

1 THE PUBLIC UTILITIES COMMISSION
2 OF THE STATE OF SOUTH DAKOTA
3 =====
4 IN THE MATTER OF THE COMPLAINT EL11-006
5 BY OAK TREE ENERGY, LLC, AGAINST
6 NORTHWESTERN ENERGY FOR REFUSING
7 TO ENTER INTO A PURCHASE POWER
8 AGREEMENT
9 =====
10 Transcript of Proceedings
11 October 2, 2012
12 =====
13 BEFORE THE PUBLIC UTILITIES COMMISSION,
14 CHRIS NELSON, CHAIRMAN
15 KRISTIE FIEGEN, VICE CHAIRMAN
16 GARY HANSON, COMMISSIONER (by telephone)
17
18 COMMISSION STAFF
19 John Smith
20 Karen Cremer
21 Greg Rislov
22 Chris Daugaard
23 Brian Rounds
24
25 APPEARANCES
26 Michael Uda, Oak Tree
27 Al Brogan and Timothy Olson, NorthWestern Energy
28
29 Reported By Cheri McComsey Wittler, RPR, CRR
30
31
32
33
34
35

1 CHAIRMAN NELSON: I will call the meeting to
2 order. Commissioner Fiegen and Commissioner Nelson are
3 present in the committee room. Commissioner Hanson is
4 with us on the line.
5 Gary, just for your information, Yvette LaFrentz
6 is also on the line. Everybody else is present here in
7 the committee room.
8 COMMISSIONER HANSON: Thank you.
9 CHAIRMAN NELSON: I just want to go over the
10 timelines that we've got. I think the last time we met
11 we thought we were maybe making some progress and several
12 of you have had questions about that progress. So
13 hopefully we can get that resolved today.
14 What we would like to do is in -- and just for
15 the record in EL11-006, and we're dealing with Oak Tree's
16 motion for partial reconsideration and NorthWestern's
17 application for reconsideration. We plan to give Oak
18 Tree 30 minutes for your initial arguments. NorthWestern
19 30 minutes for your arguments. 20 minutes for Staff
20 arguments.
21 Then we'll come back to NorthWestern for 10
22 minutes of rebuttal, go to Oak Tree for 15 minutes of
23 rebuttal, and then allow 5 minutes for NorthWestern
24 rebuttal limited to Oak Tree's rebuttal. And then after
25 that we will go to Commissioner questions, discussion,

1 TRANSCRIPT OF PROCEEDINGS, held in the
2 above-entitled matter, at the South Dakota State
3 Capitol Building, Room 413, 500 East Capitol Avenue,
4 Pierre, South Dakota, on the 2nd day of October, 2012,
5 commencing at 1:30 p.m.
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

1 and/or action.
2 Any questions on how we will proceed today?
3 Any questions?
4 Okay. If not, Mr. Uda, you may proceed.
5 MR. UDA: Thank you, Mr. Chair, members of the
6 Commission, Staff. First of all, I know it's been a long
7 time since we were in front of you. And I wanted to sort
8 of remind you a little bit about the nature of the
9 project. It's a 19 and a half megawatt project in Clark,
10 South Dakota.
11 I think this is a good project and would provide
12 reliable energy and some capacity to NorthWestern's rate
13 payers in South Dakota. But in addition to that, and I
14 think even more important is I think that the Makenses
15 are good people and I dealt with some developers who are
16 just in it for the money. And I think the Makenses are
17 in it for the long haul. And I think that they will be
18 responsible developers. And I think that makes it an
19 important part of your consideration.
20 With that, I'll turn to our motion for partial
21 reconsideration.
22 Could I have the first slide, please. Thank
23 you, Sherry.
24 Okay. So what we have here -- and this isn't
25 meant to represent anything real. This is just

1 demonstrative, and it's just kind of an example of how --
2 on the first half of the slide what we see here is two
3 hypothetical days of load generation capacity.

4 And as you can see, the red line is coal
5 operating at a steady state. The green line is coal plus
6 gas. And the blue line represents load. And what you
7 can see from this slide is that the incremental cost of
8 operating coal and gas -- or the incremental generating
9 capacity is in excess of NorthWestern's load if you add
10 those resources together. And, again, this is for
11 demonstrative purposes only.

12 The second half of the slide on the bottom is
13 the associated incremental cost and market prices. And
14 this is where Oak Tree has a problem with the hybrid
15 methodology. As you can see, the blue line represents
16 the cost, and the -- of the incremental cost of
17 NorthWestern's resources, again, for illustrative
18 purposes only, and the red line represents market.

19 And the problem Oak Tree has with the hybrid
20 method is as follows: In the hours where NorthWestern
21 has represented on the right side has insufficient coal
22 to serve its own load, it relies on the market. And
23 that's a prudent decision, and that's something that it
24 should do. It does not use its peaking resources because
25 presumably they're more expensive than the market

1 alternative.

2 The problem for Oak Tree comes in the hours
3 where there is sufficient low cost coal to serve
4 NorthWestern's load. Because in those hours the market
5 is higher than the incremental cost of operating
6 NorthWestern's own coal resources. And what NorthWestern
7 does in those hours is it sells into the market.

8 And, again, that's a prudent thing for the
9 utility to do. It's maximizing the value of those
10 resources.

11 The problem comes in that when you really look
12 at this what happens is that anytime market would help us
13 specifically in the hours where there is sufficient low
14 cost coal to meet NorthWestern's resources we get the
15 cost of the coal.

16 In the hours where there's insufficient
17 resources we get the market. So to us what happens is
18 anytime market could help us on either side of the
19 equation, either in the hours where NorthWestern has
20 insufficient coal or in the hours where NorthWestern has
21 sufficient coal, we get the lower of the two
22 alternatives.

23 Now the definition of avoided cost is
24 essentially what it would cost the utility itself to
25 purchase resources from a third party or to generate that

1 power itself by acquiring a facility.

2 So in this case you could use either one. You
3 could use the incremental cost of operating
4 NorthWestern's resources, including the peaking resources
5 in the hours where NorthWestern needs resources instead
6 of resorting to the market. And then in those low cost
7 hours, in those hours where the utility has sufficient
8 low cost coal to meet its load you could assign the value
9 of incremental cost to the coal plants.

10 Or alternatively you could assign the market
11 across all hours. That's what Mr. Lauckhart did. He
12 used Black & Veatch's analysis, he used their power curve
13 and calculated a number. And it's very simple and it's
14 very straightforward. And I can just tell you from my
15 experience most qualifying facilities don't like getting
16 the market rate because it's typically lower than the
17 alternative.

18 What you've done here with the hybrid
19 methodology is essentially you're playing a heads we win,
20 tails you lose game.

21 Now I want to address briefly the objections
22 that I've heard to this, the argument I've just made.
23 And the argument is Oak Tree is indifferent if you used
24 incremental cost of NorthWestern's resources or the
25 market. We just don't want to have a situation where

1 we're getting the worst of both worlds on either side of
2 the equation.

3 And the response we've heard to this is
4 essentially two arguments. The first one is, well, this
5 represents more accurately what NorthWestern does. And
6 that's not the case. NorthWestern isn't backing down its
7 coal plants. It's selling that power in the market when
8 it has sufficient capacity to do so. As I said, that's a
9 prudent decision.

10 So there's not a mythological world or even real
11 world example of where what NorthWestern is doing is
12 backing down its generation when it has sufficient coal
13 resources to meet its load. It's doing the prudent thing
14 and selling it into the market. So it doesn't represent
15 reality.

16 The second argument I've heard is, well, the
17 definition of avoided cost is, well, what it costs. But
18 if you look at what NorthWestern actually does, the
19 incremental activity, and this is really if you look at
20 it what they're really doing is using the market. And if
21 you've got a market you have to consider in that activity
22 that's where the incremental activity is taking place.
23 And when NorthWestern makes the decision to sell into
24 that market, what it's doing is essentially selling its
25 output to a third party who presumably is backing down

1 another unit of generation. This has to take place from
2 a load resource vantage point. And that value is being
3 transferred to NorthWestern in return for backing down.
4 So that resource in the market is being displaced and
5 that's the fundamental principle of avoided cost.

6 You can either assume there's a market or you
7 can assume there's no market. What we're asking you to
8 do is just be consistent in that determination. We're
9 not telling you what the outcome of that determination
10 needs to be but we're saying that this methodology is
11 inconsistent with avoided cost because of this heads we
12 win, tails you lose scenario.

13 I want to turn next to -- well, before I
14 proceed, one point I want to get to is NorthWestern cites
15 in response to our motion for reconsideration two cases
16 for the proposition that a hybrid methodology is
17 appropriate. The first cited is the Arkansas Entergy
18 decision. But that case did not deal with long-term
19 avoided costs for prospective QFs. It dealt with
20 calculating an avoided cost for existing QFs that did not
21 need to build a resource.

22 The second decision they cite is from Virginia.
23 The Virginia decision did not use the market at all when
24 it determined avoided costs for Virginia Electric Power.
25 The reason is is that using the PROMOD model and it did

1 not use the market dispatch portion of that model when it
2 made its calculation. In fact, it relied solely on the
3 utility's incremental cost of its own resources.

4 Now I want to quickly move to carbon costs. And
5 okay. The carbon cost figure that was used by the PUC
6 here is \$10 by 2015, I believe, \$15 by 2020, and \$20 by
7 2025. And this figure is simply out of the range of
8 normal expectation for what carbon costs will be. And if
9 I could -- Sherry, if I could have that second slide real
10 quick.

11 CHAIRMAN NELSON: Okay. Do we need to --
12 everybody in the room, you're comfortable with this?

13 MR. UDA: I'm fine.

14 CHAIRMAN NELSON: Okay. And so far as your
15 verbalization of this, do we need to go off the record?

16 MR. UDA: I don't think so. Because I'm going
17 to describe it pretty generally.

18 CHAIRMAN NELSON: Okay.

19 MR. UDA: This is from the Black & Veatch Fall
20 2010 Energy Market Perspective. And they did a
21 calculation of various different scenarios. And they
22 included EIA carbon cost scenarios in it.

23 And as you can see from the slide, the 5, 10, 15
24 is way below any assumption that anybody is using. And
25 as you can see, the Black & Veatch forecast is actually

1 -- the blue line in the middle is actually at the low to
2 low mid range of those estimates.

3 And this is something that we've talked about
4 extensively in our briefs, and I would commend you to
5 those. But one of the points that we've made about this
6 whole issue of calculation of carbon costs is
7 NorthWestern both in 2009 and 2011 when it did its
8 procurement plan in Montana used a very different
9 calculation.

10 Their proposal in this proceeding is 0. The 5,
11 10, 15 was adopted by the Commission. But if you read
12 what they've said in their procurement plan, they assume
13 now as the 2011 procurement plan delayed implementation
14 of Waxman-Markey until 2019, and some of those costs are
15 very high in the outer years but it averages out
16 levelized to about between 23 and \$25 per ton, not 5, 10,
17 and 15. And that's assuming delayed implementation of
18 Waxman-Markey.

19 And that's essentially what Black & Veatch did
20 too is they delayed the implementation of Waxman-Markey
21 because it had stalled at that point and was not at that
22 point a viable legislation.

23 The basis for NorthWestern's calculation is the
24 NorthWestern Power & Conservation Council's sixth plan
25 where they do an estimate of carbon costs. And I commend

1 that to you. I think that's a pretty good analysis of
2 what you can expect.

3 The game changer, of course, is the recent I
4 believe it was June of 2012 decision in Coalition For
5 Responsible Regulation versus EPA 684 F.3d 102 in 2012,
6 as I said.

7 The reason that decision is so important is
8 because in 2008 a number of states, coastal states not
9 surprisingly, sued EPA because EPA had yet to make a
10 determination as to whether greenhouse gases were a
11 threat to human health and safety under the Clean Air
12 Act.

13 The United States Supreme Court said that not
14 only does the EPA have the authority, the jurisdiction to
15 consider that issue, it had the obligation to do so. So
16 EPA went back and it made an endangerment finding. And
17 not only did it make an endangerment finding, it proposed
18 regulations for stationary sources as well as for mobile
19 sources.

