:20 157:3  
**inequitable** 232:10  
**inequities** 291:18  
**influence** 21:12  
**influencing** 84:5  
**information** 11:5 23:6  
32:25 48:17 64:10,14  
81:19,20 90:15,18 96:14  
98:13,18 106:1 122:1  
123:21 127:2 128:20,21  
185:5 186:12 193:11  
194:20,21,24 201:12,16  
202:1,7 215:20 216:9,15  
218:13 219:7 238:14,20,  
22 290:13  
**infrastructure** 55:6 56:22  
65:24 103:17

**initial** 77:18 144:15,22  
153:6,12 158:12 189:2,9  
208:17 237:10 241:6  
**initially** 54:7 157:21  
208:4 231:15  
**initiate** 194:19  
**initiative** 223:21  
**input** 23:9  
**inputs** 215:7  
**installation** 203:10  
**instance** 50:24 58:22  
79:4  
**instances** 260:16  
**insufficient** 152:10  
**integral** 172:22  
**intended** 150:23 220:1  
**intends** 164:3 175:21  
**intent** 197:4 251:19  
**inter-** 177:8  
**interacting** 57:17  
**interacts** 57:13  
**interclass** 13:8 30:18  
31:17 208:2,7 209:21  
210:12,22 291:19 295:14  
**interest** 20:19 23:20  
139:16 150:19  
**interested** 225:4  
**interesting** 47:6 122:8  
**interests** 151:2  
**interim** 29:5,11 30:4 31:3  
174:13  
**intermediate** 50:13  
138:22 208:14 261:1  
264:13

**internal** 178:6

**interrupt** 20:4 21:14,15,  
16 27:10,12,13,14,15  
28:7,9,12 46:7,16 47:2  
63:11 70:14 90:15  
102:25 103:14,23 299:6,  
7

**interrupted** 20:4 26:1,3  
39:3 46:9,11 47:13 55:1,  
3,12,14 232:14 264:3

**interruptible** 20:2 25:2,8  
27:9,14,24 29:23 38:6,9,  
23 39:13,14,23 40:9,18  
41:5,24 43:5 44:5,7,17,  
22 46:4,6,13,15,18,21  
49:16 51:18,23 54:18,19,  
22,25 55:12 102:21,24  
103:4,5,9,14,20 133:4,7,  
22 134:1,3,10,15 151:11  
153:16,20 154:2 159:14,  
19,24 160:3,15 161:15,  
23 162:4,8,9,13 163:22  
165:10,24 166:10,25  
168:15,22 169:14,18,19  
171:10,12 172:16 174:17  
210:3,5 214:13,19,22  
215:11,21 216:16,20,23  
217:5 218:9,18,19,20  
219:15,16,19,20 230:9  
232:7,9,11,14,20,21,22,  
23 233:4,6,8,10,13 271:7  
272:21 273:1,11 274:3,5,  
10,20,24 275:7 297:15

**interrupting** 21:4,5 91:2  
92:4

**interruption** 26:22 27:19,  
21 92:2 103:6,21 226:16

**interruptions** 26:2,5,6

**intervening** 23:9 185:1

**intervenor** 152:3

**intervention** 10:17

**intraclass** 13:9 17:2  
23:12 30:3,19 31:5 73:12  
176:24 177:8 291:20  
295:14

**intrastate** 101:12

**introduced** 238:5

**introducing** 265:6

**intuitive** 179:10

**intuitively** 180:12

**investigate** 252:23

**investment** 25:15

**involved** 15:19 105:19  
152:8 194:6 264:22  
275:22

**Ipson** 8:23 135:8,9,16,  
18,23 136:7 137:2  
139:24 140:3 224:22

**IRP** 22:15,17,19 129:5,11

**irrelevant** 41:7

**isolate** 290:9,11

**isolating** 155:3

**issue** 11:7 18:16 20:22  
22:14 75:1 104:3 125:24  
138:2 145:17 146:1  
156:9 160:19 190:21  
209:16,18 210:2,11,15  
211:1,15,23 212:1 232:6  
244:2 280:8 291:12  
296:11

**issued** 139:17

**issues** 20:10 29:15,23  
30:2 34:14,15,17 57:8,21  
78:10 85:6 149:24 185:5  
187:6 194:4 206:8 208:9,  
12 211:5 213:9 223:10  
234:5 287:19 290:2

291:8 295:13

**items** 19:17 228:22

---

**J**

---

**James** 205:24

**January** 85:1 206:19  
277:19 285:16

**Jennifer** 8:19

**Jessica** 8:23 135:8,18,23

**Jetter** 8:25 9:1,2 24:19,  
20,23 116:4,5 140:2,4  
147:15,16,24 149:4,15,  
16 155:23 156:1 178:23  
179:2 180:20 182:24,25  
183:9 184:6,16,17  
187:20,22 200:4,5,9,20  
212:22,24 246:18,19  
253:25 254:1 267:21,22  
281:8,11 282:8

**Jetter's** 180:24 200:23

**Jim** 9:16 205:12

**job** 281:15

**join** 70:9 125:20 191:17  
279:2,12

**joining** 66:20 192:17  
279:5

**judgment** 232:5

**jump** 11:5 115:19 125:18

**June** 17:16 22:16

**jurisdiction** 153:2

**jurisdictions** 83:10 153:2  
197:18

**justified** 223:22

**justify** 37:22

**Justin** 9:2

<b>K</b>		
<b>keeping</b> 241:7 279:10	<b>lack</b> 123:1 201:15	175:20
<b>Kern</b> 101:12	<b>lacks</b> 255:10	<b>lead</b> 14:20 67:7 85:5
<b>Kevin</b> 10:14 226:14 227:2	<b>lagged</b> 292:21	<b>leads</b> 19:1 151:4
<b>key</b> 150:10 228:17 229:2 230:12 262:4 287:18 295:13 298:20	<b>laid</b> 66:13	<b>learned</b> 15:17 23:7,10 98:18
<b>kind</b> 20:21 36:8 37:10 46:3 53:23 59:25 60:11 64:20 72:19 110:18,21 117:22 122:7,14 123:4 126:17 127:4 165:12 167:19 170:8 174:20 181:23 182:9 194:17 196:8 202:6 203:8 251:2 274:19 295:7	<b>Lake</b> 135:24	<b>leave</b> 44:5 58:15,25 73:14 99:25 100:11,18, 19,22 101:5,21 111:16 115:13 193:20 241:25 257:8
<b>kinds</b> 60:14 115:1 182:3	<b>Laketree</b> 285:6	<b>leaving</b> 99:23 100:12 101:4
<b>Kirk</b> 9:18,19,20 84:13,18, 20 143:20,21 176:1,2 197:24 198:1,4 220:12, 14 245:22,25 246:3,12 254:3 258:7,15 259:15, 25 260:1 267:11 273:21, 22 274:2 276:5,20,22 281:6,7	<b>language</b> 138:10,19,24 141:9 225:5,11	<b>led</b> 108:21
<b>knowing</b> 57:21,24 121:22 134:23 200:16	<b>large</b> 60:8 67:16,20,24 68:5,19,20 71:10 80:11, 14 111:2 112:2,6 113:17, 20,25 124:11,14 126:15, 20 171:24 180:7 185:17 192:13 198:8,19 212:17 235:4,7 236:4 239:6 242:2 250:20 252:12 256:17 278:20 288:3 289:11,14,20 290:6 294:23 297:9	<b>left</b> 73:9 84:6 92:9 115:10,14 287:3
<b>knowledge</b> 25:23 26:18 85:7 139:12	<b>large-diameter</b> 261:1 264:13	<b>left-hand</b> 167:18 168:6
<b>L</b>		
<b>labeled</b> 136:9 249:13 259:5,7	<b>large-use</b> 186:2	<b>legislation</b> 36:22
<b>labeling</b> 286:1,15	<b>largely</b> 31:10	<b>legislative</b> 140:18 222:18 223:21
<b>labels</b> 32:24	<b>larger</b> 22:9 61:15 106:17 107:3 186:5 188:23 236:16,25 237:7 238:4 240:3,24 242:4,15 244:2 290:10,15	<b>Legislature</b> 222:12
	<b>largest</b> 61:12 297:3 298:3	<b>length</b> 121:4 236:12
	<b>lasts</b> 245:7	<b>lessons</b> 23:10
	<b>late</b> 78:4 204:7,8 299:8	<b>letting</b> 199:15
	<b>late-filed</b> 175:19	<b>LEVAR</b> 8:4,15,24 9:10,17 10:2,8,16 11:1,12,14,17 23:25 24:9,12,19 28:16 49:21 59:17 63:10,15,19, 22 84:12,17 85:3 90:17, 22 91:5,17,25 102:12 116:3,6,8,11 123:24 124:3,19 132:9,14 134:23 135:5,9,12,20 136:18,21 140:1,6,9,11 143:17,19,22 144:1,4,7, 11 145:1,7,16,20,22 146:9,12,15,17 147:10, 13,15,18,21 149:8,11 156:1,12 159:5 173:18
	<b>latest</b> 173:13 201:16	
	<b>laughs</b> 97:9	
	<b>lay</b> 56:7 59:25 114:16	



175:25 176:3 178:23 180:22 181:1 182:18,21 183:3,6 184:9,12 187:22 188:2,5 197:23 199:25 200:4,22,25 203:2 205:1, 4,7,13,16 207:6,9 212:21 213:1 217:18 220:9,12, 15 223:3 224:2,5 225:19, 22 226:1,4,8,11,15,20 227:25 228:3 235:15 245:22 246:13,17,21,24 247:1,5,8,11,18 248:9, 15,20,23 250:3,6 253:20, 24 254:2,5,11 257:9,13, 16,20,23 258:1,5,9,12 259:18,21 267:15,19,21, 24 268:22 269:10,13 273:16,20 276:6,9,14,17, 20,23 277:2,5 280:19,22 281:3,6,8 282:8,11,15,17 283:17 284:11,15,18,21, 24 299:16	<b>linkage</b> 162:17 <b>list</b> 29:10 <b>listed</b> 118:16 <b>listening</b> 238:11 <b>litigated</b> 210:6 <b>live</b> 299:8,13 <b>load</b> 16:9 31:11 52:21 53:16 64:12 73:19,20 74:6,8,9,15,16,18,19,22, 23,24 75:1,2 112:18,21 113:4,7,8,16,20 114:1 121:15 130:24 131:4 180:18 181:14 230:24 231:2,3,5 240:14 251:18, 23 261:14 265:7,22 269:23 272:5,14 296:24 297:1,2,4,7,8,10,11,14, 16 <b>locking</b> 19:13 <b>logic</b> 54:3 79:14 129:24, 25 181:13 <b>logical</b> 18:22 39:7 130:4 <b>long</b> 13:18,21 16:19 25:24 79:11,13 80:4,21 106:24 131:24 156:24 190:21 193:3,4 197:20 245:6 <b>long-term</b> 18:11 <b>longer</b> 81:9 91:1 120:6 166:16 172:6 211:22 214:1 233:7,12,13 248:2 <b>longstanding</b> 208:3 <b>looked</b> 53:23 58:4 65:2 117:17 120:18 123:19 174:25 180:4 256:2 296:19 297:20 <b>lost</b> 224:18 286:3	<b>lot</b> 13:3 15:2,17 17:19 22:16,21 23:6 27:13 28:10 40:1 50:22 53:11 60:4 61:18 64:9 70:5,17 71:11 79:1 81:10 82:21, 23 83:3 98:18,25 99:1 108:19 119:24 121:20 126:19,23 127:14 134:12 159:17 163:16 180:13 182:10 191:10 199:2 201:25 202:4,15,22 243:4 279:20 283:25 291:6 <b>lots</b> 293:1 <b>loud</b> 270:4 <b>love</b> 278:11 <b>low</b> 74:16,24 75:4 113:6, 7 121:15 129:9 215:3 251:18 272:14 <b>lower</b> 44:11 180:9 252:21 253:9 265:22 280:1 288:7 <b>lowest</b> 251:24 <b>Lubow</b> 9:8 147:17,18,25 148:2 149:7 155:24 156:8,16 159:7 173:20, 25 181:4 182:22 185:8 197:15 213:17,25 <b>Lubow's</b> 47:19 213:20 215:6,10 <b>lump</b> 127:17 <b>lunch</b> 131:23 135:4 <b>lurks</b> 253:15 <b>luxury</b> 204:18 <hr/> <b>M</b> <hr/> <b>made</b> 15:9,13 19:4 22:23 32:4 54:3,20 76:23 82:11
--	---	---