20 The D.C. circuit reviewed that decision and said
21 that it did not find that it was in error. And so we
22 have, although not implemented yet, we have the looming
23 threat of the EPA essentially forcing limitations on
24 greenhouse gas emissions. Now I don't know how they're
25 going to do that, but my expectation is it could be

1 extremely expensive. And it may be an impetus, for
2 example, for Congress to move back toward the cap and
3 trade approach, which seemed to be the preferred approach
4 prior to 2010.

5 And another point related to this is the Staff
6 has said, and I agree with them, that you need to take
7 into account when calculating potential greenhouse gas
8 emission regulations, or carbon costs as we've
9 shorthandedly referred to it here, you need to consider
10 the likelihood of it being adopted and what gets adopted.
11 I think that's a fair point.

12 And I think that's what happened in both the
13 Black & Veatch forecast and in the Northwest Power
14 Conservation Council and NorthWestern's own calculations.
15 They said, well, we don't think it's going to get adopted
16 this year. If you look at NorthWestern's calculations,
17 they don't have any carbon costs until 2019. So even
18 though it's very expensive in the outer years, it's
19 discounted by those early years where there's nothing
20 there. So I think that discount has already taken place.

21 Now I want to make a point about the EIA
22 forecast because I think this is really important. The
23 EIA forecast has -- the AEO has a number of different
24 scenarios. They have a reference case. The reference
25 case what it does is it says basically if nothing

1 changes, this is the number.

2 It doesn't take into account either legislation
3 that's been passed or regulations that have been adopted,
4 for example, the EPA's HAP regulations dealing with
5 hazardous and toxic pollutants because that has not been
6 funded yet. And the same thing is true for EPA's
7 regulations. So at this point that EIA reference
8 forecast does not include those items.

9 But they do, the council does have a forecast
10 that includes various different scenarios including a \$25
11 per ton carbon cost calculation, and you can run those
12 scenarios side by side.

13 Okay. We know that retrofitting those plants,
14 one of the criticisms Mr. Lauckhart had of the EIA
15 forecast is it didn't take into account retirement of
16 coal plants based on these regulations. We know both in
17 North Dakota and South Dakota that that is going to be a
18 considerable expense if you just take Big Stone standing
19 alone. There are going to be considerable costs
20 associated with that. And a lot of utilities, at least
21 according to Black & Veatch, a lot of utilities are going
22 to be retiring coal plants rather than proceeding to use
23 them and displacing them in their generation portfolios.

24 The last issue in our motion for reconsideration
25 is current information. The use of current information.

1 Now it wasn't clear to me whether this was an
2 unintentional issue, but 18 CFR 292, 304(d) 2 gives a
3 right to a qualifying facility to have a rate forecast at
4 the time the legally enforceable obligation is incurred.

5 Given that, and the Commission's finding that
6 the LEO occurred as of February 25, 2011, I think it
7 would be contrary to the law to permit the use of current
8 information. I think that for whatever you want to call
9 it, a lock-in or whatever else, I think it would be
10 inappropriate to do that.

11 I want to briefly refer to a couple of
12 arguments. And I believe Staff agrees with us on this
13 issue. This has to do with the current-information
14 issue. NorthWestern argued that Mr. Lauckhart either
15 ignored or failed to consider information available to
16 him on February 25, 2011, including the game changing
17 November 2010 EIA AEO forecast. And Mr. Lauckhart's
18 testimony makes it clear he did consider it, but he
19 didn't think that it was sufficient at that point to
20 change his calculations.

21 And to the extent that you think the November
22 2010 EIA AEO was game changing because it showed an
23 increase in technically-recoverable reserves, take a look
24 at the 2012 forecast. That number has dropped
25 precipitously. That may be an indication of a

1 fundamental change in the market or not but it's not
2 anything you need to consider because current information
3 should be used.

4 They also argued that Mr. Lauckhart had access
5 to the Black & Veatch Energy Market Perspective for
6 spring of 2011, but he didn't. The spring forecast came
7 out in late spring or early summer, something like that.
8 He was involved in the process but he was not privy to
9 the outcome of that process as of February 25, 2011.

10 And I would point out that under the
11 Commission's current order NorthWestern can argue that
12 Mr. Lauckhart's calculations were wrong but that doesn't
13 have anything to do with the use of current information.
14 They can argue he should have considered this, he should
15 have considered that and his calculations are incorrect.
16 But they can't say that he didn't consider it.

17 Now two quick points just -- how much time do I
18 have left, Mr. Chairman?

19 CHAIRMAN NELSON: You have 11 minutes.

20 MR. UDA: Okay.

21 This is on NorthWestern's motion for
22 reconsideration. First, NorthWestern argues that
23 inclusion of carbon costs would violate the avoided cost
24 principle. This makes no sense.

25 The reason it makes no sense is because if

1 you're trying to figure out what price you need to pay to
2 a qualifying facility, you need to figure out what costs
3 you're avoiding.

4 So if in the resource plan, for example, the
5 utility says, well, we need to hedge our risk against gas
6 prices in the future by having other resources, for
7 example, renewable resources, whether it be wind, hydro,
8 whatever, and in doing so they consider, for example, the
9 risk that there's going to be greenhouse gas regulation,
10 if they do that and they incorporate in that forecast a
11 carbon cost of some kind, it makes absolutely no sense
12 not to at the same time say, well, this is what the
13 qualifying facility would get. You have to know what
14 costs are being avoided.

15 If carbon costs are being avoided by purchasing
16 from a qualifying facility it must be included in the
17 avoided cost rate. That's as straightforward a decision
18 as you need to make.

19 The second point I would make is if you don't do
20 it, you're discriminating against qualifying facilities
21 by paying them less than you would pay the utility to
22 build its own resource. Now maybe the argument is that
23 you don't give either one a carbon cost.

24 Perhaps, but if you think that inclusion of
25 carbon cost is important and appropriate as a hedge

1 against future risk, then you need to do it for both. I
2 think that's pretty simple.

3 I guess another point I would make is, you know,
4 you made a determination that there needed to be carbon
5 costs included in the calculation, and you picked this
6 forecast that Lands Energy came up with, which as near as
7 I can tell was based on Mr. Lewis talking to some of his
8 colleagues at Lands Energy.

9 Now that might be a perfectly appropriate way if
10 you are, you know, trying to decide who you think is a
11 better player, you know, Buster Posey versus Ryan Braun.
12 But it's not an appropriate way to set avoided cost.

13 The EIA, for example, does this thing called the
14 National Energy Modeling System which is so complicated
15 nobody really knows how it works but they spend a lot of
16 time doing it and they come up with a pretty good idea of
17 what they think the range is. Black & Veatch does the
18 same thing and any number of professional forecasting
19 entities put a considerable amount of time and effort
20 into figuring these things out.

21 And what I'm saying is is that I think that
22 there is substantial support for your decision to include
23 carbon costs. I'm not sure you got the carbon costs
24 right, but I do think that rather than making a decision
25 about what that appropriate cost is today it's one of

1 those things that could be when we have a hearing on the
2 technical matters involving the calculations, the rate
3 should be included.

4 Neither of the cases also cited by
5 NorthWestern for the proposition that you don't include
6 avoided costs in -- you don't include carbon costs in the
7 calculation of avoided cost but you do it in resource
8 planning.

9 First of all, in Montana the issue about whether
10 you include carbon cost is an issue presently before the
11 Montana Commission. We believe that the Whitehall Wind
12 decision in Montana said that they have to include it if
13 it's in the integrated resource plan and that's what
14 their electrical procurement plan is.

15 The Utah decision, Rocky Mountain Power,
16 included carbon costs in their calculation of avoided
17 costs. The Utah Commission said this isn't consistent
18 with what we've told you to do. Explain. And rather
19 than explain, Rocky Mountain Power took it out. So I
20 don't think either one of these cases is precedential for
21 the proposition NorthWestern cites.

22 Time, Mr. Chairman.

23 CHAIRMAN NELSON: 7 minutes.

24 MR. UDA: On the issue of legally enforceable
25 obligation let's recall what the record shows here.

1 The record shows that in early 2010 Oak Tree's
2 representatives approached NorthWestern about obtaining a
3 contract. They didn't really get anywhere so they
4 started writing letters and saying, hey, you know, we'd
5 really like to sell you our output. And the response
6 they got back was, well, here's our avoided cost. If you
7 can provide it at that rate, we'd be happy to talk to
8 you.

9 The testimony from Mr. LaFave at hearing was he
10 didn't even think he could go beyond the short-term
11 avoided cost rate which is like \$22 a megawatt hour at
12 that point.

13 And the interesting thing about that is of
14 course we weren't there to get a short-term avoided cost
15 rate. We were there to get a long-term avoided cost rate
16 so we could obtain financing for the project. And so a
17 short-term rate of \$22 was plainly a nonstarter. So we
18 kept trying to engage the utility, and the answers we got
19 back were the same.

20 And nobody in this case, not even NorthWestern,
21 is now maintaining that their long-term avoided cost was
22 \$22 a megawatt hour.

23 CHAIRMAN NELSON: 5 minutes.

24 MR. UDA: So what NorthWestern has argued is
25 that, well, you sent us a contract with a bunch of terms

1 on it and we don't agree to those terms so, therefore,
2 there's no legally enforceable obligation. Understand
3 that there's a difference between a legally enforceable
4 obligation and the contract terms themselves.

5 Legally enforceable obligation, and FERC has
6 made this clear a number of times, most recently in Cedar
7 Creek Wind, the legally enforceable obligation is created
8 when the qualifying facility commits to sell its output
9 to NorthWestern. As you may recall, the testimony of
10 Mr. Makens was they tried everything they possibly could
11 and the only purchaser that made sense, the only party to
12 whom they could really sell it was NorthWestern. So they
13 continued to push on that front, and they are continuing
14 to push today, obviously.

15 But I think the most important aspect of this is
16 at any point if NorthWestern had decided to negotiate,
17 which your order from 1982 orders them to do, they could
18 have said we don't like this term, we like this term, we
19 don't like your price, can we negotiate on that. Can we
20 negotiate terms. They have the power today to do that.
21 But they haven't done it because they're not interested
22 in it. Basically at this point their answer is no.

23 And at that point FERC says if the utility
24 refuses to negotiate, at that point a legally enforceable
25 obligation has been incurred and it was incurred and

1 that's your order from February 25 -- it occurred on
2 February 25, 2011, and that's supported by the record
3 evidence in this case and there's no need to change
4 that.

5 I think the remaining issues in this case are
6 more technical issues, and they have to do with the
7 proper calculation of the avoided costs including what
8 gas price forecast you use, what escalation factors you
9 might use. And I would suggest the issue of the
10 calculation of carbon costs should be one of those
11 issues. Because I think it's a technical issue. I don't
12 think that the evidence in the record to date from Lands
13 Energy is sufficient to stand on its own.

14 And with that, Mr. Chairman, I will conclude my
15 remarks.

16 CHAIRMAN NELSON: Thank you. With that, we will
17 turn to NorthWestern for 30 minutes.

18 MR. BROGAN: Good afternoon, Commissioners.
19 It's good to be back in Pierre. I have to say I'm not
20 sure what to say today. I think nearly all, if not all
21 of what I could say and what I -- hopefully not what I
22 will say is in the briefs. Therefore, I fully intend or
23 fully hope not to use anywhere near my allotted 30
24 minutes.

25 I do think, however, in the briefs there is a

1 great deal of obfuscation, irrelevancy, and plain
2 mischaracterization.

3 Given that I -- I fervently hope that
4 South Dakota does not repeat the mistakes that Montana
5 made 30 years ago with respect to setting avoided cost
6 and promoting qualifying facilities, mistakes that are
7 costing NorthWestern's Montana consumers over \$600
8 million, that I can shed some light on the things that
9 are of significance in this proceeding.

10 You have before you today NorthWestern Energy's
11 application for reconsideration and Oak Tree's motion for
12 reconsideration. Mr. Uda has talked about both. In my
13 initial presentation I will only try to talk -- at least
14 I'll try to restrict my comments to support of
15 NorthWestern Energy's application for reconsideration.
16 We have the difference of terminology, "application" and
17 "motion." "Application" comes from the rules. I'll try
18 to refer to both of them as "request" but if I slip into
19 "motion," please accept that I mean it as a request. If
20 I say "application," please accept that I mean it as a
21 request.

22 NorthWestern asked for reconsideration with
23 respect to inclusion of carbon costs and the calculation
24 of avoided cost and with respect to the Commission's
25 determination that an LEO had been created on

1 February 25, 2011. First a few comments about the carbon
2 costs.

3 I think it's undisputed that as of today there
4 are no carbon costs. And I think what NorthWestern has
5 been saying all along is that rate payers should not pay
6 for something that doesn't exist.

7 Now it's possible, I think Mr. Uda would say
8 even probable, that there will be carbon costs of some
9 kind in the next 20 years. But as of today when we are
10 trying to estimate, or I should say calculate,
11 NorthWestern's avoided cost for the next 20 years they
12 don't exist.

13 Oak Tree has made much of the fact that
14 NorthWestern and, quite frankly, other utilities consider
15 things that may happen in their planning, in their
16 resource planning. But consideration of carbon costs for
17 planning does not justify including it in avoided cost.

18 It's not something that as of now the utility
19 avoids. If the utility -- or to be specific, if
20 NorthWestern is looking at what resources to build, buy,
21 or purchase power from today, especially if it's looking
22 long-term as to what resources it might build, certainly
23 it's going to as part of that resource planning consider
24 things that may happen.

25 You know, we all in business and in our

1 individual lives try to anticipate things that may
2 happen, but that doesn't necessarily mean we start paying
3 for them at this point.

4 But what Oak Tree is asking is that you include
5 a speculative carbon cost in calculating the avoided
6 cost.

7 Keep in mind this doesn't affect NorthWestern.
8 This affects NorthWestern's customers. It isn't
9 NorthWestern that pays it. It's NorthWestern's customers
10 that pay it. And there's no reason that they should be
11 paying for something that we can't show that NorthWestern
12 is actually avoiding. It may well be that down the road
13 it's possible, but at this point it's not.

14 My last comments at this point with respect to
15 carbon is that the parties definitely disagree as to the
16 value of carbon if they are included. As I said, that's
17 part of Oak Tree's motion. I'll discuss it during my
18 rebuttal -- or I guess I would call it response as
19 opposed to rebuttal.

20 So let me turn next to the issue -- the second
21 issue that NorthWestern applied for reconsideration on,
22 and that was the issue of the legally enforceable
23 obligation.

24 This may be surprising considering that this is
25 my fourth time here in less than a year to discuss this

1 particular docket but I think the parties actually agree
2 on what an LEO is. I think we do. But I think we
3 disagree fundamentally on what it takes to create an LEO.

4 NorthWestern Energy's position is that it takes
5 an unconditional commitment by a potential QF or an
6 existing QF to sell at the avoided cost as determined by
7 a regulatory body.

8 If I understand Oak Tree's response to
9 NorthWestern's application for reconsideration, Oak Tree
10 seems to assert that an LEO can be created by an
11 unenforceable, conditional offer to sell the output of a
12 future project.

13 I think we need to step back a little bit. When
14 we talk about legally enforceable obligation I think the
15 first question we have to ask legally enforceable by
16 whom? Who are we talking about having the right to
17 enforce this LEO?

18 We have to remember it's the utility. This
19 comes from both FERC and court cases who have repeatedly
20 said a QF by binding itself to deliver binds the utility
21 to purchase. We need to think about that real carefully.
22 By binding itself to deliver it binds the utility. But
23 if there is no -- if the QF does not bind itself to
24 deliver it cannot have created an LEO.

25 It's well settled that an LEO is not a mere

1 option in a QF's fate. They can't say I've created an
2 LEO, now I'm going to see if I can build the project.
3 Because if that were the case, there was nothing for the
4 utility to enforce. And, unfortunately, that's what we
5 have here.

6 Oak Tree offered to sell at a price much higher
7 than NorthWestern's avoided cost. And the record
8 evidence also shows that when this Commission asked
9 NorthWestern about -- or excuse me. Asked Oak Tree about
10 what it would do if the Commission set an avoided cost at
11 a given level, Oak Tree would not commit to delivering.

12 You know, if merely offering to sell at some
13 price and negotiating it later is enough to create an
14 LEO, then anyone can offer to sell to a utility at any
15 price. Say \$1,000 a megawatt offer. I've offered to
16 sell it to you. I've committed to doing it. Then they
17 can Petition the Commission to determine that there was
18 an LEO based on that offer, find out what the price is,
19 then shop the project around. During all of this time,
20 of course, the utility can't do anything else with
21 respect to resource acquisition because it may have this
22 QF.

23 And then once the Commission sets the true
24 avoided cost rate if the QF in shopping it around doesn't
25 find anybody that will finance it for them or any way

1 that it can build it, they just walk away, and the
2 utility is left holding the bag.

3 And that's how come an offer to sell at a rate
4 other than avoided cost cannot create an LEO.

5 Now I'm not saying -- in case somebody wants to
6 go there, I'm not saying that the parties have to agree
7 on that price before an LEO can be created. I'm not
8 saying that they have to have entered into a contract
9 before an LEO can be created.

10 An LEO doesn't take what attorneys normally
11 consider to be the fundamentals of contract. You know, a
12 meeting of the minds, a mutual agreement, certain terms.
13 An LEO doesn't require any of that, but it does require a
14 commitment to deliver power, to sell power at the price
15 equal to a utility's avoided cost. Not at a price that
16 makes a QF financially viable.

17 There's nothing in PURPA that requires utilities
18 to pay a rate that makes QFs financially viable, only
19 that they pay the avoided cost.

20 In a very brief summary I would point out that
21 the utility is essentially a three-legged stool. And the
22 legs of that stool are the utility shareholders, the
23 utility's employees, but I think most importantly for our
24 discussion today a utility's consumers.

25 Sometimes we forget about the consumers when we

1 start talking about PURPA and QFs. PURPA did not forget
2 about consumers. PURPA included language that required
3 consumers to be indifferent and prohibited utilities and
4 prohibited regulatory commissions from requiring
5 utilities to pay any amount greater than true avoided
6 cost.

7 Now that's full avoided cost but it's the true
8 avoided cost, not speculative or hypothetical.

9 For those reasons NorthWestern respectfully
10 requests that the Commission grant its application for
11 reconsideration, reverse its determination of the
12 inclusion of carbon costs and avoided cost, and reverse
13 its determination that an LEO had been created by an
14 illusory commitment.

15 Thank you.

16 CHAIRMAN NELSON: Thank you. We will now turn
17 to Staff for 20 minutes.

18 MS. CREMER: Staff relies on its previously
19 filed Answer regarding Oak Tree's motion. That said, I
20 will summarize Staff's position as it applies to both
21 parties' motions, however.

22 As to the issue for reconsideration that the
23 hybrid method is inconsistent with PURPA, Staff believes
24 that the hybrid method is the only appropriate avoided
25 cost calculation methodology to use under the

1 circumstances.

2 This is due to NorthWestern's status in
3 South Dakota as a vertically-integrated utility that
4 predominantly relies on its own internal generation.

5 The Commission cannot base an avoided cost rate
6 exclusively on market estimates or incremental costs of
7 operating NorthWestern's internal resources as this does
8 not reflect the true nature of its South Dakota systems
9 in the costs associated with operating that system.

10 In addition, strict reliance upon either of the
11 cost components does not give proper effect to the
12 requirements of PURPA.

13 Regarding current market conditions and a
14 legally enforceable obligation, Staff agrees with the
15 Commission that the LEO was established as of February
16 25, 2011. Thus, Staff does not support NorthWestern's
17 request to reconsider finding 4.

18 However, the Staff does support Oak Tree's
19 request to reconsider the portion of the Commission's
20 order requiring the parties to utilize current market
21 conditions and projections in order to determine the
22 avoided cost rate.

23 The language contained in
24 18 CFR 292.304(d)(2)(ii) requires an avoided cost
25 rate be based on information available when the LEO

1 was created.

2 Staff feels that carbon costs should be
3 incorporated into the hybrid method and, therefore, does
4 not support NorthWestern's request to reconsider finding
5 2 and finding 3, which stated that NorthWestern had not
6 incorporated carbon costs in the model, required inputs
7 to be modified, and adopted Lands Energy's carbon cost
8 projections.

9 Staff supports Oak Tree in its request to
10 reconsider the carbon cost estimates to be included in
11 the calculation of Oak Tree's avoided cost rates. Carbon
12 costs should be based on the evidentiary record presented
13 by the parties in this matter. The carbon cost estimate
14 provided by Lands Energy does not carry sufficient
15 evidentiary support to be used in this proceeding.

16 No evidence was presented in the record to
17 support Mr. Lewis's carbon price estimate.

18 Oak Tree provided the Commission with a carbon
19 price estimate based on the actual proposed legislation
20 but did not discount the price based on the likelihood of
21 any carbon legislation becoming law. Staff feels it is
22 appropriate for the Commission to exercise its judgment
23 to establish a carbon price projection guided by
24 potential legislation and discounted based on the assumed
25 probability that -- of that legislation becoming law.

1 In summary, Staff recommends denying the portion
2 of Oak Tree's motion asking the Commission to reconsider
3 the use of the hybrid calculation method. Staff
4 recommends granting the portion of Oak Tree's motion
5 asking the Commission to reconsider the use of current
6 market conditions and projections to determine proper
7 natural gas and electric market price inputs.

8 Staff recommends rejecting NorthWestern's motion
9 to reconsider the establishment of the LEO. Staff
10 further recommends rejecting the portions of
11 NorthWestern's motion asking to exclude the consideration
12 of a carbon price in the hybrid method. And Staff
13 recommends granting the portion of Oak Tree's motion to
14 reconsider the use of Lands Energy's carbon price
15 estimate.

16 Finally, Staff recommends that the Commission
17 exercise its judgment to establish a discounted carbon
18 price projection guided by potential legislation.

19 Thank you.

20 CHAIRMAN NELSON: Thank you.

21 NorthWestern, 10 minutes.

22 MR. BROGAN: Mr. Chairman, thank you. And I'll
23 try to go very quickly but I may use the whole 10
24 minutes. I'm not sure.

25 As I said earlier, I intended to use this time

1 to respond to Oak Tree's motion. The first part has to
2 do with the hybrid method. And it has to do with things
3 that Mr. Uda said during his initial oral argument.

4 He complains that the hybrid method creates a
5 heads we win, tails you lose approach or result for Oak
6 Tree -- or for NorthWestern. Obviously, we disagree.

7 In his oral -- in his initial argument he says
8 the problem is that in the light hours NorthWestern sells
9 into the market and seems to suggest that NorthWestern
10 selling into the market somehow affects the costs that
11 NorthWestern avoids by purchasing power from Oak Tree.

12 Remember, that's what we're -- that's what we're
13 trying to figure out. What costs does NorthWestern
14 actually avoid by taking power from Oak Tree? Shouldn't
15 be that hard, but obviously it is.

16 He says that the problem is Oak Tree gets the
17 lower of cost of our market. They get the cost in the
18 low load hours and they get the market in the high load
19 hours. He says that doesn't represent what NorthWestern
20 does because NorthWestern doesn't back off its coal
21 plants.

22 That may be true, but it's totally irrelevant.
23 What NorthWestern does isn't the issue. What costs can
24 NorthWestern avoid? During the light load hours
25 NorthWestern can only avoid the variable cost of

1 operating its base load plants.

2 During the heavy load hours when NorthWestern's
3 base load resources are not sufficient to meet its load,
4 the only costs that NorthWestern can avoid are the costs
5 of acquiring that energy in excess of what the base load
6 plants produce. And NorthWestern acquires energy at the
7 lower of market or the cost of running its peaker plants.

8 In the recent past and probably foreseeable
9 future that will be market and not operation of the
10 peakers plants. The hybrid method accurately and
11 correctly determines the costs that NorthWestern can
12 actually avoid.