84:24 108:23 109:25  
137:6 148:12 151:6  
152:5 153:22 154:25  
164:11 165:8,16 166:24  
169:9 171:2 174:4,25  
204:6 222:5 232:13  
233:13 278:3  
**Mag** 68:17 252:7,9,19  
**Mag's** 250:21 253:3  
**Magnesium** 10:12,14  
248:19 249:7,9,13 250:8,  
17,21,25 251:2,25 253:5,  
10,14 289:8 292:14  
294:23 295:2  
**Magnesium's** 248:17  
**magnitude** 288:19 289:4  
292:18 298:7  
**main** 85:21 138:20,23  
175:3 266:6 267:7  
274:16 275:16 277:13  
**mains** 40:3 50:14 86:15,  
21,25 152:21 260:24  
261:1,3,8 262:2,6,9  
263:5 264:14,15 265:14  
268:8,17 275:3,25  
**maintained** 229:6 240:18  
**maintaining** 235:8 241:4  
**maintains** 186:10  
**major** 9:18,19,20 84:13,  
18,20 143:20,21 150:2  
174:11 176:1,2 197:24  
198:1,4 211:2 220:12,14  
245:22,25 246:3,12  
254:3 258:7,15 259:15,  
25 260:1 267:11 273:21,  
22 274:2 276:5,20,22  
281:6,7  
**majority** 180:17 229:10  
**make** 8:7 12:22 15:22  
16:20 17:11 26:8 31:8  
42:9 51:21 60:7 62:2,24  
67:2 69:20 71:19 76:16  
78:1,23 81:20,23 82:10  
83:23 84:7 89:1,7 94:14  
109:12 116:23 120:21  
122:17 129:13 134:18  
141:10 148:22 164:10  
168:20 176:20,23 177:1,  
14 183:25 190:17 193:1  
195:2 202:12 203:25  
206:23 216:18 252:16  
269:10 293:11 296:10  
**makes** 17:23 78:19 79:18  
82:3 100:9 119:7 121:17  
178:17 208:7 297:7  
**makeup** 15:6  
**making** 14:19 19:13  
58:13 70:2,4 78:3 100:17  
124:15 160:9 161:1  
210:7 241:20 245:1  
262:4  
**manage** 23:3 119:9  
**manager** 11:25  
**manual** 40:24 41:1,2,3  
137:9 144:12 231:6  
246:8,9 268:16,24 269:8,  
16,19 270:3 275:17  
**manually** 137:14  
**mapping** 242:23  
**March** 56:10,11,13,17,20  
57:14 125:18 243:24  
**marginal** 287:16  
**marked** 217:14,16,21  
249:16 269:2,3 277:17  
285:11,14,17  
**market** 70:20,21 82:19  
101:3 196:24 245:14  
253:4 278:11 279:16  
**markets** 253:9  
**massive** 177:7  
**material** 11:3 67:19  
**matter** 12:3,19 18:19  
80:2 121:13 130:7 213:6,  
7 238:7 255:25  
**matters** 8:12 10:23 150:4  
163:16  
**MBTU** 279:8  
**means** 22:20 34:1 47:21  
70:3,5 234:10 251:17  
298:12  
**meant** 14:6 21:12 66:3,  
23 68:3 71:6  
**meantime** 70:11  
**measure** 48:6 229:7  
**measured** 49:2 229:3  
**measuring** 50:14 228:21  
**Mecham** 10:3,4 59:18,19,  
22 63:10,14,17,23,24  
98:19 108:14 109:15  
112:18 113:15 114:7  
116:11,12,15 140:11,12,  
16 141:12,15,20,22,25  
142:4,5 143:18 173:19,  
21,24 175:24,25 188:5,6,  
10 197:21,23 220:10,11  
235:16,18,22,24 245:20  
254:5,6,9,13,15 257:8,10  
267:19,20 276:24,25  
277:9 280:17 281:1  
282:15,16 284:18,19  
285:2 299:16,18  
**Mecham's** 143:23  
**mechanical** 26:10  
**mechanism** 162:14

**meet** 22:25 55:10 85:21  
89:24 94:12 131:1  
208:23 230:6 263:18,21,  
24 264:5,6,9 266:15  
272:9

**meeting** 161:22 186:13  
188:19 190:5,7

**meetings** 29:15,23 30:4  
185:2

**memory** 157:12 216:11

**mention** 298:9

**mentioned** 16:25 18:7  
23:6 30:14 66:21 68:2  
76:12 82:1 139:12  
151:24 210:12 290:23  
298:18

**merit** 36:15 153:11  
230:10

**message** 253:13

**met** 264:8

**meter** 27:25 48:23 137:9,  
13 144:12,20 278:15,18

**meters** 278:15,16,19

**method** 52:15,17 54:2  
128:25 156:23 157:7  
208:22 230:21,22  
232:17,25 261:4,7,9  
265:2 266:1 270:10,11,  
19,23,25 271:4,5,16,25  
272:2,12,18 273:6  
275:15

**methodology** 108:6  
151:9 156:17,19 209:10  
210:4 246:8 274:4

**methods** 128:14 252:11  
270:15 272:3 275:18

**microphone** 148:4  
156:13

**microphone's** 135:20  
254:11

**middle** 53:23 130:6,13,  
14

**migrate** 34:10,12 98:15  
111:12 244:6,7 245:17

**migrating** 32:17 34:2  
292:9

**migration** 32:11 34:8  
58:8 104:6 211:5 212:8  
244:15 293:3

**million** 72:9,13 88:15,16  
89:3 157:21 158:1,14  
195:10 215:12 250:24

**mind** 36:7 174:6,8 179:5  
276:2

**mine** 169:23

**minimal** 295:25

**minimize** 78:16 235:9  
240:18

**minimized** 14:25

**minimum** 32:15,20 33:25  
34:7 122:10 212:12

**minor** 144:7 286:10

**minute** 41:18 43:4,19  
71:13 77:14 176:20  
204:2,9 239:22 286:4

**minutes** 66:22 90:25  
91:21 248:10

**mirrors** 138:22

**misapplication** 232:25

**miscellaneous** 20:9

**missing** 83:15

**mission** 102:7

**misunderstood** 31:19

**mitigate** 138:15 210:16  
260:18

**mitigation** 242:17

**mix** 109:11

**mixed** 33:2

**Mm-hmm** 144:14,23  
284:4,9

**model** 40:22 41:1 43:15,  
17 78:1,24 114:22  
131:13,17 145:6,11,24  
146:6,10,14 147:2 165:7  
169:6,9,16 170:22 174:9,  
11 175:3 198:11,12,15,  
17,20 202:3 237:15  
275:12,14,21 276:2

**modeling** 78:4 131:13

**models** 275:12

**modicum** 196:18

**modification** 141:3  
143:14 151:11 153:8  
225:5,8 270:12

**modifications** 8:8 110:7  
137:5 163:8,14 164:10

**modified** 155:18 160:14

**modify** 141:9

**moment** 55:16,18 75:7  
89:25 92:14 93:21,24  
98:5 102:22 106:16  
125:3 161:13 247:14

**momentarily** 91:16

**Monday** 120:17

**monetary** 171:6

**money** 83:2 100:19  
102:6 103:15,16

**monitor** 58:17 204:15

**monitored** 203:14 204:1

**monitoring** 203:24  
**month** 137:10 144:19  
180:14 204:16,17  
**month's** 138:13  
**monthly** 48:1  
**months** 57:15 138:14  
262:17  
**moot** 172:11  
**moratorium** 13:23 14:6  
15:5 16:24 17:25 18:12,  
15 19:11 23:18 32:20  
34:7 58:11,20 59:6 60:10  
66:17,21,22 68:3 69:16  
71:12 72:12,22 73:2 81:7  
98:12 99:2,6,8,10 104:3,  
11 105:5 120:25 122:6,  
23 123:12 124:9,13  
132:17 139:10 140:18,  
22,24 141:4,11 186:9  
189:21,24 190:1,5,17,24  
191:6,14 192:16,23  
193:10,17,18,22 194:25  
195:6,15,16,19 196:1,3,  
7,25 197:9 199:14,17  
200:12 201:7,19 202:10  
203:8,11 204:10 212:13  
241:25 243:6,9,11,16,25  
244:8,12,18,19 245:2,4,6  
293:17  
**moratorium's** 190:9  
**moratoriums** 197:17  
**morning** 8:4 9:1,19 10:4  
11:12,13 13:2 24:24,25  
25:6 28:21,22 50:3,4  
59:23,24 85:2,15,16  
120:17 140:25 174:22  
224:23 226:17 258:16  
291:4  
**morphed** 123:5

**motion** 24:10,13 136:22  
149:9 184:10,13 207:7  
228:1,4 250:7 259:19  
280:20,23 299:17  
**motivated** 194:7 196:11  
**motivation** 196:13  
**mouth** 255:15  
**move** 11:4 19:6 21:23  
23:11 24:3,8 38:5 103:10  
111:16,20,23 120:23  
133:6,22 134:3 136:15  
149:4 157:14 184:6  
190:14 193:21,23,24  
194:15,18,20 195:11  
197:10 199:15 200:13  
204:5,19 211:24 212:7  
227:22 238:23 243:5  
245:1,11 247:12 250:1  
252:2,4 271:11 280:17  
281:21,25 283:5 295:13  
299:11  
**moved** 106:21 214:2  
**movement** 185:20 189:5  
191:7 244:25 260:16  
293:18,25 295:10  
**moves** 56:16 259:15  
**moving** 14:6 17:6 18:9  
20:21 31:6 94:25 96:5  
99:5,12,17 100:6 112:4  
121:13 171:8 172:18  
186:9 190:11 191:10  
192:1,8,10,11,24 200:11  
202:15,22 204:14 214:10  
243:15 244:4 251:11  
282:21 291:23 293:10  
**multiple** 288:23  
**multiplied** 272:4

---

**N**

---

**narrative** 64:20,25 65:17  
66:11,12 98:19,22  
142:10 189:15,18  
238:12,15  
**NARUC** 40:24 41:2,3  
157:3 231:6 246:8,9  
268:15 269:7,19 275:12,  
14  
**nationally** 231:14  
**natural** 10:5 101:9 113:5  
270:9 278:11  
**naturally** 111:12  
**nature** 16:13 23:8 178:16  
**necessarily** 35:14  
170:24 179:9 288:21  
**needed** 94:11,16 186:20  
223:16 251:5,12  
**negative** 68:20,21 79:5  
80:16 158:19 256:11,22  
289:22  
**neighborhood** 60:21  
**Nelson** 8:19  
**net** 170:11 172:8  
**NGV** 34:20 35:22,24  
36:20 37:12,14 107:9,12,  
13,20,24,25 108:1  
209:20,23 219:4 221:1,6,  
11 222:9  
**NGV-RELATED** 223:9  
**nice** 181:19,22  
**Nobody's** 293:19  
**nomenclature** 33:3  
**nominal** 159:2 163:12

**non-coincident** 270:10  
272:3  
**non-coincidental** 270:25  
271:5  
**non-firm** 297:6,8  
**non-gas** 76:8 139:8  
142:7,16,19,20,24 143:2,  
10,13 225:6  
**non-interruptible** 263:3  
**nonetheless** 159:22  
**nonresidential** 294:19  
296:5  
**notation** 286:18,21  
**note** 29:22 38:7 47:25  
57:5 62:18 170:11 214:9  
215:5 231:7 256:25  
286:25 296:14  
**noted** 177:18 213:17  
236:1  
**notes** 287:16  
**notice** 83:12 138:25  
**noticeable** 288:1  
**noticed** 77:25  
**notify** 21:20  
**notion** 55:13 177:9  
243:25 244:13  
**notwithstanding** 30:23  
231:20  
**November** 206:15  
277:18  
**Nucor** 10:17,19  
**number** 64:1 96:10,16  
100:21 109:18,20 117:10  
118:10 129:7 130:17,18  
158:2,18 194:16 195:15  
196:12 200:10 215:3,17

219:23 256:14 294:7  
**numbers** 58:24 63:12,13  
94:9 109:6,15 167:22  
168:7 261:13

---

**O**

---

**O&m** 102:7  
**object** 172:24 248:7  
**objected** 139:13  
**objection** 24:13 136:22  
146:3 149:9 226:2  
247:24  
**objections** 184:12  
207:10 248:10 250:7  
259:22 280:23  
**objective** 36:7 122:19  
208:6 292:5  
**objectives** 150:22  
185:13  
**objects** 24:10 136:18  
184:9 207:6 227:25  
250:3 259:18 280:19  
**observation** 153:8  
**obtain** 178:9 185:4  
**occasion** 151:24  
**occupation** 148:1 183:11  
258:17  
**occur** 75:12 131:20  
154:14 177:12 193:13  
203:11,15 243:21  
**occurred** 44:20 45:2 49:1  
75:12 229:4  
**occurrence** 26:25 271:9  
**occurring** 26:18  
**occurs** 175:17