13 Mr. Uda said the fundamental principle of
14 avoided cost is displacement of resources and that by
15 selling into the market NorthWestern is displacing its
16 base load resources.

17 To the extent that the fundamental principle of
18 avoided cost is the displacement of resources, it's the
19 displacement of resources by purchases from the QF, not
20 by selling into the market. And, again, it would be to
21 some extent arguable that because NorthWestern doesn't
22 back off its coal plants and won't if it purchases from
23 Oak Tree, the avoided cost relative to the light load
24 hours should be zero. That would be one way of looking
25 at it. But that's not the way that anybody's asked to

1 look at it.

2 I want to deal very briefly with the issue about
3 current market conditions. If, indeed, an LEO was
4 created it's possible that looking at anything that
5 happened after that would be violative of PURPA.
6 However, that doesn't mean we should blindly accept what
7 one expert has said.

8 Because there are differing views and because
9 there is ample evidence in the record that there were a
10 lot of things that were known or should have been known
11 by February -- by the end of February of 2010 that don't
12 appear to be reflected in a Black & Veatch fall of 2010
13 report. And the mere fact that Mr. Lauckhart thought
14 those things weren't substantial enough to require some
15 sort of adjustment to that fall plant should not be
16 dispositive.

17 Also I would point out, of course, that if the
18 Commission grants NorthWestern's motion for
19 reconsideration of the LEO issue, then clearly it can
20 consider anything up until it finds an LEO was created or
21 until certainly the end of the hearing.

22 Finally, let's talk about carbon costs. And,
23 Mr. Chairman, how much time do I have left?

24 CHAIRMAN NELSON: 4 minutes.

25 MR. BROGAN: I'm going to have to be very quick

1 and I apologize to the court reporter if I start talking
2 too fast. First off, the demonstrative slide that's on
3 the screen, this is something that I guess I was not
4 aware was coming today. I thought we were going to be
5 talking about Exhibit 2 to Oak Tree's motion for
6 reconsideration. That slide includes things that are not
7 on that initial exhibit.

8 I also would -- so I would point out it's
9 difficult for me to respond to something that I've never
10 seen except that it, you know, basically is the exhibit
11 plus some Black & Veatch estimates. It's up to the
12 Commission to determine the credibility of Black & Veatch
13 estimates as presented by Mr. Lauckhart.

14 Secondly, Oak Tree asserts that the carbon costs
15 from Mr. Lewis have no evidence in the record. Staff
16 supported that. Basically when we get to carbon costs
17 we're talking about opinions. And experts can use many
18 ways to come up with their opinions.

19 And to say that an opinion is reached through
20 mathematical analysis when we don't know the assumptions,
21 when we don't know the equations, when we don't know the
22 model doesn't give it any more credibility than an expert
23 saying I reached this through my considered judgment and
24 consultation with other experts.

25 So again, to the extent that the Commission

1 agrees -- thinks that carbon costs should be included, it
2 has reached the proper decision by using the Lands Energy
3 figures.

4 Staff suggested that we need to consider the
5 probabilities. I think we would have a lot of
6 disagreement as to what's the probability of carbon
7 costs. Mr. Uda suggests it's high on the basis of the
8 EPA actions. Others would suggest, I think, and I'm
9 trying to be careful not to try to provide any testimony
10 or evidence but I think others would suggest that the
11 probability is very low.

12 CHAIRMAN NELSON: 1 minute.

13 MR. BROGAN: Finally, I do want to correct a
14 statement that was made with respect to the EIA reference
15 case. Mr. Uda referred to it as if nothing is adopted,
16 this is what happens. That's not what EIA says about its
17 reference case. What EIA says, this is what may happen.
18 It doesn't say this is what will happen.

19 Mr. Chairman, I thank you for your indulgence.

20 CHAIRMAN NELSON: Thank you. At this time we
21 will go to Oak Tree for 15 minutes' rebuttal.

22 MR. UDA: Thank you, Mr. Chairman.

23 We talked a little bit about carbon costs and
24 why it's important to include them. And I didn't hear an
25 explanation from Mr. Brogan or NorthWestern Energy why

1 including carbon costs violates the avoided cost
2 principle. What he said is this is uncertain.

3 Everything in an avoided cost calculation is
4 uncertain. We've heard testimony that, you know, gas
5 prices have been historically wrong, that inflation
6 factors can be off. We're estimating things here. What
7 we're trying to get our arms around is what makes sense.
8 What is a reasonable approximation of what we think will
9 happen? We have to do that.

10 So just to say that today NorthWestern isn't
11 experiencing any carbon costs doesn't mean you shouldn't
12 consider it. You have to consider it. And, in fact,
13 NorthWestern in Montana says it would be prudent for a
14 utility to consider those issues. They're not saying it
15 in this proceeding because essentially they're opposed to
16 the idea of Oak Tree building a project.

17 The LEO issue is kind of humorous because I
18 think Mr. Brogan is correct that, you know, we agree
19 generally. I think where we disagree is in the actual
20 practical application of the LEO doctrine.

21 So let me ask you, so you go to NorthWestern,
22 you're a developer and you say I want to build a project.
23 And they say, well, nuts to you. I mean, you can -- you
24 can say that they didn't say that but essentially that's
25 what they said.

1 So how are you supposed to bind yourself to
2 deliver to something? If they had signed the contract
3 that we sent them along with our LEO letter on February
4 25, 2011, we'd be delivering power today. We would have
5 gotten the production tax credit, and we would be
6 delivering a valuable resource to South Dakota today.
7 And it would have been, we think, within the range on
8 avoided costs.

9 Now Mr. Brogan says, well, we don't have to
10 agree on the price. Okay. We didn't. We don't have to
11 agree on the contract terms. Yeah. We didn't.

12 What we said is we're going to do an
13 Interconnection Agreement with NorthWestern. We're going
14 to commit the resources to do that. We're going to make
15 an offer to sell which is unconditional. If we sell to
16 anybody it will be NorthWestern. We're not going to sell
17 it to anyone else. And the rights that are created under
18 PURPA are not for the utility. They're for the
19 qualifying facility.

20 Now whether you agree with the decision or not,
21 Congress made the decision that qualifying facilities
22 were going to be a special category, and it's the job of
23 every state public utility or service commission to
24 enforce that obligation.

25 And one of your obligations as State Commission

1 is to encourage the development of these resources. If
2 you can say, well, you don't get an LEO because no matter
3 what price we set, you have to deliver. And, you know,
4 no one is going to do that. You know that. That's a
5 practical issue.

6 So if NorthWestern wanted to put contract
7 provisions in place that said if you don't deliver as of
8 this date, whatever price you have to pay a penalty, that
9 would have been a subject of negotiation. But the
10 undisputed record is they didn't negotiate. Your
11 February, 25, 2011, decision on the creation of an LEO is
12 correct. It's based on the record.

13 I want to talk briefly about the hybrid
14 methodology. I think this is a point where I think we're
15 talking past each other. What happens when NorthWestern
16 is short of low cost coal -- or excuse me. Is long on
17 low cost coal and is selling it into the marketplace?
18 It's never really long. I mean, it's selling in the
19 market. What happens in that case if they buy from Oak
20 Tree?

21 Yeah. Mr. Brogan's right. They're not going to
22 back down their coal plant. But what they are going to
23 be doing is reselling that in the market and somebody in
24 the market -- and this is why I say you can either
25 pretend the market exists or it doesn't. You're asked to

1 pretend it exists over here when it hurts Oak Tree and
2 down here when it hurts Oak Tree -- or you don't
3 recognize it down here when it hurts Oak Tree.

4 And my point is you either pretend the market
5 exists or it doesn't. You either give us the incremental
6 costs of NorthWestern's own resources or the market, but
7 you can't discriminate by doing one when it hurts us and
8 the other when it hurts us. Because that's what happens,
9 it automatically lowers avoided costs.

10 The point is a resource in the resource stack
11 that NorthWestern is -- is part of the market is being
12 displaced, and that's part of the calculation of avoided
13 cost.

14 Mr. Brogan said that one way of looking at this
15 because they don't back down their coal plants is that
16 avoided cost should be zero. It would never be zero
17 because there will always be a value associated with
18 operating those coal plants.

19 NorthWestern continues to have an obligation to
20 buy it. The only question would be what is that cost?
21 What we're saying is the simplest method, the best method
22 is to just adopt a market forecast approach because it
23 takes into account all hours and all variabilities within
24 the market, including any times when you get zero or less
25 than zero, you get negative avoided cost.

1 The point is is that NorthWestern doesn't
2 operate in the hours that it doesn't need resource --
3 that it doesn't need resources as though the market
4 doesn't exist. It plays in the market. That's where the
5 incremental activity takes place. And I think that's an
6 important consideration when you take into account this
7 hybrid methodology, which I really do think is a heads we
8 win, tails you lose kind of methodology.

9 The last issue I want to talk about just briefly
10 is the current market conditions. I think Staff is
11 correct if you read the regulation. If you believe that
12 a legally enforceable obligation was created on February
13 25, 2011, that's the date on which the information
14 matters.

15 And I believe Mr. Brogan's argument has to do
16 with whether or not Mr. Lauckhart's avoided cost
17 calculation was correct, not the point at which that
18 calculation was made. That is -- my understanding is
19 there's another hearing for that to determine whether he
20 calculated avoided costs properly. But it's not the
21 issue of whether current information should be
22 considered. In other words, information today or
23 anything that happened after February 25, 2011. That's a
24 completely different issue.

25 Now the issue of carbon costs, I think Staff --

1 we agree on this issue. Staff has said that they don't
2 think Lands Energy's forecast is supported by very much.
3 And Mr. Brogan's argument seems to be that all opinions
4 are equal so, you know, why have a hearing? Why have
5 multiple experts? Why have a clash or a debate over
6 those issues? Just listen to whoever comes up with
7 something.

8 I'm not saying that Mr. Lewis is not an expert,
9 but what I am saying is Mr. Lewis is not creating
10 sophisticated models to try to figure these things out to
11 the best of his ability.

12 There are organizations that devote considerable
13 resources to this. Now could they be wrong? Sure, they
14 could be wrong. But are you more likely to be wrong if
15 you just talk to a couple of people you work with, or are
16 you more likely to be wrong if you do an exhaustive study
17 of the issue, take into account all the opinions, and
18 yes, actually crunch the numbers. Because sometimes
19 we're wrong about things like that.

20 For example, I'm using baseball again. Some
21 people will say a certain player is better than another
22 player, and there's any number of metrics you can look at
23 to measure it. But that doesn't mean the debate isn't
24 worth having. Because sometimes you can convince
25 yourself that there's a better way of looking at things.

1 But that doesn't mean you stop with the first opinion
2 that's based on nothing else than your conversation with
3 a couple of other people.

4 You should really look at this more as a
5 scientific matter and I think that's the kind of
6 technical issue that this Commission would benefit from
7 in terms of having a hearing on it and considering all
8 the different opinions and then you can explore with
9 Mr. Lewis what was the basis, what was the foundation for
10 this? What else did you consider? Those things were not
11 discussed at hearing, and I think that's absent from the
12 record now.

13 I believe the evidence you'll see in the record
14 is that Mr. Lewis's forecast is on the lower end. And
15 this was actually part of Mr. Lauckhart's prefiled
16 direct testimony, I believe. I can't remember what
17 exhibit it was, but it was attachment 5. So this was
18 always in the record. So I don't know why Mr. Brogan's
19 confused.

20 Anyway, in closing what I'd like to say is on
21 the three issues that we raise, we think the hybrid
22 methodology is discriminatory. We think that it sets
23 too low an avoided cost. We are not saying what it is
24 but that's what we think. We think that it
25 automatically would produce a lower result than another

1 methodology.

2 The second issue with respect to carbon costs, I
3 think we made clear what our position is on that.
4 Current information the same. We think the Commission
5 should find that there should be carbon costs, and we
6 think you shouldn't use current information. With
7 respect to NorthWestern's argument that somehow carbon
8 cost inclusion would violate PURPA, I submit to you it
9 makes no sense.