**OCS** 207:11 211:9  
215:25 216:5,13 217:8,  
23 218:1,4,7 269:2,3  
289:24

**October** 29:20

**odd** 169:17

**offer** 207:4

**offered** 20:20 137:3

**offering** 164:19

**office** 9:3,14 35:7 82:24  
130:9 187:25 205:10  
206:3 224:24 225:10  
231:23 238:3

**Office's** 225:2

**offset** 44:12

**offsets** 209:16

**Ohio** 118:24

**Oliver** 10:7 21:12 77:6  
231:8 232:1 237:21  
240:24 254:25 256:19  
284:20,21 285:3,5

**Oliver's** 69:2 108:15  
239:2 254:16,24 255:15

**one-time** 81:25 118:17  
279:14

**ongoing** 21:21

**online** 84:24

**open** 16:19 70:8 79:14  
199:21 241:7,11 281:24

**opening** 155:21 234:17

**operates** 83:11

**operating** 83:1 102:10  
262:25

**operation** 252:19

**operational** 21:7

**opinion** 172:19 229:9  
**opportunity** 30:21 72:23  
148:11 160:22 183:17  
197:10 299:20  
**oppose** 33:25  
**opposed** 146:7 181:15,  
16 271:18 287:2  
**opposite** 186:7 189:14  
**option** 14:24 22:12 23:13  
101:21 134:15 137:11  
138:6 191:1 203:20  
211:16 229:15 245:13  
**options** 187:7 281:20  
**order** 102:19 139:17  
142:3 145:17 160:18  
166:22 168:14,21 185:4  
194:14,17 203:11,16  
211:18 215:22 218:10  
222:23 234:4,16  
**ordered** 45:4  
**orders** 21:7 125:10  
**original** 13:11 14:23  
16:25 23:10,15 62:3,4  
93:22 209:14 243:13  
**originally** 65:2 76:1  
98:20 119:23 122:9  
127:25 156:22 158:12  
186:8 209:7 261:11  
**outcome** 131:13 158:12  
200:17,18 203:16  
**outcomes** 150:16  
**outlined** 55:21 57:18  
203:7  
**outperforming** 289:14  
**output** 167:21 170:21  
**Overland** 185:6,8

**overstated** 298:24  

---

**P**

---

**P&a** 87:7,8,9,11 266:12  
**p.m.** 8:11  
**pace** 105:12,13  
**package** 40:18  
**pages** 34:16 217:25  
268:16 277:17,20  
285:11,14,17  
**paid** 33:19 102:6 103:13  
115:9,12  
**paperwork** 279:21  
**paragraph** 140:23 141:6  
**paralegal** 85:1  
**parameters** 16:20 175:20  
191:4  
**parcels** 278:16  
**parenthesis** 219:3  
**part** 18:25 21:20 29:11  
35:11,12 40:18 42:4,9  
43:8,15 62:8 82:25 83:22  
111:2 120:10,12 142:11  
167:13 187:8,11 201:11  
202:18 238:8 239:21  
241:13 242:21 250:20  
262:16 281:15 287:23  
291:22 295:15  
**partial** 29:6 274:15  
**partially** 260:24  
**participants** 11:4  
**participate** 10:20 194:7  
**participated** 185:2  
**participating** 245:14

**parties** 14:19 15:2,18  
20:20 23:9 30:20 33:24  
34:6 53:13 57:7 67:6  
84:25 91:17 105:18  
108:20 121:25 145:10,12  
146:8 148:13 150:18  
154:21 155:18 159:16  
163:17 177:4 182:12  
183:18 185:1 187:21  
203:14 230:1 233:24  
247:19 248:1 258:25  
271:14 287:20 289:25  
292:13 294:25  
**partly** 54:8  
**parts** 56:3 191:10  
202:15,22  
**partway** 30:13  
**party** 139:13 181:20  
203:25 290:3,4 296:9  
**pass** 251:1 252:24,25  
**past** 36:18 38:22 45:1  
97:5 106:20 108:17  
160:4 278:13 279:24  
**path** 125:10 129:18  
252:5  
**patterns** 89:5  
**pay** 27:10 70:24 102:2  
103:4 106:20,25 115:14  
127:13 138:12,15  
229:16,21 263:22 265:9  
278:18  
**paying** 30:18,22 33:21  
62:22 66:18 70:3,4 72:20  
73:7,8,10 75:3,5 76:17  
83:6 88:7,12,13,15,16,  
22,24 97:25 103:25  
108:23 110:13 186:4  
265:4 278:21,23 280:4  
291:3 294:6 295:17

<b>payment</b> 138:16	266:2,8	<b>performing</b> 127:5
<b>peak</b> 20:23 21:3,9,17 25:14,21 26:25 39:12 47:19,22 48:25 49:8 50:25 51:5 52:17 54:2, 18,21,25 55:3,6 87:12,13 93:8 94:11 95:3 128:10, 12,18 129:17 131:3 133:3,23 134:6 142:25 143:1,4,8 151:14,15 153:17,25 154:3,8,19 159:13 160:13,16,23 161:4 162:6 163:23 168:22 174:19 177:21,23 178:9,14 187:15 208:23 209:8,13,14 214:12,21 215:11 216:15 217:3 219:1,3,7,9,24 229:1,2,3, 7 230:3,13,16,19,20,22 232:8,9,17 233:1,3 246:7 251:12 261:4,9,10 262:6, 7,12 263:2,13 265:1 270:11,20,21 271:8,9,12, 16,25 272:9,11,24 273:5, 9 275:25	<b>perceived</b> 137:11	<b>period</b> 71:14 75:13 103:6 104:13 119:19 133:9,17 146:2 153:17 154:3,9 155:20 174:12,13,19 179:17 180:14 187:17 225:7 229:4 234:8 288:13
<b>pejorative</b> 201:9	<b>percent</b> 13:19 52:2,3 62:15 65:7,8,19 66:3 68:8 73:23 74:22 75:9,14 76:5 77:20 79:5,6,19,23 80:16 89:23 90:8,12 93:4,7,17,19 94:2 95:2,5 96:2,6,20,22 97:1 98:6,8 100:8,9 105:2 106:9 107:18 109:17 112:22 113:21 117:19 131:1,3 161:19 170:11,14 171:13,16,20,25 173:12 177:3,8 179:13,15,22 180:12 181:15 198:14 199:4 208:18,20,25 209:5,7,8,14 210:24,25 211:11,13 214:2 221:13, 17 222:3,4,19 228:23 230:16 231:2,3,20 234:4 237:17 240:6 256:22 257:3 261:11,12,20 264:12,22 265:21 266:6, 19 274:18 289:4,5,18,21 292:16 297:1,3,5,12,14 298:1,12	<b>periodically</b> 204:13
<b>penalize</b> 120:22 279:4,11	<b>percentage</b> 40:2 78:16, 20 79:17 90:11 93:4,8 95:2,4 96:1,11,17 104:18,20 116:19 117:9, 13 125:14 131:12 146:22 151:23 157:11 171:22 179:24 180:8 181:15 222:2 234:24 242:13	<b>periods</b> 143:9
<b>penalized</b> 143:5	<b>perception</b> 294:6	<b>permanent</b> 212:12
<b>penalties</b> 21:5,6,11 27:16 28:2,4 102:24 103:13,15 104:1	<b>perform</b> 152:6	<b>permitted</b> 299:15
<b>penalty</b> 21:15 27:11 103:3,5,16	<b>performed</b> 111:25 126:3 150:10 242:8 291:9 294:22	<b>person</b> 97:10 243:8
<b>pension</b> 13:5		<b>personally</b> 152:8 244:11 264:20 275:22
<b>people</b> 22:16 53:10 71:16 82:23 88:11 89:3 90:24 97:7,9,20,21,25 119:12 176:16 194:3,4,6 197:10 245:1 298:18		<b>personnel</b> 114:20
<b>per-unit</b> 265:5,9,11,15,22		<b>perspective</b> 237:1 253:3 289:15
		<b>persuade</b> 202:7
		<b>pertain</b> 228:19
		<b>phase</b> 8:9 60:12 150:21 185:13 206:7 228:13 233:21 234:20 258:25 288:4,12
		<b>phase-in</b> 56:2 75:13 77:15,18 234:1,8 244:3, 6,9,14,16 288:8,9
		<b>phased</b> 79:14 283:5
		<b>phased-in</b> 187:16
		<b>Phillip</b> 10:10
		<b>philosophy</b> 251:7 252:1
		<b>physical</b> 263:5
		<b>pick</b> 105:1
		<b>picking</b> 254:12
		<b>picture</b> 40:11

**piece** 236:17  
**pieces** 112:4 285:21  
**pipe** 26:19 251:12,15  
**pipeline** 83:6 101:12,13  
211:18  
**place** 16:5 17:8,25 32:24  
44:15 97:11,12,22  
102:23 123:2,7 182:6,7  
232:18 243:24 286:3  
**places** 33:10  
**placing** 126:24  
**plan** 22:22 82:6 119:9  
159:18 248:5,11  
**planned** 115:15 159:25  
**planning** 22:19 84:4  
114:13 118:15 120:22  
**plans** 22:19 82:10 83:24  
208:2  
**plant** 25:18 34:18,19,23,  
24 36:2,3,10 86:15,21,25  
138:1 158:16 209:19,22,  
23,25 228:23 265:14  
266:7  
**play** 202:20  
**players** 28:11  
**plentiful** 137:19  
**point** 16:16 30:17 36:8,  
17 46:5 58:13 68:6  
71:12,22 77:5 80:18  
83:22 85:7 99:1,9 106:12  
111:9 118:8 120:3  
121:23 128:14 134:9  
144:18 149:4 156:10  
160:8 166:20 172:10  
175:15 177:13 178:7  
205:9 215:25 248:16  
249:25 257:1 264:19

**pointed** 14:12 18:3 45:7  
50:21 77:6,21,23 98:19  
100:2 104:5 131:9  
151:20 178:4,16 209:11  
230:18  
**pointing** 92:18 94:8  
**points** 12:22 32:10 78:6  
79:24 152:14 190:1  
**policies** 150:7 151:3  
158:22 174:3 287:17  
**policy** 138:22,23 160:5  
**portion** 13:9 40:13 41:13,  
16,25 42:1,3 46:20 51:4,  
5 67:2 115:14 180:13  
201:23 208:22,24 242:15  
258:25 272:17,18 273:6  
**portions** 25:17  
**posed** 214:16  
**position** 11:24 15:14  
44:25 54:24 94:5 123:17  
136:4 158:16 159:15  
169:15 175:1 213:12  
214:1 222:7,17 224:24  
225:1,2,11 231:13 251:2  
288:7 299:21  
**positions** 9:16  
**positive** 68:1 73:1 290:1  
**possibility** 37:7 158:23  
**potential** 19:12 58:8  
160:23 186:22 187:1  
200:13 203:15 250:23  
**potentially** 203:25  
204:20 242:6 243:7  
245:3  
**practice** 36:4,18 154:12  
155:7 157:3  
**practices** 45:1 150:7,13

**preaching** 82:22  
**precedence** 150:16  
**predecessor** 229:6  
**predicate** 161:20  
**predominant** 155:7  
**prefer** 91:17 248:1  
**preference** 129:12 248:3,  
4  
**preferred** 137:21  
**prefers** 234:14  
**prefiled** 25:6 57:5 136:8  
148:17,22,25 149:5  
152:5 154:18 159:16  
164:3 184:3 227:5,16  
249:10,19 250:12 259:10  
**preliminary** 8:12  
**premarked** 277:20  
**premature** 14:20 238:23  
**premise** 293:19  
**prepare** 131:25 145:11  
277:15 285:9  
**prepared** 12:21 131:24  
145:5 149:17 151:20  
184:18 207:14 228:8  
236:13,22 237:4 240:22  
250:11 260:2 277:15  
278:5 287:9 289:7  
**preparing** 120:4  
**prescribed** 231:6  
**present** 207:17 260:5  
289:5  
**presented** 186:8 201:12,  
14 234:19 288:23 289:6  
290:5,18,20,22 291:1  
292:12,14 295:3 296:22



**presenting** 10:6 291:22  
**presents** 296:17  
**preserve** 221:1  
**pretty** 48:10 53:8 76:23  
77:4 100:9 123:10  
145:16 203:7 240:2  
**prevent** 18:17 32:16 34:1  
36:18 191:8  
**prevented** 72:25 83:25  
119:12 192:23  
**preventing** 19:10 99:12,  
22  
**previous** 150:3 153:4,18  
174:4 207:22,25 217:7  
230:18  
**previously** 108:2 153:22  
210:12  
**price** 76:7,13,18,19 77:2  
80:17 82:17 107:22  
250:24 252:9 253:1  
255:2,8,10,16,18,21,23  
278:17 292:17  
**prices** 70:21 76:11  
82:18,19 83:7 101:3  
114:25  
**pricing** 77:12 149:25  
233:9 252:8 287:17  
**primarily** 113:6 149:24  
228:14  
**primary** 170:2 185:13,21  
223:10 284:5  
**principal** 258:18  
**principally** 125:25  
**principles** 157:2  
**print** 218:25 219:1  
**prior** 20:17 36:4 38:8

39:4 44:21 108:7 109:2  
138:11 220:3 231:8  
237:5 299:11  
**priority** 196:14  
**pristine** 293:5  
**privilege** 150:23  
**problem** 14:12 59:11  
64:18,22 65:22 67:22  
78:25 92:3,6 120:11,13  
124:15 147:7 189:3,6  
190:14,16,20 192:18,21,  
22,23 223:25 293:12  
294:8  
**problems** 14:20 67:8  
98:21 209:16 294:21  
**procedural** 85:5  
**procedures** 150:15  
151:3  
**proceed** 228:11 250:14  
**proceeding** 40:2 106:14  
111:20 125:9 149:23  
151:17 152:18 154:22  
156:11 175:15 194:20  
206:1,5,12 238:8 249:10,  
20 252:22,24 255:10  
271:15 277:16 285:10  
287:19 288:24  
**proceedings** 50:19 150:4  
151:8 225:9 291:8  
**process** 13:12 15:17,20  
16:17,19 17:21 22:17  
23:8 32:2,5 35:12 57:12,  
18,19 74:14 78:2 81:5,23  
84:4 105:17 119:4,11  
150:1,14 154:5 173:3  
185:8 188:14 193:15  
194:9  
**processes** 82:21 125:12

**processing** 138:1  
**produce** 82:8,10,14  
131:17 158:24 175:22  
257:3  
**produced** 63:6 64:17  
91:15 206:11 256:11  
**produces** 163:12 256:21  
**producing** 62:14 63:7  
64:5 191:18 242:1,2  
250:21  
**product** 88:6 250:21  
**production** 82:5,6  
161:11 202:17 250:22  
**productive** 16:20,21,23  
23:8 194:9  
**profiles** 251:23  
**program** 23:3 65:24  
**progress** 15:8 81:23  
291:16 293:23  
**prohibit** 243:13  
**prohibition** 103:8 243:12  
253:14  
**project** 262:10  
**proof** 45:21 175:19  
186:10  
**propane** 138:7  
**proper** 22:19 208:13  
229:7 262:2,8 299:24  
**properly** 169:25 211:5  
223:15  
**properties** 82:25  
**proponent** 45:20  
**proportionate** 241:5,12  
**proportionately** 242:13

**proportioned** 241:9  
**proposal** 15:23 17:1  
19:6,25 20:7 23:4,11,15  
30:25 32:8 37:8 45:13  
51:25 52:14 56:1,5,7,16,  
17,19 57:13 75:8 78:21  
79:15,16,21 80:6 89:13  
93:11,12,16,18 94:7,19,  
22 95:14 107:7 121:5  
144:21 152:11 153:12  
158:7,8 159:22 161:14,  
18 163:21 164:6 166:15  
171:11 172:6 199:20  
209:9 210:10,20,22  
211:10 212:5 213:10  
217:3,6 222:1,20 223:19  
234:3 243:13,18 274:8,9,  
20 288:15  
**proposals** 53:2 54:17  
122:1 151:6 160:9 168:9,  
10 171:2 177:15 283:4,5  
291:1,21 292:13 293:24  
295:12 296:16  
**propose** 31:1 32:15  
53:14,20 78:7 110:19  
133:20 137:5 154:8  
168:8 209:4 210:23  
**proposed** 13:11 14:13,23  
20:13,23 21:24 22:12  
31:2,4,20 32:4 36:4  
37:24 52:15 54:8 78:11  
80:6 98:23 106:17 108:1  
118:6 120:2,5,20 122:8,  
12,23 125:12 127:20  
137:7 139:2,15 150:11  
151:1,5,10,16,18 152:10  
153:15 154:24 155:19  
156:22 163:1 164:18  
165:17 168:11,17,23  
169:2 170:9 172:12  
175:8 187:13 208:1,4,5  
209:7 211:6,14 213:18

230:10 231:15,17,21  
234:8 242:11,19 243:18  
250:16 251:10 252:17  
261:15,17 264:11 266:24  
267:2,4,8 274:4 286:8  
**proposes** 56:8 173:8  
198:15 209:6  
**proposing** 18:11,12 73:4  
75:21 81:6 108:5 110:7  
119:11 124:13 130:10  
160:11,18 161:21  
163:23,24 166:16 169:10  
178:11 210:3 211:2,3  
212:2 233:21  
**pros** 203:8  
**protect** 71:18  
**protecting** 72:2  
**protects** 19:11  
**proved** 210:18  
**proven** 138:16  
**provide** 12:25 38:4 44:11  
85:10 138:7,12 146:5  
148:9 194:24 196:4  
210:8 216:3 234:5  
237:11 258:21 263:3  
279:9  
**provided** 32:23,25 37:21  
49:15 185:8,10,25  
186:12 187:2 215:20  
220:5 237:21 238:2,12  
252:8 255:1 265:12  
270:14 290:23  
**provider** 196:22  
**providing** 145:6 188:16,  
19,21 216:14 237:17  
238:21 241:4 289:1  
298:23  
**provision** 34:7 74:19

161:22 204:13 212:12  
**provisions** 34:1 268:25  
**proxy** 231:2  
**prudent** 19:12  
**public** 8:5,10 9:4,7 20:19  
23:19 139:16 148:16  
183:14 184:24 196:21  
247:22 248:13  
**pull** 165:2 167:7 193:3  
**pulled** 231:22  
**punctuation** 139:3  
**punitive** 153:9  
**punitively** 231:19  
**purchase** 196:23  
**purchased** 114:25  
**purchases** 22:18  
**purchasing** 114:15,17  
**purports** 296:18  
**purpose** 132:19 137:4  
138:3 275:17  
**purposes** 107:25 161:11  
162:16 221:21  
**pursuant** 146:8  
**push** 100:25 295:15  
**pushing** 164:25  
**put** 17:14 43:3,19,24  
46:1 70:22 88:10 96:14  
107:14 109:11 121:24,25  
123:20 130:6 131:2  
145:25 193:10 204:10  
247:14 255:14 275:17  
286:18,19,20 295:6,7  
**puts** 91:13  
**putting** 39:7 53:3 146:6  
203:22

<b>Q</b>		
<b>qualify</b> 111:13 202:14	204:25 206:25 212:22,24	44:21 45:1 56:24 57:1,
<b>quantification</b> 126:7,8	220:8,10,14,18 221:22	10,14,25 59:3 62:15 67:3
<b>quantitative</b> 122:18 126:13 130:6,19	223:2 224:1,3,7 225:18, 20 227:19 228:17 235:17	69:9,13,22 71:4,15 72:9 74:2,19 78:11,15 81:2
<b>quantities</b> 21:8	245:23,25 246:14,16,19, 23 247:2,3,6,8 249:22	99:5,7 100:5,24 101:17, 19,20,22 104:1 105:2,7, 24 106:2,4,17 107:9,12, 15,17,18,20,23,24,25
<b>quantity</b> 252:15	253:19,21,23 254:1,4 257:12,13,17,18,21	108:1,7 109:5,25 110:6 111:8,14,16,17,18
<b>quarterback</b> 120:17	259:12 267:12,13,16,18, 22,25 272:15 273:18	112:14 115:18 119:22 120:14 121:24 127:14,25
<b>Questar</b> 101:13 229:6	276:5,11,12 277:23	128:6 131:5,10 133:2,16 139:22 146:21,22 149:23
<b>question</b> 26:8,14 31:20 36:9 42:25 43:1 47:6 51:20 78:9 105:16 106:23 107:24 119:21 122:3 124:5 131:19 144:8 145:5 161:20 163:19 164:25 173:11 174:7 177:18,20 179:3 180:5 181:8 197:12 200:21 203:6 214:16,17 215:18,20 224:20 229:2 230:12 233:18 268:7 271:2 282:6	281:5,7,12 282:10,13 283:14 284:13 285:20 295:4 296:14	150:1,11,13 151:8,18 154:21,24 157:11,16 158:7,24 160:10,11,19, 20 161:15 162:19 163:2, 7,10,13,25 164:9,16 165:7 168:9,17,25 169:6 170:2,24 174:1,2,4 175:9,20 176:24 177:6,8, 16,22 178:20 186:3,6,11 187:9,11,12,17 191:2,4 197:17 200:17 203:12 206:7 207:19,22,25 210:6,13 211:1,2,4,6,10, 14,15,16,19,21,22,25 212:1,6,8,10 221:6,11,13 222:1,3,4,13,23 223:20, 21 225:7 228:14,15 230:18 233:20 234:5,7, 13,15,18,24 240:23 241:17,19 252:18 255:9 256:17 260:17 265:12 268:15 269:7,19 278:12 279:1,9,10,23 280:4,6 281:24 286:22 287:19 288:9 289:2,3,16 290:2 291:6,19 292:4,13,25 293:1,15 294:3,4,12 295:12 296:13,15,18,21 297:24 298:6,11
<b>quick</b> 61:6 140:12 173:21 245:25	<b>quickly</b> 22:22 43:17 86:8 107:10 193:21,23,24 194:2	
<b>quote</b> 38:18 268:15		
<b>R</b>		
<b>raise</b> 163:24	<b>raised</b> 34:17 151:10 163:16 236:19	
<b>Ralph</b> 277:12	<b>random</b> 105:1	
<b>range</b> 54:14 83:7 105:3 112:22 150:12 152:1,25 289:18 297:12,15	<b>ranging</b> 297:4	
<b>rapidly</b> 14:4	<b>rate</b> 13:2,10,19 14:10,15 15:3,9 16:18 17:3,14 18:23 19:15 20:15 23:12 28:25 29:7,21 30:3,16 32:10,17 33:18 34:2,10 35:5 36:23,24 38:8 39:10	
<b>questioning</b> 235:14		
<b>questions</b> 11:4 15:19 25:1,2 28:13 29:5 34:14 38:5 47:16,17 49:20 50:5 84:19 92:5 106:15 108:20 114:7,10 124:18, 22 132:7,10 139:25 140:2,4,8,10 143:21,23 144:2,5 148:24 155:23, 24 156:2 158:11 159:4,6 167:10 170:20 173:19 176:2 179:4 180:24 181:4 182:19 184:3 187:21,23 188:1,4 197:25 200:3,6,10,23 201:2 202:5 203:1		

**rates** 8:7 13:14 14:16  
18:13,18 19:10,14,24  
23:18 25:8 30:22 45:23  
46:22 47:9 51:16 52:7  
57:16,24 59:2 62:23  
65:4,6 67:7 70:1 71:22  
72:1,20 73:4,15,16  
74:20,24 75:3 79:1,11  
100:14 101:18 105:14,15  
106:4,12,25 107:13  
109:2,3,7,8 110:9 111:9,  
11,22 112:14 114:18  
118:3 123:21 125:5,18  
126:5 127:18 128:4  
139:8 151:6 153:5,14  
155:12 162:25 163:24  
167:25 168:18 193:1  
200:17 224:16 236:15  
242:8 243:19 244:20,23,  
25 250:15 251:4,7,10,20  
252:16,24 253:1 255:1,  
24 260:13 274:11,21  
282:23 283:1,2,8,22  
287:21 289:5,19,25  
290:15 291:11 292:5  
293:15 295:17 298:5

**rationale** 160:24 232:16

**ratios** 130:3

**raw** 170:21

**reach** 13:16

**reached** 231:10

**reaching** 241:14

**read** 30:12 72:5 91:12  
137:13 144:19 240:9  
255:5,15 269:25 270:4  
271:23,24 275:13

**readily** 161:9

**reading** 48:23 93:13  
137:9 144:12

**ready** 27:6 121:4 135:6  
145:17 229:13

**real** 86:8 127:24 292:10

**realistic** 293:6

**realize** 13:3 122:17

**realized** 297:21

**reason** 20:15 28:9 33:5  
40:11 47:10 56:23 57:3  
83:23 100:13 105:8  
107:2 114:3,7 119:13  
137:23 186:8 191:21  
201:18 212:9 290:16

**reasonable** 19:6 20:1,16  
22:11 23:19 35:25 36:5,  
7,14 45:23 46:2 49:10,12  
53:24 54:4 57:2 61:4,13  
88:21 113:22 118:1  
139:16 175:2 192:24  
288:9 291:6

**reasonableness** 54:15

**reasoning** 213:22

**reasons** 18:22 20:14  
63:16 154:17 185:22  
211:13

**rebut** 211:22

**rebuttal** 12:3,8,22 19:20  
24:6 32:21 34:16 47:18  
55:21,23,24,25 77:25  
78:12,24,25 79:23 80:6  
86:13 107:14,15 147:3  
155:17 157:24 206:16,17  
213:16 227:10 234:20  
240:9 255:1,7 285:13  
286:2,13,25

**rebutting** 254:24

**recall** 25:20,22 26:21  
47:23,24 52:12 53:5  
112:24 274:9

**receive** 20:5 43:6 44:8  
46:12 55:7 211:22  
261:19 263:11,19

**received** 85:8 91:20  
201:16 212:6 218:14,17,  
20 219:6

**receiving** 33:21 41:25  
207:21 211:16

**recent** 26:3 49:7 152:16  
173:4 185:21

**recently** 27:5 39:5 85:11

**recess** 84:16 90:23 91:4  
135:4 205:6 248:14

**recognition** 151:11  
153:16,20 160:4 174:16

**recognize** 133:12 152:25  
181:25 191:6 217:22  
218:5 265:1 269:9,15  
297:8

**recognized** 151:2 153:4  
156:19 231:14 246:8  
266:12,17

**recognizes** 208:22 279:6

**recognizing** 150:7 152:1  
299:7,10

**recollection** 256:13

**recommend** 78:15  
152:11 154:18 187:3  
211:13 212:11,14 222:20  
230:2 234:7,18,23,25  
235:8 240:22 261:15  
267:1

**recommendation** 146:23  
151:17 153:15 154:11  
155:5,19 161:1 163:7  
164:20 173:14 194:13  
201:9 202:9 209:15  
214:12,18 231:23 241:2