10 And, second, the second argument on the LEO, I
11 honestly don't know what else Oak Tree was supposed to
12 do. They were left in a position where they were
13 bargaining against air. And if you're ever in that
14 situation and -- I think sometimes we all end up in that
15 situation, you know that you have no leverage.

16 The fact is the utility owns the marbles. They
17 have to let us be willing to play in their game. If they
18 want to tell us that we have to bring, you know, purees
19 or some kind of other marbles to the game, we would have
20 considered that. We would have discussed it with them.
21 The problem was no discussion took place.

22 If anything comes out of the Commission's
23 decision here, it should be that it's very clear that the
24 utilities have an unconditional obligation to negotiate.
25 Because then you don't end up in these situations where

1 there's arguments about whether an LEO was created based
2 on the lack of bargaining. You end up with a clearer
3 situation where you can then determine what rates should
4 apply.

5 And, for example, even though there were
6 disputes, you know, there are ways of handling those
7 disputes. And I think that one of the things that you
8 can clearly say about everything that's happened in this
9 particular case is we've been trying, and I've got the
10 Makenses here today. They're still committed to selling
11 to NorthWestern. I don't know what else they could have
12 done. They did everything within their power to bring
13 this process to a conclusion.

14 So with that, I would like to thank the
15 Commission, Mr. Chair, Staff, for your indulgence, and
16 thank you for all your consideration.

17 CHAIRMAN NELSON: NorthWestern, time for your
18 rebuttal, limited to Oak Tree's rebuttal on your
19 application. 5 minutes.

20 MR. BROGAN: Thank you, Mr. Chairman. And I'll
21 try to be very brief but 5 minutes is brief.

22 First off, with respect to the LEO issue,
23 Mr. Uda has basically indicated that NorthWestern failed
24 to negotiate. I think that's untrue.

25 The record establishes that in early 2010 Oak

1 Tree approached NorthWestern. Yes, NorthWestern believed
2 its avoided cost was what it stated and kept indicating
3 that it needed to -- could only pay up to its avoided
4 cost.

5 What Mr. Uda did not say then is after the
6 exchange of letters over a several-month period Oak Tree
7 disappeared for six months and didn't contact
8 NorthWestern, and then suddenly in January there's a
9 letter and in February there's a letter that says agree
10 to our price or we're going to sue you.

11 And then Mr. Uda says he doesn't know what else
12 Oak Tree could do. Quite frankly, I think it would have
13 been very, very simple. In the pricing term in the
14 contract that Oak Tree submitted strike out the dollars
15 and the inflation portion and say NorthWestern offers to
16 sell you our power and commits to sell you our power at
17 the avoided cost as determined by the Commission. That's
18 all it would have taken.

19 They did not do that. I have a lot of other
20 things I'd like to say about the hybrid method, but I
21 won't. That's not within our motion so I won't say it.

22 With respect to the carbon costs, I just want to
23 point out one thing very quickly. Mr. Uda just said that
24 Mr. Lewis's carbon cost is at the lower end. He didn't
25 say it was out of the ballpark. It's at the lower end of

1 estimates.

2 And as the Commission will recall, NorthWestern
3 has said all along that when you're binding rate payers
4 to pay something for 20 years you should make
5 conservative assumptions and that the lower end is a
6 conservative assumption.

7 Like Mr. Uda, I thank the Commission for its
8 indulgence. I'm sorry that we're having to have so many
9 hearings. I look forward to the Commission's order in
10 this matter and then probably our final -- hopefully our
11 final hearing for the technical matters as Mr. Uda
12 referred to them.

13 Thank you.

14 CHAIRMAN NELSON: Thank you. And I appreciate
15 both sides -- appreciate your written submissions and
16 your brevity today. I did expect this to go longer.

17 At this point we will turn to Commissioner
18 questions.

19 Commissioner Hanson, do you want to go first or
20 would you like us to?

21 COMMISSIONER HANSON: Mr. Chair, I believe I've
22 had every opportunity I ever wanted to in a docket to
23 fully apprise myself of issues, especially on this one.
24 So I'm fine.

25 Thank you.

1 CHAIRMAN NELSON: Commissioner Fiegen?

2 COMMISSIONER FIEGEN: You can start.

3 CHAIRMAN NELSON: Okay. I do have questions.

4 Mr. Uda, and I think you hinted at this, but I

5 just need to ask it very, very directly. Once this

6 Commission sets the avoided cost does Oak Tree have an

7 absolute obligation to deliver at that cost, given our

8 finding that an LEO was created?

9 MR. UDA: Mr. Chairman, it would be tempting for

10 me to say that no matter what the rate is they have an

11 obligation to deliver. And I think that technically that

12 might be the case. But I think financially if they can't

13 do it -- I mean, can I just clarify what I'm trying to

14 say?

15 CHAIRMAN NELSON: Feel free. We've got time.

16 MR. UDA: Okay. So let's suppose the following

17 circumstance happens. Let's suppose that you know that

18 in order for you to actually build the project and make

19 any money you need \$50 a megawatt hour. Let's just

20 suppose that as a hypothetical. And suppose the

21 Commission comes back at 10. Now at that point you can't

22 even buy your equipment. So obviously in that case if

23 you say, well, it's an unconditional commitment, does

24 that mean that you have to build your project and operate

25 it at a loss?

1 I think that's not what FERC intended. What I

2 think FERC intended is to say, okay, once you have a

3 legally enforceable obligation, and by that they mean you

4 commit to sell your output to a utility, you have an

5 obligation at that point to deliver that output to that

6 utility. You can't sell it to somebody else. You can't

7 sell it into the market. You can't play the market. You

8 have to sell it.

9 If it's not financially feasible for you even to

10 build the project, at that point, then even though there

11 might be a legally enforceable obligation, it's just not

12 going to happen.

13 So I think that's one way of looking at it.

14 And I think this is kind of what Mr. Brogan was

15 kind of hinting at. You know, the point is is that we

16 tendered a contract to NorthWestern and there isn't any

17 performance penalty in it.

18 So, for example, if they wanted a performance

19 penalty, that's something they could have negotiated for.

20 They didn't say anything about it at all until this

21 proceeding commenced. So they're obviously unhappy with

22 the lack of that. But I think that's one way you can

23 ensure performance.

24 But the other way you can ensure performance is

25 that you get the avoided cost calculation that actually

1 reflects the utility's avoided cost. Because once you

2 establish that avoided cost, then you will get projects

3 that can perform at that level.

4 The problem here is that we had an enormous

5 difficulty getting any information out of NorthWestern

6 about what its avoided costs were and, in fact, a lot of

7 that information didn't appear until we had to file a

8 Motion To Compel in this matter.

9 So, you know, for us to say that we know as a

10 matter of fact whatever rate the Commission sets we

11 have to deliver, I don't think that's the legally

12 enforceable obligation issue. I think that's a practical

13 issue.

14 Is NorthWestern out anything if it doesn't get

15 output from NorthWestern and NorthWestern fails to

16 perform? Well, I suppose if they had this in their

17 resource queue and they were forestalling other

18 investment decisions, it might be possible that they

19 do.

20 But if that's the case, there's a solution to

21 that. And, for example, Idaho is dealing with this issue

22 of delayed performance, liquidated damages, and that's an

23 issue that I think the Commission could decide. But

24 that's a separate issue from whether or not a legally

25 enforceable obligation exists in the first place. It's a

1 term of art and it isn't intended to bind a qualifying

2 facility to deliver no matter what rate the Commission

3 sets.

4 CHAIRMAN NELSON: Thank you. The other question

5 that I've got for you, several, is there a carbon cost

6 today? Mr. Brogan has told us there isn't. Do you

7 concur with that?

8 MR. UDA: I do. But if I might add to that,

9 Commissioner Nelson, we are trying our best to get a

10 handle on what the situation is going to be. And I think

11 that's kind of the case for all estimates of everything

12 that goes into the avoided cost calculation.

13 CHAIRMAN NELSON: Is it possible that there will

14 not be a carbon cost over the next 20 years?

15 MR. UDA: I think that that is a vanishing

16 improbability. I think that if Congress doesn't act to

17 do something like Waxman-Markey, EPA is going to do it.

18 I think the Supreme Court has told them they have to do

19 it. I think the D.C. circuit has affirmed the method

20 that they have used is appropriate. The question of

21 costs is going to be something that's going to have to be

22 considered.

23 But I think that in the alternative to

24 Waxman-Markey, I would suspect that if people are doing a

25 carbon cost calculation today based on what EPA is going

1 to do, it's going to be substantially more expensive than
2 a cap and trade. That's my opinion and not based on
3 anything in this record.

4 But I think that's one of the reasons having a
5 technical hearing on this issue might clarify some of
6 these better. You wouldn't have to listen to me. You
7 could actually listen to someone who actually knows what
8 they're talking about.

9 CHAIRMAN NELSON: Ms. Cremer, you've talked --
10 on the same issue of carbon costs, you talked about the
11 fact that we should include calculating the probability.
12 Is there anything in the record that speaks to
13 probability?

14 MS. CREMER: As you know, I wasn't the attorney
15 on that so I will let Mr. Rounds who was at the hearing
16 address that.

17 MR. ROUNDS: Yeah. I think the only thing
18 that you're going to find in the record is my own
19 testimony.

20 CHAIRMAN NELSON: And can you refresh me on
21 that.

22 MR. ROUNDS: Yeah. I had just made the
23 suggestion that because utilities typically when they're
24 doing resource planning and taking carbon costs into
25 account they'll look at a case in which there is a carbon

1 cost or there is a low carbon cost and they'll look at a
2 case where there's a high carbon cost, and then based
3 on -- they can use the information that they glean out of
4 the results of those two scenarios with other variables
5 held constant.

6 So if --

7 CHAIRMAN NELSON: Go ahead.

8 MR. ROUNDS: For example, if, say, in the no
9 carbon situation the decision is going to result in a
10 cost of \$50 million but in the case of a -- the high
11 carbon price you see the cost of -- or a benefit of \$100
12 million, it gives them that information to know what
13 their risk is given those futures.

14 CHAIRMAN NELSON: Well, and I understand that
15 you can run scenarios using high numbers and low numbers
16 to get a range of what's -- of what those different
17 possibilities would be, but that still doesn't give us
18 any testimony as to what the actual probability is of
19 either of those actually happening.

20 MR. ROUNDS: Right. And my testimony on that,
21 as I recall, was that we think that is a pretty
22 subjective decision and that's why we thought it was a
23 good decision for the Commission to make.

24 CHAIRMAN NELSON: I agree. Mr. Brogan, you
25 indicated in going to the LEO issue that you were not

1 saying that the parties have to agree on a price in order
2 for it to be created. And then I think you talked about
3 the fact that if Oak Tree had simply said we're going to
4 leave it up to the Commission.

5 And so is it your understanding that really the
6 only way a LEO can be created is if that price question
7 is left to a Commission in every case?

8 MR. BROGAN: Mr. Chairman, no. I don't believe
9 that.

10 I believe that's the situation in this case. I
11 would point out as an example that is different is that
12 in the state of Texas, for instance, the Public Utilities
13 Commission has adopted a rule that an LEO cannot be
14 created until the QF can show it can deliver energy
15 within 90 days. Which basically as a practical matter I
16 think we would all agree means the QF has to build before
17 it can create an LEO. And that provision has been upheld
18 by the courts.

19 But, you know, the point is that to create an
20 LEO, in my opinion, at a minimum a QF has to commit to
21 deliver power at the avoided cost. And I think I would
22 add that, you know, utilities are prohibited from paying
23 more than avoided cost and they're prohibited from paying
24 less.

25 CHAIRMAN NELSON: Thank you. No further

1 questions.

2 COMMISSIONER FIEGEN: Mr. Chairman, I have a
3 quick question on, on February 25, 2011 we're trying to
4 figure out the costs of the inputs, and I believe you
5 went back to the fall of 2010 and the Commission kind of
6 wanted current. And we understand that maybe that's not
7 perfect either. And the report actually didn't come out
8 until the spring of 2011, but I'm sure a lot of work was
9 done by February 25 or March 1 or whatever.