296:10  
**recommendations** 15:13  
150:2 151:1,5,16 154:25  
164:3,9 170:25 172:4,7  
175:16 187:7  
**recommended** 199:22  
232:2,4 240:25 241:7,14  
288:7  
**recommending** 25:7  
182:12 231:4 241:3,16,  
18  
**reconvene** 135:1,3  
**record** 11:22 12:18 20:6  
24:8 25:5 64:16,23 79:22  
91:6 131:14 135:17  
146:20 148:1 149:5  
161:3 172:11 174:14  
175:11,16 180:7 183:11  
184:7 205:8,23 227:1  
237:23 238:1,6 239:15,  
16 247:20 248:16 249:4  
255:9 259:16 277:11  
285:4  
**records** 178:6  
**recovered** 38:11 143:9,  
13 224:13,15 273:7  
**recovering** 46:25 273:10  
**recovers** 33:19 143:6  
**recovery** 44:23 46:23  
138:1 201:17 290:3  
294:21  
**recross** 116:4 180:23  
200:22 224:3 276:7  
**RECROSS-  
EXAMINATION** 116:14  
**red** 117:4  
**redesign** 211:2,10,14  
291:11  
**redesigning** 212:9  
**redirect** 102:13,16 124:7  
143:22 178:23 179:1  
180:20 200:4,5,8 223:4,7  
246:24 257:14 273:21  
274:1 282:15  
**reduce** 21:25 31:7,20  
109:12,13 208:1,3 209:4,  
6 242:11 252:15 295:23  
298:19  
**reduced** 18:25 21:25  
157:25 186:22 187:1  
278:17  
**reduces** 214:24  
**reducing** 31:22 242:18  
**reduction** 22:8 31:10  
77:20 79:19 187:13  
215:13 252:14 298:10,  
17,20,22  
**reductions** 19:4 27:22  
158:25 159:2  
**refer** 32:12 104:22  
116:16  
**reference** 33:11 130:21  
131:8 152:23 297:22  
**referenced** 76:22 250:1  
**referencing** 139:3  
**referred** 84:2 142:11  
174:21 209:9 236:23  
261:7,8  
**referring** 33:7 39:16 87:8  
91:10,11 109:15 189:1  
232:20 236:8,10 239:2,8,  
11 242:8 256:20  
**reflect** 131:13 146:20  
160:14 169:25 182:2  
260:22 262:19 289:9  
**reflected** 153:17 160:6  
162:2,24  
**reflecting** 169:7 201:11  
**reflection** 25:4 154:15  
161:24 172:20  
**reflective** 292:2  
**reflects** 118:3 141:11  
150:6 262:20 264:16,17  
266:11 267:6 272:2  
**regard** 125:25 131:5  
158:16 163:7 177:12,15  
178:17 201:13 279:17  
299:9  
**regular** 21:17 204:15  
**regulating** 50:14 228:21  
**regulation** 11:25  
**regulators** 261:6 263:5  
**regulatory** 136:6 151:3  
**reiterate** 114:12  
**reject** 210:10  
**rejected** 23:5 211:14  
230:11  
**relate** 161:22  
**related** 26:10 29:15,23  
30:3 32:10 34:17 40:3  
96:10,17 145:6 157:15  
166:10 181:8 206:7  
208:14,20 219:7 232:6  
261:6 263:6 268:8  
299:12  
**relates** 37:9 43:7 124:9  
138:2 177:21 224:21  
**relating** 166:16  
**relationship** 234:11  
237:3 282:23  
**relationships** 130:3

235:6 236:4 239:6	269:1,6	163:11,13 164:13 165:18
<b>relative</b> 113:10 171:6 224:11	<b>representation</b> 152:10 169:9 221:21 298:22	168:12 175:19 188:20 199:11 241:8,15 260:10 267:1 287:23 288:6,22
<b>relevance</b> 153:3	<b>representative</b> 126:4 127:7 129:17	<b>requirements</b> 39:12 138:1 186:14 234:23
<b>relevant</b> 162:22	<b>representatives</b> 35:6 185:3	<b>requires</b> 103:3
<b>reliance</b> 153:5 260:23	<b>represented</b> 157:18 173:13 179:24 255:13 275:9	<b>researched</b> 197:15
<b>relied</b> 64:8 151:24 169:7, 9	<b>representing</b> 9:3,14 10:5 150:5	<b>researching</b> 85:1
<b>relies</b> 41:22 178:16	<b>represents</b> 154:13	<b>resent</b> 85:2
<b>rely</b> 11:3 194:24	<b>reps</b> 126:11	<b>residential</b> 61:19 113:11, 12,16 130:8 155:2,5 288:17
<b>relying</b> 47:4 62:24 90:24 154:10 178:12	<b>request</b> 27:18 62:8,9,18 63:1 64:7 66:8 68:16 81:15 123:1 129:16 133:13 139:21 146:8 157:25 188:17 203:24 216:1,4,7 217:12,23 218:1,7 219:7 237:15 239:4 240:2 256:21 286:23 288:11 299:13	<b>residential/ nonresidential</b> 296:6
<b>remain</b> 115:11 234:8 290:1	<b>requested</b> 68:13 152:3 266:25 295:1	<b>resolution</b> 209:15
<b>remaining</b> 155:14 272:8	<b>requesting</b> 130:11	<b>resolve</b> 90:25
<b>remains</b> 281:24	<b>requests</b> 17:21 63:4 68:23 108:21 185:4,24 189:12 256:19 289:7	<b>resource</b> 137:18
<b>remember</b> 18:10 55:22 114:10 158:2 177:19 256:14	<b>require</b> 46:23 71:3 128:14 187:6 211:23 212:15	<b>respect</b> 62:3 77:18 79:19 81:25 126:2 144:12 146:20 160:9,19 162:7 181:12 206:1 223:9 224:25 234:1 237:11,22 239:1 261:23 265:5 267:7 270:18,24 271:4 272:17,18,23 274:25 275:25 294:3
<b>remind</b> 87:7	<b>required</b> 29:6 140:20 154:19 175:22 223:22 229:19 279:9 280:4	<b>respective</b> 86:21 230:12 231:9 260:15
<b>reminder</b> 24:18	<b>requirement</b> 32:16,20 79:12 80:2,5 128:6 155:1 157:16 158:10,17	<b>respond</b> 249:23 252:11 255:17 292:17,20 299:17,19
<b>removal</b> 144:15,22		<b>responded</b> 27:18 152:7 233:25
<b>remove</b> 31:16 245:9		<b>responding</b> 158:11
<b>removed</b> 137:12		<b>response</b> 8:14 10:25 24:11 62:9 68:10 109:1
<b>removing</b> 137:15,25 138:4,6		
<b>repeat</b> 46:19 94:13		
<b>rephrase</b> 26:8 180:5		
<b>replaced</b> 80:7		
<b>replacement</b> 65:24		
<b>reporter</b> 217:19 219:18 269:11		
<b>represent</b> 44:25 45:3 150:18 179:15,18 250:20		

136:20 147:12 149:10  
177:19 180:25 184:11  
185:24 189:12 200:24  
207:8 213:20 214:15  
216:7,10,13,14 217:11,  
12,23 218:1 219:6 226:3  
228:2 237:4,14 238:6  
239:20,25 240:1 242:7  
246:25 248:8 250:5  
259:20 280:21 286:23  
289:7 292:21

**responses** 236:13

**responsibilities** 230:5  
292:3

**responsibility** 44:8 46:1  
151:15 219:2 267:3

**responsible** 88:18 96:6,  
25 98:7

**rest** 31:8

**restarted** 90:16

**restate** 61:1 196:6,16

**restaurant** 60:6

**restrict** 293:24

**restricting** 253:8 295:10

**restriction** 26:19 279:17  
293:18

**result** 20:18 36:19 37:23  
38:4 67:5 86:16 94:24  
119:24 129:2,21 131:18  
150:15 158:23,24 165:9  
169:5,17 173:2 175:22  
182:9 197:6 202:11  
206:10 210:13 216:3  
222:20 242:18 256:10,15  
261:15 263:14 288:14  
295:22 297:7

**resultant** 233:9

**resulted** 215:12 274:16,

19

**resulting** 106:12 172:7  
266:18

**results** 125:11 131:13  
162:18 172:11 237:3  
265:4 266:1 289:11  
290:6 295:3

**retain** 211:18

**retained** 149:21

**return** 61:25 62:15 63:6,8  
64:2 66:19 67:12 68:1  
69:13 73:1,8 80:12 83:2  
109:5,13,15,17,24,25  
110:8 188:16,21,22  
191:18 236:15 237:17  
242:1 256:11 257:3  
289:2,3,16,20,25 290:10,  
12,15 294:13 298:5

**returned** 138:18

**returning** 68:8 80:11

**returns** 64:3 69:9,12  
256:6

**revenue** 47:14 58:3,4,6  
65:25 67:15,18 79:12  
80:2,4 96:1,11,17 97:1,2  
109:8,12 128:6 143:6  
155:1 157:16,21 158:10,  
17 163:11,13 164:12  
165:18 167:20 168:12  
170:21 175:20 199:11  
210:11,18 234:23 241:8,  
15 260:10 261:17,18  
264:18 266:20,24,25  
267:3,4 287:23 288:5,22

**revenues** 47:4 76:4  
224:18

**revert** 153:12

**review** 86:2 145:12  
148:11 149:22 152:6

153:10 183:17 185:7  
186:21,25 187:5 206:6,  
10 215:14 218:13,16  
258:24 271:1

**reviewed** 150:9 152:15  
154:24 173:8 184:24  
196:13 218:22 224:22

**revised** 153:12 157:25  
162:23 185:25 218:8  
231:13

**Revolution** 70:22

**rewording** 139:3

**RFP** 22:18

**Richard** 285:5

**right-hand** 168:8

**rights** 11:25

**rigorously** 49:7,9

**risk** 46:17,25 47:7 138:15

**River** 101:13

**road** 62:17 67:8

**Robert** 9:22

**robust** 173:3

**Roger** 10:15 248:19  
249:6

**role** 152:17 250:17

**room** 22:16 82:18 136:22  
145:23 167:9 175:6  
226:2

**root** 189:6

**rough** 126:24

**roughly** 87:20 195:21  
222:2,19

**round** 106:20

**rule** 141:24

**ruled** 199:11

**ruling** 220:3

**run** 40:12 44:9 114:22  
147:2 167:21 202:1

**running** 37:10 90:19

**Russell** 10:9,10 49:23  
50:2,4 59:17 90:14  
116:9,10 140:9,10 159:6,  
8,11 173:16,18 188:3,4  
213:1,2,5 217:14,20  
219:21 220:8,9 226:12,  
13,23 227:22 228:7  
235:13 247:11,13  
248:17,18 249:2,25  
250:10 253:18 257:14,15  
258:2,4 267:16,18 281:4,  
5

**Russell's** 177:20

---

**S**

---

**Sabin** 8:20 11:10,20  
23:23 24:2,17 33:6 38:15  
102:14,17 118:2 124:5,8  
131:21 132:5 176:4,5,8  
178:22 200:2 220:16  
246:22,23 257:11,12  
273:17 282:12

**safe** 226:6

**safely** 33:8

**safety** 138:8

**sales** 17:8 19:24 21:2  
25:13 29:24 39:17 40:16  
46:4 47:14 49:15 58:16  
59:1 60:9 70:25 72:21  
82:9 99:16 104:16  
114:19 115:11,12 125:7  
127:11 137:16,21,23  
139:20,21 186:22 187:1  
216:20 232:21 273:8

274:20 275:7 293:15

**Salt** 135:24

**sat** 35:6

**satisfied** 72:20

**satisfying** 295:18

**save** 100:19

**saved** 72:9

**saving** 13:5

**savings** 72:19 77:7,8  
191:9,11 195:5,7,9,12

**scale** 78:19,20 79:16  
131:10

**scaled** 80:1

**scaling** 78:15 146:21

**scarce** 137:18

**scenario** 115:21 171:4  
202:12,21 289:21,22

**scenarios** 69:10

**schedule** 21:8 211:25  
294:4

**scheduled** 8:10

**schedules** 293:15

**scheme** 244:3

**school** 72:9 113:7 195:5,  
9

**schools** 60:5 113:2

**scope** 177:7

**Scott** 9:20

**scroll** 167:12

**seaboard** 156:17,19,23  
157:7 209:9

**season** 207:23

**seasonal** 16:6

**seasonally** 74:16 121:16

**Seated** 9:5

**secondary** 278:16

**secret** 82:18

**section** 139:19 222:14  
270:22 271:24 272:24

**sections** 270:13

**sectors** 241:20

**security** 138:12,15,17

**seek** 156:4 157:17

**seeks** 50:12 107:7

**sees** 181:13

**segment** 290:23

**segmented** 296:3

**segments** 290:7 295:1

**segregating** 290:16

**sell** 250:22

**send** 76:9 80:17 144:19

**sending** 77:2

**sendout** 47:20 48:6,9  
128:19 129:2,8

**sense** 54:3 78:19 79:18  
121:17 190:17 208:7  
233:14 297:7

**sensitive** 288:20

**sensitivity** 171:4 289:9,  
11 290:24

**sentence** 125:5 214:23  
269:21 270:5,22

**sentences** 30:12

**separate** 125:24 126:24  
128:8 155:5 218:3

**separately** 283:20 290:6



**separates** 19:21 178:18  
**separation** 155:1,9  
**separations** 155:15  
**serve** 138:3 229:24  
232:11 236:24 237:6  
251:12 253:9 266:5  
279:25  
**served** 49:17 84:25  
**serves** 216:11 279:4,5  
**service** 8:5 13:2,9 16:18  
17:13,20 18:23 20:10  
25:3,9 27:10 29:24  
30:18,22 33:20 34:20  
35:1,4 37:12 39:22,23  
55:8 57:21 59:3 62:5  
70:24 72:13 75:4 81:2  
86:6,16 96:15 99:16  
101:9 105:24 108:24  
133:4,6,7,22,25 134:1,4,  
13 137:16,17,23 138:7,  
20,23 139:9,20,21  
142:17 143:4,8 148:16  
149:22,25 150:3,11  
151:9 154:23 156:25  
160:6 162:18 170:1,12,  
15,22 172:9,17,18,23  
174:9 175:3 176:12,17  
177:16 179:17 180:1  
185:15 186:1,5,18  
188:19 190:5,7 191:17  
199:7,9,16,18 204:6  
207:20 208:6,8,10 210:3  
211:16,21 212:3,8,16  
228:15 229:16,17,18  
230:9 233:6,8,10,13,16  
234:2 236:14 237:3,11,  
21 242:24 260:9,11,12,  
15,16,20,22 261:16,19  
262:18 263:3 264:3,11  
267:5 272:10,21 273:8  
274:6,13 282:23 283:6,9

286:22 287:19 288:23  
289:10,11,15 290:5,22,  
24 291:23 292:2 293:13,  
15,16,17,19 294:22  
295:1,14 296:5 297:15  
299:4,5  
**services** 9:14 97:19,24  
142:21,24 143:1 149:25  
152:22 206:4 238:3  
287:18 298:23  
**set** 14:8 16:20 18:8,18  
52:11 65:4 69:19,23,25  
73:15,16 99:5,7,9 101:18  
105:14,19 106:1 111:10,  
14 125:6 143:7 166:21  
175:15 200:17 293:5  
**sets** 170:23  
**setting** 176:24 234:13  
279:22  
**settled** 45:12,15 47:8  
52:8,9 133:16  
**settlement** 29:6 133:19  
**settlements** 174:5  
**settling** 174:21  
**Shale** 70:22  
**share** 38:10,23 40:19  
62:22 66:19 91:16 186:5  
232:19 268:24 273:10  
**sharing** 39:22  
**sheet** 218:3  
**shelf** 43:19,25  
**shift** 62:25 104:2 107:9  
230:5,10 293:14  
**shifted** 75:17  
**shifting** 189:18 231:19  
251:16

**shifts** 153:10  
**shock** 260:17  
**short** 146:1  
**shoulders** 251:24  
**show** 33:18 45:22 64:9  
69:11,14 70:17 76:1  
81:19 95:10 112:11  
131:17 185:25 188:18  
189:7 192:13 222:23  
236:14 281:20 290:18,24  
294:23 296:18  
**showed** 13:24 117:18  
186:3 189:14 237:16  
256:5  
**showing** 20:7 86:25  
87:14,17 116:17 168:2  
178:14  
**shown** 22:3 116:21  
211:7,9 220:25 234:22  
265:16 266:9,15 267:8  
279:7 286:8 290:9 298:4  
**shows** 13:25 14:2 15:18  
18:4 22:3 61:6,9 62:21  
64:4,7,17,23 67:16 68:7,  
18,22 69:6,9 74:2 76:3  
81:17 84:2 86:20 87:2,3  
89:17 93:4,7 94:2,9,21,  
22 95:7 96:1 98:9,10  
108:23 110:24 117:6  
129:7 169:1 171:6  
175:12 236:23 237:5  
238:3 239:5 240:2 257:2  
**shut** 245:4  
**shuts** 245:8  
**side** 13:4 76:8 167:19  
168:6,8  
**sign** 23:5 83:25 114:9  
**sign-up** 114:8

**signal** 76:13,18,19 77:2  
80:17 252:8,9 255:11,19

**signals** 76:9 252:12  
253:1 255:2,8,16,18,21,  
23

**signed** 204:8

**significant** 18:7 57:16  
59:11 75:22 77:4 107:19  
109:25 115:6 157:8  
191:23 207:21 210:13,17  
222:10 239:13 240:2  
291:18

**significantly** 36:20 126:5  
237:5 242:11 283:11  
287:21

**signing** 22:14 84:1

**similar** 16:13,14 36:13  
37:18 38:4 52:10 73:7  
105:13 127:2 129:2,21  
152:17 153:1 156:23  
187:10 224:17 281:24

**simple** 17:3 127:14

**simpler** 88:10

**simplify** 256:1

**simplifying** 164:14

**simply** 18:12,17 31:6  
71:5 106:21 152:25  
164:14 170:21 172:20  
177:6 230:4 243:13  
251:1

**single** 196:22 235:8  
240:18 264:7

**sinuses** 207:24

**sir** 28:17 89:15 143:21  
176:2 179:7 198:1 246:4  
254:4 276:4,22 281:7

**sister** 155:8

**sit** 110:11

**situation** 17:5 37:13

**situations** 21:13 197:16

**sizable** 27:16 288:16

**size** 15:25 16:1,3,4 26:19  
64:15 121:7,8,13 239:14  
251:12,14 262:3,8 263:5  
290:19 296:21 297:13

**sized** 263:9

**sizes** 61:9 211:7 288:20  
296:18

**sizing** 55:10,13

**skewed** 180:9 182:9

**skip** 58:4

**slight** 192:4

**slightly** 158:19 289:3

**slow** 123:13

**small** 11:2 19:1 22:10  
32:16 33:19 34:1,8  
60:14,25 61:15 62:14  
63:6 64:4,18,21 65:15  
66:9 67:8,19 69:12 80:12  
98:21 109:16 110:12  
112:25 113:14,24 117:2,  
22 124:10,12 126:16,18  
130:8 171:23 180:13  
185:19 186:4 188:15,18  
189:3 190:4 192:4  
193:14 198:7,18 201:17,  
23 212:7,17 235:4,7  
237:16 239:6 241:25  
244:21 278:22 288:25  
289:12,13,16 290:1,6,14  
291:3 294:6,12,16,19  
295:10 297:13

**smaller** 53:19,20 62:22  
77:10 117:7 186:13  
191:22 236:4,15,20

242:4,13,14,18 280:3  
283:10 290:11 294:10  
297:11 298:19

**smallest** 193:12

**Snarr** 9:11,12,13 28:16,  
17,20 33:8,14 38:16,19  
40:21 49:20,22 51:20  
61:23 62:13 91:15,23  
116:6,7 140:7,8 146:3,  
11,13 147:7 156:2,3,7,  
12,14,15 159:3,5 165:15  
187:23,25 205:9,11,19  
207:4,13 212:19,21  
223:4,5,8 224:1,2 225:25  
226:9,10 246:14,16  
253:21,23 267:24,25  
268:3,21,23 269:5,12,14  
273:15,16 276:7,8 282:9,  
10

**SNG** 20:22 280:8,12

**sole** 63:2 196:22

**solid** 66:24 68:4

**solution** 14:13 20:19  
132:24 193:6

**solve** 132:23

**sooner** 145:17

**sophisticated** 71:10  
126:20

**sophistication** 283:24

**sort** 56:1 167:18 238:20  
253:14

**sought** 157:20 162:12  
218:7

**sound** 61:3 73:23 257:4

**sounded** 77:4

**sounds** 12:13 54:11  
61:4,13 73:25 90:23  
148:6 180:12 273:13

<b>source</b> 294:20	<b>spreads</b> 174:2	214:17,20 222:12 226:25
<b>South</b> 135:23 277:13	<b>spreadsheet</b> 165:2	249:4 258:17 277:10
<b>Southwest</b> 152:16,19	167:8,9,12	285:3
<b>speaks</b> 23:7	<b>spreadsheets</b> 161:17	<b>stated</b> 62:10 155:8
<b>special</b> 275:5	<b>stability</b> 13:22	185:12 189:2 199:23
<b>specific</b> 27:25 150:7	<b>stabilization</b> 14:17	<b>statement</b> 30:23 108:22
152:3,12,14 158:2	<b>stabilize</b> 13:21 57:23	113:14 160:5 198:9
162:14 176:23 185:5	66:23 68:3 99:2 122:20	255:3
187:6 197:14,17 229:20	295:21	<b>statement's</b> 239:16
238:25 251:8	<b>stabilized</b> 112:15	<b>statements</b> 294:15
<b>specifically</b> 108:22 151:4	<b>stabilizes</b> 15:5	<b>states</b> 9:22 185:17
152:9 154:12 163:1	<b>stabilizing</b> 69:15 123:9	264:20,21 269:21
164:10 185:15 216:24	<b>stable</b> 15:8 57:11 59:12	275:19,21,22 276:1
227:8 249:12 260:25	99:9,20 174:10	278:24 279:16
<b>specifics</b> 26:13	<b>stack</b> 290:9	<b>stating</b> 43:4
<b>spell</b> 52:19	<b>staff</b> 158:13	<b>station</b> 228:21,22 285:7
<b>spend</b> 126:14 159:17	<b>stakes</b> 150:19	<b>stations</b> 50:14
<b>spending</b> 126:14,15	<b>stand</b> 87:11 191:21	<b>statutory</b> 37:21
<b>split</b> 15:13,15,22,24 16:5,	226:14 247:15	<b>stay</b> 100:18 101:23
7,8,10 29:16,21 48:19	<b>standard</b> 231:14	124:14 195:20 247:21
62:20 69:19 81:16 121:6,	<b>standing</b> 229:13	<b>stayed</b> 80:9
7,8 122:5 123:2,7 129:25	<b>standpoint</b> 104:18	<b>staying</b> 73:17
130:1 187:8,11 201:23,	114:15,17 115:5	<b>stays</b> 141:6
24 212:15 235:4 236:2	<b>start</b> 8:16 11:4 25:2,11	<b>Steel</b> 10:17,19
237:10 291:10 296:6	28:23 50:7 67:7 84:17	<b>steep</b> 104:1
<b>splits</b> 63:4	102:21 135:5 235:15	<b>step</b> 13:13,20 14:9,24
<b>splitting</b> 15:12 17:3	<b>started</b> 17:15 51:24	15:5 31:6 56:6,8,17 65:7,
241:24	66:13 122:21 123:4	8 77:15,19 79:6,7,20
<b>sponsor</b> 9:15	215:19 231:24 294:5	110:19 125:11 234:3,13,
<b>sponsored</b> 139:10	<b>starting</b> 170:10 236:11	25 241:6 243:22,23
<b>sponsoring</b> 33:5	243:24	295:25 296:7 298:13
<b>spot</b> 114:25 202:4	<b>starts</b> 38:14	<b>stepped</b> 75:11
203:22	<b>state</b> 11:21 20:12 69:18	<b>stepping</b> 15:10
<b>spread</b> 164:15 169:10	83:16 135:16,24 148:1	<b>steps</b> 65:6 79:14 210:24
174:1,2 187:17 228:14	150:4,5 183:10 205:22	233:24 234:6,7,15 235:2
233:20		241:9 243:20 295:5