10 How can we acquire that information or how can
11 we work together to try to get the information that is
12 more current on February 25 instead of the old
13 information from the fall?

14 MR. UDA: That's a good question, Commissioner
15 Fiegen.

16 What actually transpired. First, I'll just tell
17 you what we did. We used the November 2010 Black &
18 Veatch Energy Market Perspective, the fall one, didn't
19 come out until November. It usually takes them six
20 months to get everything put together because they have
21 all these different groups that are working on it,
22 national gas group, markets group, people who are working
23 on transmission constraints and issues like that. They
24 do this for the whole country so it's an exhaustive
25 exercise.

1 So when Mr. Lauckhart was relying on it, that
2 was the most recent work that Black & Veatch had done
3 that was actually a final product. I mean, to a
4 certain extent, I mean, he was aware of the work that
5 was going on and he assisted in preparing the spring 2011
6 forecast, but he was -- you know, for one thing he
7 couldn't have said anything or published anything public
8 about what was being said because of his agreement with
9 Black & Veatch.

10 But second of all, he looked at the direction
11 the market was heading. And I think it's still his
12 opinion today that that -- the forecast that he used was
13 in the money. And it was an accurate forecast when he
14 prepared it. And he looked at the movement and various
15 different things, the EIA, AEO forecast and so on and
16 said that he didn't feel like the fundamentals in the
17 market had moved enough to change his forecast.

18 So the question of how you get that. If, you
19 know, the technical hearing is going to I assume get
20 into that as to what is the appropriate information to
21 use at that point in time, then I think what you have to
22 do is to see what other information was available and
23 whether or not other information should have informed
24 that decision that was available as of February 25, 2011.

25 And I think if you look at the various

1 forecasts, I think that, you know, you could say some
2 were higher and some were lower. And I think
3 Mr. Lauckhart and Black & Veatch's estimate was somewhere
4 in the middle.

5 Did I answer your question?

6 COMMISSIONER FIEGEN: Did I like the answer to
7 your question?

8 MR. UDA: That's a whole different thing.

9 COMMISSIONER FIEGEN: Another quick question on
10 the hybrid method. Because all the time we've spent on
11 trying to figure out avoidable cost, of course, is the
12 main concern. And, you know, how can you make that
13 workable, the hybrid method?

14 MR. UDA: How could you make the hybrid method
15 workable?

16 COMMISSIONER FIEGEN: Uh-huh.

17 MR. UDA: You know, there's probably somebody
18 way smarter than me that could answer that question.
19 But, you know, I guess my feeling about it is is that --
20 and this is in a way sort of my opinion about guidance
21 for the Commission in the future. But I think you need
22 to come up with something that's easily replicable.

23 I mean, one of the things that we've struggled
24 with, for example, in Montana and I think Idaho has a
25 better handle on it, although there's still

1 disagreements, is how you come up with a method that
2 basically can be fairly easily calculated and updated
3 that reduces some of the fights about the methodology
4 itself.

5 The difficulty is is what are you going to say
6 that avoided cost is in any given situation. So, for
7 example, when you're looking at a utility and it's not
8 using its peaking resources because it's relying on the
9 market, do you say, well, in some hours we're going to
10 assume that they're not relying on the market and were
11 using peaking resources? That is sort of antithetical to
12 reality because that's not what's going on.

13 In the hours where there is sufficient coal,
14 base load coal, to meet NorthWestern's base load needs do
15 you say, well, we're going to use the incremental costs
16 of operating those coal plants? Because that's not in
17 reality what's really happening.

18 What's really happening is regardless of the
19 hour, they're playing in the market. So is it possible
20 that you could come up with something that sort of fixed
21 the hybrid methodology? You could but I think you'd
22 be -- I'm not sure -- my law professor used to use this
23 expression, "The game's not worth the candle." I guess
24 it was at a time when people played games late at night
25 and they had to decide whether they were going to use

1 another candle or not. But I'm not sure that in this
2 circumstance that particular game would be worth the
3 candle because I think you'd end up complicating things
4 more.

5 So I think the simplest thing to do is to come
6 up with a method that's replicable that everybody kind of
7 understands and that gives a proper signal both to the
8 utility and to prospective QFs about how this method will
9 be calculated in the future.

10 COMMISSIONER FIEGEN: So currently the
11 Commission's order is that we have chosen the hybrid
12 method. How can you make that workable?

13 MR. UDA: Well, I mean, one of the things we
14 don't know, the unknown is we haven't had the technical
15 hearing yet. And if it turns out that we employ the
16 hybrid methodology in that setting and it produces a good
17 result, and by good, not necessarily good for my client.
18 I mean, a good result in the sense that it produces
19 something that's reliable and replicable and so on, I
20 think that at that point the Commission has done its
21 job.

22 I think the issue comes down to -- for us, is it
23 comes down to is that approach -- is that fair? And we
24 don't think it is, but that doesn't mean that, you know,
25 you might not think it is.

1 But I think that you looking at the hybrid
2 methodology and getting the inputs right, that's an
3 important part of that equation. Because, I mean, just
4 having the methodology is one thing, but it's like the
5 old saying, "Garbage in, garbage out." I mean, if you
6 get bad inputs, you're going to get bad results.

7 CHAIRMAN NELSON: I'm about to go to Staff to
8 see if they have any questions, but, Cheri, are you okay
9 for a few more minutes?

10 John or Greg, any questions?

11 MR. SMITH: I have one.

12 CHAIRMAN NELSON: Go ahead, John.

13 MR. SMITH: Back on the status of carbon costs,
14 be it through some kind of cap and trade tax or the other
15 potential high kind of cost scenario would be regulation,
16 what is the exact status of the EPA now? Is there a NOPR
17 currently outstanding, or is there just talk about a
18 NOPR?

19 MR. UDA: No. There are actual rules that were
20 reviewed by the D.C. circuit in June. And the proposed
21 rules, I haven't read them, but the D.C. circuit reviewed
22 them and did not find them arbitrary or capricious.

23 MR. SMITH: And do you have any comment on that,
24 AI?

25 MR. BROGAN: Mr. Chairman, Mr. Smith, it's my

1 understanding that those rules do not actually impose a
2 carbon cost on NorthWestern at this time. I would have
3 to review them carefully to comment more.

4 CHAIRMAN NELSON: Mr. Rislov?

5 MR. RISLOV: Thank you. This would be directed
6 to Oak Tree. I am looking at a document and it has a
7 real long name but it's NorthWestern Energy's Answer in
8 Opposition to Oak Tree's Motion.

9 MR. UDA: Uh-huh.

10 MR. RISLOV: And specifically I'm looking at the
11 bottom of page 6 and the top of page 7.

12 MR. UDA: See if I have that, Mr. Rislov. Just
13 maybe you could just tell me what it says.

14 MR. RISLOV: Okay. It says, "Mr. Lauckhart
15 failed to consider that the Waxman-Markey Bill was dead."
16 And then it goes on to say that the carbon costs, and I'm
17 going to go on to the top of page 7, the carbon costs
18 reflected in your filing have diminished what I would say
19 is significantly, looking at the bottom paragraph on page
20 6 and the top paragraph on page 7.

21 And my question is -- well, number one, my
22 question to you would be what is your response to those
23 two paragraphs?

24 MR. UDA: Well, first of all, as I think I
25 mentioned previously, I believe in my opening remarks,

1 Waxman-Markey, I wouldn't say if -- if it's dead, it's
2 definitely undead. I think that in light of EPA's
3 intention to regulate greenhouse gas emissions -- and
4 I think Mr. Brogan may be correct. There's no actual
5 cost imposed on NorthWestern Energy as of yet by that
6 particular legislation -- by that particular regulation,
7 you know, there are going to be costs associated with
8 it. And I think those costs will be substantially
9 higher.

10 And maybe this is just my cynical view, but I
11 think part of this is, the reason the EPA did what it
12 did, other than being a little bit chastised by the
13 Supreme Court was to force action on something like
14 Waxman-Markey. I don't know that Waxman-Markey will be
15 the model, but I think everybody in the industry would
16 prefer the cap and trade approach. So even if
17 Waxman-Markey is technically dead, and I think it
18 technically is dead, I think it's more likely to be
19 undead and I think it will come back in some form.

20 MR. RISLOV: Okay. Number two, I'm going to be
21 more specific.

22 MR. UDA: Okay.

23 MR. RISLOV: We talked about the forecast, the
24 fall of 2010 and that's what you included in your filing.
25 And I believe if I read this correctly the costs that I'm

1 reading here came out in the subsequent six-month
2 projection by Black & Veatch; is that correct?

3 MR. UDA: I'm not sure, Mr. Rislov, what you're
4 referring to when you say --

5 MR. RISLOV: The revised numbers that appear on
6 the top paragraph on page 7.

7 MR. UDA: Yes. I think that comes back to the
8 question of current information, what information did
9 Mr. Lauckhart have available to him when he calculated
10 the avoided costs in the first instance. I don't think
11 he had that particular thing.

12 And I would point out that if you looked at
13 Black & Veatch's employment forecast, those numbers are
14 significantly higher.

15 MR. RISLOV: Again, focusing on February 25,
16 2011.

17 MR. UDA: Right.

18 MR. RISLOV: In knowing that that fall forecast
19 was already old news, although albeit not that old news,
20 but still when you're doing six-month forecast it becomes
21 old news fast. In this case do you believe it could be
22 argued that these numbers shown on the top paragraph of
23 page 7 were more accurate as of February 25 than those
24 that were shown in the fall forecast?

25 MR. UDA: Well, two things. I think, firstly,

1 you have to consider whether that information was
2 actually available on February 25, 2011. And the
3 accuracy of it notwithstanding, those numbers reflect
4 Black & Veatch's opinion sometime into the future. And
5 you're right. I mean, when you're doing it every six
6 months the numbers become stale relatively quickly.

7 But, you know, in any event, what you're doing
8 is estimating. And so, you know, there's a margin of
9 error in any of those estimates. And what will happen is
10 if you see the EIA forecasts and the various different
11 scenarios they run and look at the Black & Veatch or any
12 of the other forecasting entities, those forecasts change
13 over time.

14 So, you know, is it more accurate? I don't
15 know. It might be less accurate. I mean, they didn't
16 have -- for example, Black & Veatch didn't have the EPA
17 decision that just came out in June. I think that would
18 substantially affect their opinion.

19 MR. RISLOV: And I would ask you this question:
20 To the extent that fall 2010 forecast came out reflected
21 that prior six -- I don't know exactly which six months
22 in 2010, but I would assume the one that came out
23 subsequently, February 25 was in that study period for
24 the following six months.

25 Would you agree?

1 MR. UDA: You know, I don't know that that's
2 exactly how it was done. I mean, Mr. Lauckhart is more
3 the expert on that than I am. I'm not sure the process
4 that they go through. I don't know if February 25 was a
5 period they were including in the subsequent forecast or
6 not. I don't know what they based the subsequent
7 forecast on.

8 What I do know is that Mr. Lauckhart only had
9 the November 2010 forecast in its final form when he used
10 it and I assume that if we had filed this later or
11 earlier those numbers would be different. I don't know
12 what direction they would have gone in.

13 MR. RISLOV: I have one more question for you.
14 And that was in the Staff's answer to Oak Tree's motion
15 on page 3 of 7. And I would expect being this is the
16 first time for this Commission through this matter that
17 the definition of avoided cost can be an issue of
18 sorts.

19 But about halfway down the page we see A, B, and
20 C that are quoted from PURPA. And then the following
21 paragraph which cites a couple of cases.

22 MR. UDA: Uh-huh.

23 MR. RISLOV: And it begins reading, "The
24 incremental cost to the utility means the amount it would
25 cost the utility to generate or purchase the electric

1 energy but for the purchase from the cogenerator."

2 MR. UDA: Uh-huh.

3 MR. RISLOV: Is that not what the hybrid method
4 offered by NorthWestern, in fact, does?

5 MR. UDA: Mr. Rislov, Mr. Chairman, members of
6 the Commission, no. It doesn't. Because NorthWestern is
7 not operating in a vacuum. Before there were organized
8 markets, utilities used their incremental costs of their
9 generating resources as the basis for avoided cost. And
10 if you look around the country you will not find another
11 one that's using the hybrid methodology. And the reason
12 they're not using the hybrid methodology is because it's
13 illegal.