**Steve** 10:4 33:7  
**Steven** 9:13  
**sticking** 110:23 125:3  
**stifle** 70:18  
**stifled** 70:11  
**stipulation** 133:19  
**stop** 11:5 66:18 69:24  
105:9 120:11 191:7  
290:17 293:4,22,23  
**stores** 60:14  
**story** 295:9  
**Strategies** 227:3  
**streaming** 90:19 92:3  
226:16  
**Street** 135:24  
**strike** 190:25 299:11  
**strong** 290:14  
**stronger** 76:18  
**struck** 296:20  
**structure** 163:8,10,13  
164:9,16 165:7 175:9  
186:4,12 278:12 279:7,  
14 294:4 295:12  
**structured** 46:22  
**studies** 17:13,16,20  
28:24 29:6,11 30:5 35:1  
105:24 126:3 128:12  
274:14 289:13 294:22  
295:1,3  
**study** 35:12 57:8 86:6,  
16,17 99:20 100:1  
150:11 172:23 186:19  
192:2 208:6,10 260:11,  
20 261:16,19 262:19  
264:11,17 267:5 274:14  
275:5 293:19  
**stuff** 71:11 299:22  
**sub-question** 232:7  
**subject** 60:20,23 73:23  
103:2 113:19 128:8  
181:11 213:6,7 221:5,8,  
9,10,15,25 234:8 238:7  
242:21 256:21,24  
**subjective** 232:4  
**submission** 206:12  
**submit** 145:13 239:20  
295:21  
**submitted** 12:2 85:11  
164:6,21 165:3 166:2  
185:4 206:15,17,18  
218:7 227:5,8 249:9,12,  
16  
**subparagraph** 271:17,24  
**subsequent** 56:12 189:7  
**subsidies** 13:8 17:2  
23:12 30:19 31:5 207:21  
208:2,3,5,7 210:13,22  
295:15  
**subsidization** 107:7  
252:2 295:23  
**subsidize** 36:23  
**subsidized** 32:17 101:20  
107:4 185:17,18 186:6  
**subsidizing** 88:24  
185:19 198:8,18  
**subsidy** 13:10 31:17  
33:21,22 73:10,13 154:7  
209:21 212:6 242:3,20  
294:14  
**substance** 139:5  
**substantial** 124:10  
241:17  
**substantially** 289:14  
292:15 293:9  
**substantive** 139:4  
**subtext** 253:15  
**suddenly** 65:20  
**Suffice** 112:7  
**sufficient** 161:3 177:13  
263:21  
**sufficiently** 176:25  
**suggest** 158:21 223:19  
240:17 251:25 274:22  
**suggested** 56:2 243:11,  
15 244:8  
**suggesting** 36:6 251:5  
**suggestions** 151:7  
**suggests** 251:6 254:25  
**suitable** 128:1  
**suited** 70:10  
**summarize** 137:2 273:3  
**summarized** 38:20 95:19  
157:15  
**summarizing** 13:1  
**summary** 12:21 23:21  
25:6 50:7 55:20 57:4,11  
66:22 68:23 70:16 71:18  
82:1,4 131:15 137:6  
140:17 149:17 184:18  
187:18 207:14 228:9  
235:11 250:11 260:2,7  
267:10 273:4 275:17  
278:5 286:22,24 287:9  
**summer** 17:15  
**summer/winter** 121:18  
**Summers** 8:23 11:11,12,  
21,23 23:22,23 24:24  
28:21 50:3 59:23 84:19

85:15 92:9 97:15 102:18  
116:16 125:4 132:15  
139:14 142:11,15 146:24  
160:21 161:8 174:21  
176:22 178:4,15 181:13  
189:17 190:12 195:8  
201:21 222:5 238:11  
240:8 291:4

**Summers'** 181:13 296:16  
297:17 299:9,14

**superior** 151:15

**supervisor** 183:13

**supplemental** 145:6

**supplier** 19:14 71:25  
142:7,16,18,20,24 143:2,  
10,13 225:6

**supplies** 119:10 253:5

**supply** 26:15 114:18  
187:2 263:12,21 281:16

**support** 95:14 126:10  
147:1 151:22 152:4,15  
153:22 163:10 164:8  
177:9 187:10 210:9  
214:21 222:12,18 242:12  
288:24 291:24

**supported** 95:14 154:12  
163:7 211:5

**supporting** 9:16 161:18

**supportive** 176:11

**supports** 181:21 186:17  
187:13,16 199:4,6  
291:21

**suppose** 237:25 247:21

**supposed** 79:13 97:8

**sur-surrebuttal** 299:9,14

**surprise** 250:16

**surprised** 250:18,23  
252:4

**surprising** 253:8 256:15  
297:23

**surrebuttal** 12:3,10,22  
22:7 30:8 55:22 61:5,7,9  
69:2,4 72:5 74:1 78:9,21,  
23 79:2 84:23 85:4,8,17  
86:1 91:9 131:8 148:17,  
18 149:6 153:7 158:5,20  
173:25 175:7 181:10  
183:21 184:7 189:21  
206:18 220:24 227:12  
235:25 238:18 239:9,11,  
18 240:17 249:15 252:6  
254:23 259:6 260:8  
265:13,17 266:10 267:9  
277:19 285:16 286:5  
296:16 297:18,22  
299:10,19,22

**surrounding** 149:25

**suspect** 256:2

**sustainable** 107:23  
177:2

**sway** 152:23

**swear** 11:14 135:9  
147:18 183:4 205:13  
226:18 248:21 258:9  
277:2 284:21

**Swenson** 10:15 76:11  
247:11,13 248:19,21  
249:3,6 250:11 253:18,  
22 254:10

**Swenson's** 76:22

**switch** 104:16 125:7  
214:9

**switched** 72:16,18  
110:25

**switching** 77:7,8 115:23

**sworn** 147:17 183:1  
258:8

**symmetry** 34:23

**system** 21:21 25:17,21  
26:7 38:12,25 42:10,14  
44:9,11 46:24 47:1 48:2  
51:12 52:21 55:10 63:8  
64:1 67:11 69:13 80:12  
82:15 83:9 86:24 89:5,7,  
23 90:11 93:5,8 95:2,5  
96:1,6 101:5,10,23  
103:20,22 121:10,16  
130:25 154:16 159:24,25  
160:2 161:21,24 162:1,6  
172:20,25 173:7 181:14  
182:2 188:16,22 191:19  
208:15,16,23 211:17  
228:20 229:10,12,23  
230:6,24,25 231:5  
232:11,23 233:15,19  
242:1 251:9 261:14,20  
262:6,7,21,25 263:2,7,  
13,17,19 264:5,9,16  
265:10,16,17,21,24  
266:8 268:8 269:23  
270:20,21 274:24 275:8  
289:2,4 293:8

**system's** 263:9,11 272:4

**system-wide** 130:24  
131:4

**systematic** 295:8

**systems** 266:13

---

**T**

---

**table** 9:5 74:2,7 75:2,16,  
18 85:25 86:14,20 89:9,  
18 90:1 92:10,12,13,16  
93:1 94:25 95:16 98:3,9,  
10 165:13 166:1,7,9,23,

24 167:17,19,20 179:13  
217:9 219:1 265:16  
266:10,16 267:8 296:17  
297:18,21

**tables** 165:13 166:4,13  
170:6,7

**tail** 298:12

**takes** 54:24 55:13 81:11,  
22 126:19 243:23

**taking** 31:14 115:23  
162:3 211:21 253:13  
255:23 256:11,22 257:2

**talk** 15:11 43:20,22,23  
54:16 55:18 57:4 77:14  
114:6 123:9 131:23  
161:13 175:7 208:8  
238:19 247:14 268:24

**talked** 57:11 64:13 73:19  
117:17 118:2 121:4  
126:12 140:24 174:1  
240:25

**talking** 21:9 41:10 42:18  
68:24 71:13 73:5 74:9,25  
97:5 104:9 111:5 121:20  
127:4 130:17 178:20  
190:21 193:25 196:8  
238:21 284:8

**talks** 104:6 140:19

**tandem** 81:6

**target** 14:6 18:9 78:13  
192:11 233:22

**targeted** 79:25

**tariff** 8:8 82:1 102:23  
137:6 138:21 139:6,8,19  
140:19 141:2,3,19  
142:12 143:14 155:6,14,  
15,19 164:4 169:25  
221:6,11 222:1,3 224:22  
225:5

**tariffs** 154:20 178:1,20

**task** 31:3 146:6 147:9

**TBF** 48:14 101:17  
111:18,21 112:5 211:15,  
16,19,21,24 219:2  
224:17 292:25

**TBS** 292:25

**team** 17:14

**technical** 183:13 224:21

**temper** 266:23

**temperature-sensitive**  
230:7

**temperatures** 229:25

**tempers** 272:13

**temporarily** 124:14

**temporary** 13:23 123:12  
138:7

**ten** 133:13 190:22 264:21  
275:1,23

**tend** 11:3 47:3 171:1

**term** 47:19,21 243:9  
296:12

**terms** 49:13 88:10  
133:25 171:22 174:10,  
17,24 203:23

**territory** 68:21

**test** 151:14 154:9 160:16  
161:25 176:9 209:12  
229:4 289:10

**tested** 49:6

**testified** 27:9 98:11  
129:24 146:24 213:25

**testify** 240:8 258:8

**testimonies** 213:8  
234:21 259:4,10 260:8

**testimony** 10:18 12:3,5,  
7,8,10,15,17,23 13:7,11,  
24 14:22,23 18:4 24:1,5,  
6 25:5 29:2,3 30:8,15  
32:13 34:16 37:1,2 38:7,  
16 43:11,13 44:6 47:18  
50:6,9 52:16,23 55:25  
57:5 59:8 65:17 69:2  
72:6 76:6,12,21,22 77:6,  
22 78:6 79:23 84:23  
86:11 104:6 107:15  
116:17 122:22 125:4,13  
131:7 134:20 136:8,13  
137:3,4 139:15,23  
140:25 142:10 145:2  
146:23 147:3 148:9,17,  
22,25 149:6,18 150:6  
151:20,23 152:5,14,19  
153:7,11 154:18 155:9,  
18 157:16,24 158:5,21  
159:17 160:1 161:8,16  
165:3 166:15 169:23  
175:2 176:10,15,22  
177:24 181:11 182:23  
183:21 184:3,7,19,24  
185:1,9,10 189:20,23  
205:2 206:11,15,16,18  
207:15 211:20,23 213:6,  
12,16,21 214:4,15  
215:10 219:23 220:25  
222:11,22 225:23 226:5  
227:5,8,10,12,16,17,24  
228:9,13 231:9 232:13  
239:21,25 247:9 249:10,  
13,15,19,20 250:2,12  
251:22 252:6 254:16,24  
255:1,4,22 257:24  
258:21 259:5,6 260:3  
261:22 265:13,17  
266:10,16 267:1,9 268:6,  
15 274:10 275:4 276:18  
277:16,17 278:6 280:15  
284:16 285:10,13,16,21  
286:3,6,11,12,13 287:1,

7,10 290:4 296:17,23  
297:18 298:8 299:10,12,  
14

**Texas** 205:25

**theoretically** 43:20,23

**thereto** 249:15

**thing** 16:22 31:14,18  
35:16 64:8 75:5 109:9  
119:6,8 123:5 127:22  
128:13,17 190:6 193:7  
237:23 238:20 250:17  
253:2,7 282:1 296:20  
297:10

**things** 31:13 39:2,5 57:9  
58:11 60:15 64:12 70:17  
96:8 97:13 113:1 120:7  
121:11,23 123:5 127:13  
157:17 174:9 175:3  
182:11 201:21 242:14  
244:3 287:14 292:10  
293:1 297:24

**thinking** 120:15,16  
133:15 175:4

**thinks** 255:24

**thought** 92:12 174:14,19  
175:1 195:24 220:6

**thousand** 89:6 112:3  
192:19

**thread** 47:3

**three-step** 13:11,20 14:9,  
22 15:10 56:2 58:2 75:13  
120:8 210:21 234:1

**three-year** 71:14,24  
72:12,22 81:7 119:19  
155:20 187:17 193:22  
244:3,5,9,14,16,18  
288:13

**threshold** 155:4 228:17

**throughput** 40:14,15,16,  
17,19 41:6,13,15,17,20,  
22 42:6,8,16 44:3 52:3,  
20 116:20,24 117:9  
126:5 166:17 172:5  
181:14 208:21 209:1,8  
213:11,13 214:11 229:1  
230:14,17,20 231:12  
246:5 251:17 261:2,12  
262:23 272:19,20 273:12  
274:16 275:10 286:7  
289:24

**throughput-weighted**  
42:4

**throw** 127:9

**throwing** 58:24 100:21

**tied** 131:3 272:19 278:16

**tiers** 280:1

**till** 107:4 109:2 247:23  
248:5

**time** 12:14 14:16,17,18  
23:5 25:20 39:14 60:25  
66:4 71:13 80:24 81:22  
84:9 98:25 104:13 106:7,  
24 111:22 120:1,21  
121:22 123:18,20 126:4,  
14,15,19,21 127:7 131:1,  
22 137:17,22 139:21  
143:1,8 145:8 146:2  
151:6 152:6 153:11,24  
155:4 159:17 162:5  
164:11 173:6 174:12,23  
180:14 190:21 193:2,4  
200:15 204:18 210:13  
211:3 234:5 235:5 236:2  
241:2,10 242:7 243:2,4  
247:15 250:23 252:15,19  
267:12 270:21 286:8  
291:6 298:14

**times** 13:3 54:25 55:3  
61:16 65:25 143:4 271:8

**timing** 22:14 56:5 83:24

**titled** 218:3

**today** 8:10 9:3,14,21,24  
10:20 12:18 13:5,6 28:23  
35:11 50:10 57:11  
110:11 134:21 136:13  
139:14 142:16 150:6  
161:9 181:9 182:23  
184:3 185:11 195:21  
197:8 207:1 222:17  
227:17,19 233:19 249:23  
259:13 281:24 287:7

**told** 291:4 292:7,24

**tomorrow** 247:25 248:2

**top** 62:10 73:22 165:14  
166:7,23 167:17 170:11  
179:12 219:1

**topic** 18:15 20:10 159:12  
254:22

**topics** 29:10 50:6

**total** 179:16,20,25  
180:14 185:23 191:13  
234:4,23 260:11 262:9  
272:4

**touch** 50:5 56:4

**touched** 55:20

**track** 27:19,23 28:1

**tracker** 56:22 66:5  
103:18

**tracking** 137:25

**transfer** 60:11 251:17  
279:14 295:20

**transferability** 83:12

**transition** 252:17

**transparency** 138:24  
155:11

**transponder** 137:12  
144:16  
**transport** 252:12,21  
**transportation** 17:9 19:2  
21:22 22:10 23:17 29:15  
31:12 32:10 39:17 40:17  
47:9 48:11 49:3,14 66:5  
70:24 84:8 104:17 119:1  
121:12 133:6,25 134:2,  
13 139:9 142:17 168:4  
169:4,20 185:16 187:15  
204:6 207:20 212:3,16  
228:15 230:9 232:22  
233:23 234:1 237:6  
250:15 273:8 279:1  
287:18  
**travels** 226:6  
**treat** 71:2 121:19  
**treated** 43:18 97:21  
103:17  
**treatment** 138:19,24  
**tremendous** 73:10,12  
**trend** 125:13  
**tricky** 83:16  
**trouble** 226:17  
**troublesome** 291:12  
**true** 18:18 40:13 46:14  
48:5,24 64:4,23,24 66:20  
68:5 87:25 96:21 102:25  
103:1,19 108:9 118:4  
142:22,23 157:7 223:10  
258:22 270:19 271:14  
297:10  
**truth** 11:15 135:10  
147:19 183:4 205:14  
226:18 248:21 258:10  
277:3 284:22  
**TS** 13:16,21,25 14:24

15:6,12,14,24 16:13 17:4  
19:4,12 20:24 22:15  
23:11 29:21 31:16 32:17  
33:18,19 34:2,10 58:14,  
15,21,25 59:4,10 60:3,  
12,24,25 61:10,15 62:5,  
14,21,25 63:6 64:5 66:1,  
20,23 69:12,18 71:20  
72:9,13 73:21 74:17,23  
78:11,17 80:22,23 84:3  
87:17 88:16 94:25 98:3,  
15,22 99:2,12,13,18,19,  
23 100:4,6,18,24 101:4  
104:8 105:11 106:16,19,  
21 108:23 110:12,25  
111:2,16 112:2,19 113:1,  
14,17,20,24,25 114:9  
115:7,9,13,15 116:17,19  
117:14,15 120:23 122:10  
124:10,11 125:7,25  
131:5 132:18 141:1  
142:12 143:15 146:21  
150:1 155:3 162:10,24  
163:2,4,24 167:14,18,25  
170:12 171:14,24 172:1,  
8,16,17 173:12 175:13  
176:11 180:1 185:17,21  
186:1,4,6,13 187:8,14,17  
188:15,18 189:4,6,10  
190:4 191:7,16 192:13  
195:15,17,18,25 196:22  
198:6,7,8,18,19 199:1,5,  
15,17 200:12,13,14  
201:13,17 209:3 211:4  
212:1,6,7,9,15 216:24  
219:2,9 229:15 231:19,  
21 233:20,22 234:4,7,11,  
15,18,24 235:4,7,8,9  
236:2,5 237:12 239:12,  
13 240:10,18,19,23  
241:18 243:5,15,19  
244:21 245:11,17 261:19  
265:8,13,19 279:2,12,23  
280:9,12 281:16,21

283:6 286:17,18 287:21  
288:2,3,25 289:12,13,14,  
16,20 290:1,2,6,7,14,15,  
19,21 291:3,11 292:16  
293:1,16 294:3,4,6,8,17,  
19,20,21,23 295:2,10  
296:19,24 298:2,19  
**TSF** 140:21  
**TSI** 60:7 140:21  
**TSL** 68:7 286:18,19  
**turn** 13:25 30:8 32:9  
34:13,14 47:15 68:12  
78:7 104:20 108:12  
167:13 214:6 232:25  
233:20 262:9 270:2

**turned** 61:8 148:4

**turning** 179:5 240:16

**tweaking** 30:24

**two-step** 288:9

**two-year** 133:17 210:21  
244:17,18 252:17

**twofold** 103:3

**type** 71:5 88:12 203:24

**types** 60:1,7,13 113:3  
211:7

**typical** 179:14,16 262:22

**typically** 53:13,15 113:12  
130:9 175:17

**typo** 285:25 286:2,10

---

**U**

---

**UAE** 10:13 52:15 209:4  
217:15,16,22,25 226:13  
227:4,9,11,13 228:5  
230:17 231:4 234:19  
256:20 289:8 295:2



<b>UAE's</b> 62:9 68:10 210:20 241:14 257:2	216:25 253:13	248:1 254:12,21 255:25 279:22 283:18 286:14 290:9
<b>Uh-huh</b> 281:14	<b>understood</b> 140:17 176:14,22 178:21 243:12	<b>upward</b> 287:22
<b>ultimate</b> 18:20 69:17	<b>undid</b> 78:5	<b>usage</b> 28:1 38:11,24 51:5 60:17,24 61:17 89:4 117:8 122:10,14 126:25 128:10 129:17,18 137:13 153:20 154:15 159:19 161:23 163:22 172:23 186:1 216:15 219:8 230:3 231:3 242:25 243:14 246:5 251:8 260:23 261:24 262:5,7, 12,21,22 263:1 264:2 265:6
<b>ultimately</b> 75:14 150:14 162:19 214:20 298:11	<b>undone</b> 78:3	<b>users</b> 10:11 67:25 68:6 71:10 80:11 130:8,10 180:18 273:1
<b>unanswered</b> 202:4	<b>unduly</b> 294:1	<b>USM</b> 256:3,20
<b>unbundled</b> 118:25	<b>unequivocally</b> 202:8	<b>Utah</b> 8:6 9:2,3,6 10:11 119:4,7 135:24 148:16 150:8 167:18 222:12,15
<b>uncertainty</b> 201:11 292:8	<b>unfair</b> 133:12	<b>utilities</b> 9:4,7 23:3 151:24 183:14 184:24 270:9 275:19 278:24 296:3
<b>under-recovery</b> 294:24	<b>unheard</b> 197:11	<b>utility</b> 23:1 148:2 150:5 170:2 177:6 196:21 245:6 261:25 262:22 279:18 280:7 284:1 293:6
<b>underallocates</b> 209:23	<b>uniform</b> 155:10 164:16	<b>utility's</b> 260:9,12,13 279:9
<b>underallocating</b> 209:19	<b>uniformly</b> 175:8,9,13	<b>utilization</b> 174:18
<b>undercollected</b> 189:5	<b>unintended</b> 202:10	<b>utilize</b> 103:6 229:18 263:10 264:22
<b>undercollection</b> 67:17, 20 185:22	<b>uninterrupted</b> 263:12	<b>utilized</b> 64:15 86:5,9 162:9 231:1 266:23
<b>underlined</b> 158:8	<b>unique</b> 14:11 17:4 23:1 82:3,4 83:14 119:7 132:22	
<b>underlying</b> 169:6 170:1 174:24 297:24	<b>unit</b> 87:1,4,10,14,17,23 88:6 89:11 92:19,20 265:18,20,25 266:9	
<b>undermines</b> 293:18	<b>United</b> 9:22 275:19 279:16	
<b>underpaying</b> 106:24	<b>unknowns</b> 202:1	
<b>underperformance</b> 240:3	<b>unreasonable</b> 154:7 190:25	
<b>underperforming</b> 192:14	<b>unresolved</b> 291:7	
<b>underpinning</b> 130:4	<b>unusual</b> 175:14	
<b>underpriced</b> 80:25	<b>up</b> 22:15 23:5 33:2 41:18 42:9,14 56:16,21 57:25 58:14 70:8 71:23 83:25 84:1 90:19 92:14 104:11 107:4,22 113:10 114:9 128:5 132:24 137:5 143:7 163:11 165:2 167:7 170:24 171:16 193:20 199:7 204:8 217:2 244:21,23 245:12	
<b>understand</b> 43:10 47:16 62:3 76:6 82:2 127:5 129:12,13 131:22 164:19 172:5 173:5 176:9,10 188:13 202:24 216:14, 17,19 217:1 237:2 243:3 252:3 255:22 283:25		
<b>understanding</b> 40:7 95:21 102:4,8 157:20 176:21 190:2 194:4		

<b>V</b>	230:23 231:5 232:17,18, 24 234:12,24 241:5 272:7,19 292:17 298:1 299:3	17,23,24 231:5,11,16,18 232:17 286:6 289:23
<b>valuable</b> 83:4		<b>weightings</b> 153:1 230:13 232:2,4
<b>variable</b> 262:25		<b>Wexpro</b> 22:19,21 82:2,7, 8,15,17,18,21,25 83:2,4, 8,9,13,19 115:1 118:20 119:7 187:2 191:12 202:17
<b>variables</b> 157:1	<b>W</b>	<b>Wexpro's</b> 115:5
<b>variations</b> 240:13	<b>wait</b> 14:15 15:20 204:9	<b>whatsoever</b> 191:7
<b>varied</b> 174:23	<b>walk</b> 165:12 170:6	<b>Wheelwright</b> 9:6 183:2,3, 10,12 184:8 187:20,24 188:11 197:25 201:2 205:2
<b>vary</b> 60:4 246:5 261:24 290:25	<b>walked</b> 215:5	<b>whichever</b> 70:9
<b>verify</b> 26:15 40:22 42:21 93:23	<b>walking</b> 88:11	<b>White</b> 132:9,10 144:1,2 182:18,19 203:2,5 204:24 225:19,20 247:2, 3 257:20,21 276:10,12 284:12,14
<b>vernacular</b> 292:10	<b>wanted</b> 15:11 57:4 92:14 98:11 247:16 275:11	
<b>version</b> 140:19 167:16	<b>wanting</b> 124:3	
<b>versus</b> 16:8 89:4 180:9 182:7 284:1	<b>warning</b> 21:18	
<b>viable</b> 253:6	<b>wary</b> 253:12	
<b>view</b> 187:10 202:6 230:4 283:19	<b>Washington</b> 276:3	
<b>view's</b> 188:13	<b>ways</b> 50:18,22 83:1 157:1 167:11 190:6 191:15 193:16	<b>who've</b> 39:21
<b>views</b> 177:12	<b>weather</b> 27:5 232:12	<b>wife</b> 97:11,18
<b>Virginia</b> 285:7	<b>weather-sensitive</b> 229:14,22	<b>willingness</b> 20:6 46:11
<b>void</b> 255:16,18	<b>week</b> 145:14	<b>window</b> 114:8 118:17
<b>volume</b> 165:10 180:8,17 251:13	<b>weekly</b> 82:12	<b>winter</b> 21:19 48:9 137:15,22 262:17
<b>volumes</b> 103:5 107:20 151:11 155:3 162:4,8,9 165:24 166:10 167:1 168:16 169:19 171:11,12 172:16 186:22 187:1 191:22 195:20 217:5 218:18,19 221:16 260:23 263:19	<b>weigh</b> 159:12	<b>witnessed</b> 231:7
<b>volumetric</b> 51:14,16 75:3 78:14,15 80:1 127:18 128:4 131:10 146:21 163:2,25 168:24,25	<b>weighing</b> 86:9	<b>witnesses</b> 8:22 145:4 184:25
	<b>weight</b> 52:11 53:1	<b>witnesses'</b> 213:8
	<b>weighted</b> 261:10	<b>wondering</b> 57:12 225:10
	<b>weighting</b> 19:6,7 41:12 42:6 51:25 52:24 53:6,8, 14,21 54:2,7 86:12 94:23 130:5,10 151:13,23,25 152:15,24 153:4,5,9 156:23 180:10 208:25 209:5 213:18,21 230:15,	<b>word</b> 73:11 299:20
		<b>words</b> 103:10 107:2 120:24 177:24 181:15 201:15 203:13 255:14

282:25  
**work** 17:1 58:13 84:7  
88:17 120:3 126:11,19,  
21 135:19 146:1 193:4  
281:15 287:16  
**worked** 119:14  
**working** 90:20 101:18  
**works** 88:20 119:16  
120:6 249:7  
**world** 293:5,22  
**worse** 241:20 290:10  
**worst** 298:4  
**wrap** 248:1  
**written** 185:9 217:11,23  
218:1  
**wrong** 15:16 25:16 54:11  
66:11,13,14 78:8 238:15

---

**Y**

---

**year** 17:14 22:1,23 23:5  
53:18 56:11,13 59:10  
60:2 65:25 74:11,14 83:5  
100:6,17 104:15 105:1,4,  
6,11 114:14 115:6 117:6  
123:14 125:19 128:19  
129:6,7,8 138:17 143:9  
151:14 160:16 161:25  
180:15 204:5,18,21  
209:13 250:24 262:16  
263:4,12,20 264:7  
277:19 278:15,18,21  
279:8,14 285:17 288:18  
289:1,17  
**year-round** 208:24  
**years** 15:7 18:5 19:16  
22:6 25:24 26:4 31:7  
58:24 59:1,10 64:21  
71:23 81:8,12 103:9,11

119:25 123:13 129:9  
133:13 154:1 173:4  
185:21 189:15 190:19,  
20,22,23 191:3 193:4  
194:5,11,16 196:5,12,24  
197:11,19 207:19 229:10  
235:5 236:21 243:17,21,  
24 245:18 250:23 251:6  
281:25 282:3,22 283:7  
292:23 295:19  
**yesterday** 120:16  
**yields** 169:17