14 What they're actually doing with this
15 incremental cost is if they were assigning the
16 incremental costs in all of the hours I would agree with
17 you. That's not what's going on with the hybrid
18 methodology.

19 MR. RISLOV: And I would like to turn to
20 NorthWestern and go back to the first question I had
21 asked with regard to the numbers that appeared, the
22 significant lower numbers that appeared in the subsequent
23 report. I assume it was called the spring of 2011 report
24 put out by Black & Veatch. And, again, referring to your
25 answer in opposition to the Oak Tree motion. Bottom of

1 page --

2 MR. UDA: Before we get too far into this, Al,
3 was there an issue about confidentiality on this?

4 MR. BROGAN: Mr. Commission, Mr. Rislov,
5 Mr. Uda, I believe there is. I'll be very careful with
6 my answer.

7 MR. UDA: Thank you.

8 MR. BROGAN: Mr. Rislov, if I understood your
9 first question, it had to do with Mr. Uda's response to
10 the statements that were made at the bottom of 6 and
11 bottom of 7. And if I understand your question to me and
12 I guess I'm asking for clarification is is this from a
13 spring 2011 Black & Veatch forecast? Is that what you're
14 asking?

15 MR. RISLOV: That would be a good start, yes.

16 MR. BROGAN: And I would refer you to footnote
17 No. 22 that indicated that it did come from the spring
18 2011 forecast slide No. 67.

19 MR. RISLOV: I believe you heard the questions I
20 asked Mr. Uda, but what is your belief with regard to --
21 and this is making some assumptions I realize you have
22 not necessarily agreed to. But if we assume that an LEO
23 was created on February 25, 2011 -- well, it's in your
24 document. I guess I don't need to ask that question.
25 I'm going to ask a different question. Excuse me.

1 Did you compute a leveled cost related to
2 these numbers?

3 MR. BROGAN: Related to the updated Black &
4 Veatch numbers?

5 MR. RISLOV: That's correct.

6 MR. BROGAN: No, we did not.

7 MR. RISLOV: That's all I had. Thank you.

8 CHAIRMAN NELSON: Any other questions from the
9 Commission?

10 (A short recess is taken)

11 CHAIRMAN NELSON: We will call the hearing back
12 to order. We need to do a rollcall of who is on the
13 telephone line.

14 Commissioner Hanson, are you with us?

15 COMMISSIONER HANSON: Yes, I am.

16 CHAIRMAN NELSON: Yvette LaFrentz, are you with
17 us?

18 MS. LAFRENTZ: Yes, I am.

19 CHAIRMAN NELSON: Do we have anybody else on the
20 line?

21 MR. MAKENS: Matt Makens.

22 CHAIRMAN NELSON: Matt Makens. Thank you.

23 Anybody else on the line? Thank you.

24 With that, we are at the point of discussion
25 and/or action on any of the points. And maybe the first

1 thing, I'm just going to visit with the two fellow
2 Commissioners and see if they are ready to move forward
3 at this point. At this point, I will say that I am ready
4 to move forward.

5 Commissioner Fiegen, your thoughts?

6 COMMISSIONER FIEGEN: Mr. Chairman, first of
7 all, on the motion to reconsider is that where we bring
8 it to reconsider and then we go to another hearing or
9 could you clarify that, John?

10 MR. SMITH: No. It's -- we're not -- with our
11 rule on reconsideration it's like a similar motion in a
12 court proceeding. It's not a parliamentary motion.

13 COMMISSIONER FIEGEN: Okay.

14 MR. SMITH: It's not like in the legislature or
15 in that kind of a setting. So they have a right to
16 reconsideration. That's a right under our rules. It's
17 just then you need to make a decision on the merits. So
18 that's where we're at.

19 When they're talking about the subsequent
20 hearing, they're talking about the follow-on hearing that
21 is referenced in the interim order that was originally
22 scheduled for June 19, which we cancelled when all the
23 motions to reconsider were filed.

24 I think that's what you're referring to, is it
25 not, Mr. Uda and Mr. Brogan? Yeah.

1 And what that was meant to do is then with the
2 various inputs that we requested in the order, the
3 Commission did, that was meant to allow the submission of
4 additional evidence and analysis and then to hold a
5 subsequent follow-on hearing to again get information
6 that complied or comported with the interim order. That
7 was the point of that and that's what they're talking
8 about.

9 COMMISSIONER FIEGEN: Thank you. First of all,
10 I enjoyed everybody's information today. This is a big
11 case, and the avoided costs, I started talking to my 11
12 year old the other day about avoided costs when he was
13 dealing with an issue. And I just looked at myself like,
14 okay, Kristie, I know you've dealt with avoided costs for
15 a long time with this hearing but you don't have to bring
16 it to your 11 year old.

17 But I think we do need to get it right and I
18 still have some questions about the hybrid method and the
19 appropriate avoided costs. And I just want to make sure
20 that we make the correct decision and would like some
21 time certainly on that one.

22 There's some of these that I could vote on
23 today. I would rather just bring a whole package on
24 Tuesday to the Commission with my final decisions on all
25 of them.

1 CHAIRMAN NELSON: Commissioner Hanson, your
2 thoughts? Commissioner Hanson.

3 COMMISSIONER HANSON: Can you hear me all right?

4 CHAIRMAN NELSON: Oh, now we can, yes.

5 COMMISSIONER HANSON: All right. Well,
6 apparently I had it on mute when I didn't believe I had
7 it on mute. I always give deference to fellow
8 Commissioners on matters when they feel that they would
9 like to have some additional time or additional
10 information. I've been in that position myself a few
11 times, and certainly Commissioner Fiegen is absolutely
12 correct from the standpoint of wanting to get this right.

13 It is a very complex issue and we do want to
14 make certain we get it correct. Because as has been
15 pointed out in testimony and as is very much cognizant to
16 each one of us is the fact that this will affect a
17 significant number of rate payers -- and, in fact, it
18 will affect rate payers in the future. So from that
19 standpoint I would give deference to Commissioner
20 Fiegen's desire to have additional time.

21 With regard to the hybrid method -- sorry. I
22 seem to be --

23 CHAIRMAN NELSON: Yeah. You are cutting in and
24 out on us, Gary.

25 COMMISSIONER HANSON: In regards to the hybrid

1 method, I believe that the hybrid method is the correct
2 method to use, and I certainly would encourage my fellow
3 Commissioners to support that. I very much appreciate
4 the questions regarding CO2 and the appropriateness of
5 whether we should make those considerations.

6 Both sides have argued vehemently for accuracy,
7 and yet this is an extremely challenging number of issues
8 to have accuracy with. There's a lot of guessing as to
9 what the future is going to look like with this. And
10 from that perspective I think we need to have as many
11 inputs as we can to have it accurate.

12 And when I look at the CO2, you know, that
13 number can be danced around with and used in so many
14 different directions that I'm frankly uncomfortable with
15 it and I'm very uncomfortable with, as I know my fellow
16 Commissioners are, the judicial activism and bureaucratic
17 activism and that has created the situations that we have
18 today that causes some of the difficulties that we're
19 faced with on this issue.

20 So those are just some of my comments at this
21 time, and I would certainly, as I say, give deference to
22 my fellow Commissioner.

23 Thank you.

24 CHAIRMAN NELSON: With that -- and so just so I
25 understand, there's none of these six issues that you

1 would want to handle today? Correct? Wait and work on
2 them as a package?

3 COMMISSIONER HANSON: Unless Commissioner Fiegen
4 has one or two that -- whatever she and you are
5 comfortable with deciding at this juncture, I'm
6 comfortable with deciding any of them; however, whatever
7 you folks want to tackle, I'm happy to tackle. If you
8 want to give until Tuesday, that's fine with me too.

9 CHAIRMAN NELSON: Okay. Thank you.
10 Commissioner Fiegen.

11 COMMISSIONER FIEGEN: You know, I would just
12 prefer to bring the whole package on Tuesday.

13 CHAIRMAN NELSON: We will defer until the
14 meeting on Tuesday, October the 9th. Yeah. And
15 certainly your presence by telephone is just fine.

16 Anything further for the good of the order?

17 COMMISSIONER FIEGEN: Because my assumption on
18 Tuesday, it is very brief. We will have our decisions
19 made. We will discuss it as a Commission. It should be
20 done and I'm not expecting to ask any more questions
21 unless something comes up.

22 CHAIRMAN NELSON: You don't think we're going to
23 get into any heated debate?

24 COMMISSIONER FIEGEN: You and I might but other
25 than that.

1 CHAIRMAN NELSON: With that, we will defer and
2 we are adjourned. Thank you.

3 (The hearing is concluded at 3:25 p.m.)
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

1 STATE OF SOUTH DAKOTA)
2 :SS CERTIFICATE
3 COUNTY OF SULLY)
4

5 I, CHERI MCCOMSEY WITTLER, a Registered
6 Professional Reporter, Certified Realtime Reporter and
7 Notary Public in and for the State of South Dakota:

8 DO HEREBY CERTIFY that as the duly-appointed
9 shorthand reporter, I took in shorthand the proceedings
10 had in the above-entitled matter on the 2nd day of
11 October, 2012, and that the attached is a true and
12 correct transcription of the proceedings so taken.

13 Dated at Onida, South Dakota this 9th day of
14 October, 2012.
15
16
17

18 _____
19 Cheri McComsey Wittler,
20 Notary Public and
21 Registered Professional Reporter
22 Certified Realtime Reporter
23
24
25

\$	76:11, 76:14 2015 [1] - 10:6 2019 [2] - 11:14, 13:17 2020 [1] - 10:6 2025 [1] - 10:7	9th [2] - 74:14, 76:13	65:18, 72:16, 72:18 affects [2] - 25:8, 33:10 affirmed [1] - 52:19 afternoon [1] - 22:18 AGAINST [1] - 1:4 ago [1] - 23:5 agree [15] - 13:6, 21:1, 26:1, 28:6, 38:18, 39:10, 39:11, 39:20, 43:1, 47:9, 54:24, 55:1, 55:16, 65:25, 67:16 agreed [1] - 68:22 Agreement [1] - 39:13 agreement [2] - 28:12, 57:8 AGREEMENT [1] - 1:6 agrees [3] - 15:12, 30:14, 37:1 ahead [2] - 54:7, 61:12 Air [1] - 12:11 air [1] - 45:13 AI [3] - 1:17, 61:24, 68:2 albeit [1] - 64:19 allotted [1] - 22:23 allow [2] - 3:23, 71:3 alone [1] - 14:19 alternative [3] - 6:1, 7:17, 52:23 alternatively [1] - 7:10 alternatives [1] - 6:22 amount [3] - 18:19, 29:5, 66:24 ample [1] - 35:9 analysis [4] - 7:12, 12:1, 36:20, 71:4 answer [7] - 21:22, 58:5, 58:6, 58:18, 66:14, 67:25, 68:6 Answer [2] - 29:19, 62:7 answers [1] - 20:18 anticipate [1] - 25:1 antithetical [1] - 59:11 anytime [2] - 6:12, 6:18 anyway [1] - 44:20 apologize [1] - 36:1 appear [3] - 35:12, 51:7, 64:5 APPEARANCES [1] - 1:16 appeared [2] - 67:21, 67:22 application [10] - 3:17, 23:11, 23:15, 23:16, 23:17, 23:20, 26:9, 29:10, 38:20,	46:19 applied [1] - 25:21 applies [1] - 29:20 apply [1] - 46:4 appointed [1] - 76:8 appreciate [3] - 48:14, 48:15, 73:3 apprise [1] - 48:23 approach [6] - 13:3, 33:5, 41:22, 60:23, 63:16 approached [2] - 20:2, 47:1 appropriate [10] - 9:17, 17:25, 18:9, 18:12, 18:25, 29:24, 31:22, 52:20, 57:20, 71:19 appropriateness [1] - 73:4 approximation [1] - 38:8 arbitrary [1] - 61:22 arguable [1] - 34:21 argue [2] - 16:11, 16:14 argued [5] - 15:14, 16:4, 20:24, 64:22, 73:6 argues [1] - 16:22 argument [10] - 7:22, 7:23, 8:16, 17:22, 33:3, 33:7, 42:15, 43:3, 45:7, 45:10 arguments [6] - 3:18, 3:19, 3:20, 8:4, 15:12, 46:1 Arkansas [1] - 9:17 arms [1] - 38:7 art [1] - 52:1 aspect [1] - 21:15 assert [1] - 26:10 asserts [1] - 36:14 assign [2] - 7:8, 7:10 assigning [1] - 67:15 assisted [1] - 57:5 associated [5] - 5:13, 14:20, 30:9, 41:17, 63:7 assume [9] - 9:6, 9:7, 11:12, 57:19, 59:10, 65:22, 66:10, 67:23, 68:22 assumed [1] - 31:24 assuming [1] - 11:17 assumption [3] - 10:24, 48:6, 74:17 assumptions [3] - 36:20, 48:5, 68:21 attached [1] - 76:11
\$1,000 [1] - 27:15 \$10 [1] - 10:6 \$100 [1] - 54:11 \$15 [1] - 10:6 \$20 [1] - 10:6 \$22 [3] - 20:11, 20:17, 20:22 \$25 [2] - 11:16, 14:10 \$50 [2] - 49:19, 54:10 \$600 [1] - 23:7	22 [1] - 68:17 23 [1] - 11:16 25 [2] - 15:6, 15:16, 16:9, 22:1, 22:2, 24:1, 30:16, 39:4, 40:11, 42:13, 42:23, 56:3, 56:9, 56:12, 57:24, 64:15, 64:23, 65:2, 65:23, 66:4, 68:23 292 [1] - 15:2 292.304(d)(2)(ii) [1] - 30:24 2nd [2] - 2:4, 76:10	A		
0				
0 [1] - 11:10				
1				
1 [2] - 37:12, 56:9 10 [7] - 3:21, 10:23, 11:11, 11:16, 32:21, 32:23, 49:21 102 [1] - 12:5 11 [3] - 16:19, 71:11, 71:16 15 [5] - 3:22, 10:23, 11:11, 11:17, 37:21 18 [2] - 15:2, 30:24 19 [2] - 4:9, 70:22 1982 [1] - 21:17 1:30 [1] - 2:5	3 3 [2] - 31:5, 66:15 30 [5] - 3:18, 3:19, 22:17, 22:23, 23:5 304(d) [1] - 15:2 3:25 [1] - 75:3	ability [1] - 43:11 above-entitled [2] - 2:2, 76:10 absent [1] - 44:11 absolute [1] - 49:7 absolutely [2] - 17:11, 72:11 accept [3] - 23:19, 23:20, 35:6 access [1] - 16:4 according [1] - 14:21 account [7] - 13:7, 14:2, 14:15, 41:23, 42:6, 43:17, 53:25 accuracy [3] - 65:3, 73:6, 73:8 accurate [5] - 57:13, 64:23, 65:14, 65:15, 73:11 accurately [2] - 8:5, 34:10 acquire [1] - 56:10 acquires [1] - 34:6 acquiring [2] - 7:1, 34:5 acquisition [1] - 27:21 Act [1] - 12:12 act [1] - 52:16 action [3] - 4:1, 63:13, 69:25 actions [1] - 37:8 activism [2] - 73:16, 73:17 activity [4] - 8:19, 8:21, 8:22, 42:5 actual [5] - 31:19, 38:19, 54:18, 61:19, 63:4 add [3] - 5:9, 52:8, 55:22 addition [2] - 4:13, 30:10 additional [4] - 71:4, 72:9, 72:20 address [2] - 7:21, 53:16 adjoined [1] - 75:2 adjustment [1] - 35:15 adopt [1] - 41:22 adopted [8] - 11:11, 13:10, 13:15, 14:3, 31:7, 37:15, 55:13 AEO [4] - 13:23, 15:17, 15:22, 57:15 affect [4] - 25:7,	65:18, 72:16, 72:18 affects [2] - 25:8, 33:10 affirmed [1] - 52:19 afternoon [1] - 22:18 AGAINST [1] - 1:4 ago [1] - 23:5 agree [15] - 13:6, 21:1, 26:1, 28:6, 38:18, 39:10, 39:11, 39:20, 43:1, 47:9, 54:24, 55:1, 55:16, 65:25, 67:16 agreed [1] - 68:22 Agreement [1] - 39:13 agreement [2] - 28:12, 57:8 AGREEMENT [1] - 1:6 agrees [3] - 15:12, 30:14, 37:1 ahead [2] - 54:7, 61:12 Air [1] - 12:11 air [1] - 45:13 AI [3] - 1:17, 61:24, 68:2 albeit [1] - 64:19 allotted [1] - 22:23 allow [2] - 3:23, 71:3 alone [1] - 14:19 alternative [3] - 6:1, 7:17, 52:23 alternatively [1] - 7:10 alternatives [1] - 6:22 amount [3] - 18:19, 29:5, 66:24 ample [1] - 35:9 analysis [4] - 7:12, 12:1, 36:20, 71:4 answer [7] - 21:22, 58:5, 58:6, 58:18, 66:14, 67:25, 68:6 Answer [2] - 29:19, 62:7 answers [1] - 20:18 anticipate [1] - 25:1 antithetical [1] - 59:11 anytime [2] - 6:12, 6:18 anyway [1] - 44:20 apologize [1] - 36:1 appear [3] - 35:12, 51:7, 64:5 APPEARANCES [1] - 1:16 appeared [2] - 67:21, 67:22 application [10] - 3:17, 23:11, 23:15, 23:16, 23:17, 23:20, 26:9, 29:10, 38:20,	
2				
2 [4] - 1:8, 15:2, 31:5, 36:5 20 [6] - 3:19, 24:9, 24:11, 29:17, 48:4, 52:14 2008 [1] - 12:8 2009 [1] - 11:7 2010 [14] - 10:20, 13:4, 15:17, 15:22, 20:1, 35:11, 35:12, 46:25, 56:5, 56:17, 63:24, 65:20, 65:22, 66:9 2011 [23] - 11:7, 11:13, 15:6, 15:16, 16:6, 16:9, 22:2, 24:1, 30:16, 39:4, 40:11, 42:13, 42:23, 56:3, 56:8, 57:5, 57:24, 64:16, 65:2, 67:23, 68:13, 68:18, 68:23 2012 [7] - 1:8, 2:4, 12:4, 12:5, 15:24,	4 [2] - 30:17, 35:24 413 [1] - 2:3 5 5 [8] - 3:23, 10:23, 11:10, 11:16, 20:23, 44:17, 46:19, 46:21 500 [1] - 2:3 6 6 [3] - 62:11, 62:20, 68:10 67 [1] - 68:18 684 [1] - 12:5 7 7 [8] - 19:23, 62:11, 62:17, 62:20, 64:6, 64:23, 66:15, 68:11 9 90 [1] - 55:15			

<p>attachment [1] - 44:17 attorney [1] - 53:14 attorneys [1] - 28:10 authority [1] - 12:14 automatically [2] - 41:9, 44:25 available [6] - 15:15, 30:25, 57:22, 57:24, 64:9, 65:2 Avenue [1] - 2:3 averages [1] - 11:15 avoid [5] - 33:14, 33:24, 33:25, 34:4, 34:12 avoidable [1] - 58:11 avoided [74] - 6:23, 8:17, 9:5, 9:11, 9:19, 9:20, 9:24, 16:23, 17:14, 17:15, 17:17, 18:12, 19:6, 19:7, 19:16, 20:6, 20:11, 20:14, 20:15, 20:21, 22:7, 23:5, 23:24, 24:11, 24:17, 25:5, 26:6, 27:7, 27:10, 27:24, 28:4, 28:15, 28:19, 29:5, 29:7, 29:8, 29:12, 29:24, 30:5, 30:22, 30:24, 31:11, 34:14, 34:18, 34:23, 38:1, 38:3, 39:8, 41:9, 41:12, 41:16, 41:25, 42:16, 42:20, 44:23, 47:2, 47:3, 47:17, 49:6, 50:25, 51:1, 51:2, 51:6, 52:12, 55:21, 55:23, 59:6, 64:10, 66:17, 67:9, 71:11, 71:12, 71:14, 71:19 avoiding [2] - 17:3, 25:12 avoids [2] - 24:19, 33:11 aware [2] - 36:4, 57:4</p>	<p>based [15] - 14:16, 18:7, 27:18, 30:25, 31:12, 31:19, 31:20, 31:24, 40:12, 44:2, 46:1, 52:25, 53:2, 54:2, 66:6 basis [4] - 11:23, 37:7, 44:9, 67:9 become [1] - 65:6 becomes [1] - 64:20 becoming [2] - 31:21, 31:25 BEFORE [1] - 1:10 begins [1] - 66:23 belief [1] - 68:20 believes [1] - 29:23 below [1] - 10:24 benefit [2] - 44:6, 54:11 best [3] - 41:21, 43:11, 52:9 better [5] - 18:11, 43:21, 43:25, 53:6, 58:25 between [2] - 11:16, 21:3 beyond [1] - 20:10 Big [1] - 14:18 big [1] - 71:10 Bill [1] - 62:15 bind [3] - 26:23, 39:1, 52:1 binding [3] - 26:20, 26:22, 48:3 binds [2] - 26:20, 26:22 bit [4] - 4:8, 26:13, 37:23, 63:12 Black [23] - 7:12, 10:19, 10:25, 11:19, 13:13, 14:21, 16:5, 18:17, 35:12, 36:11, 36:12, 56:17, 57:2, 57:9, 58:3, 64:2, 64:13, 65:4, 65:11, 65:16, 67:24, 68:13, 69:3 blindly [1] - 35:6 blue [3] - 5:6, 5:15, 11:1 body [1] - 26:7 bottom [6] - 5:12, 62:11, 62:19, 67:25, 68:10, 68:11 Braun [1] - 18:11 brevity [1] - 48:16 Brian [1] - 1:15 brief [4] - 28:20, 46:21, 74:18 briefly [5] - 7:21,</p>	<p>15:11, 35:2, 40:13, 42:9 briefs [3] - 11:4, 22:22, 22:25 bring [6] - 45:18, 46:12, 70:7, 71:15, 71:23, 74:12 Brogan [10] - 1:17, 37:25, 38:18, 39:9, 41:14, 50:14, 52:6, 54:24, 63:4, 70:25 BROGAN [12] - 22:18, 32:22, 35:25, 37:13, 46:20, 55:8, 61:25, 68:4, 68:8, 68:16, 69:3, 69:6 Brogan's [4] - 40:21, 42:15, 43:3, 44:18 build [11] - 9:21, 17:22, 24:20, 24:22, 27:2, 28:1, 38:22, 49:18, 49:24, 50:10, 55:16 Building [1] - 2:3 building [1] - 38:16 bunch [1] - 20:25 bureaucratic [1] - 73:16 business [1] - 24:25 Buster [1] - 18:11 buy [4] - 24:20, 40:19, 41:20, 49:22 BY [1] - 1:4</p>	<p>61:14, 63:16 capacity [4] - 4:12, 5:3, 5:9, 8:8 Capitol [2] - 2:3 capricious [1] - 61:22 carbon [71] - 10:4, 10:5, 10:8, 10:22, 11:6, 11:25, 13:8, 13:17, 14:11, 16:23, 17:11, 17:15, 17:23, 17:25, 18:4, 18:23, 19:6, 19:10, 19:16, 22:10, 23:23, 24:1, 24:4, 24:8, 24:16, 25:5, 25:15, 25:16, 29:12, 31:2, 31:6, 31:7, 31:10, 31:11, 31:13, 31:17, 31:18, 31:21, 31:23, 32:12, 32:14, 32:17, 35:22, 36:14, 36:16, 37:1, 37:6, 37:23, 38:1, 38:11, 42:25, 45:2, 45:5, 45:7, 47:22, 47:24, 52:5, 52:14, 52:25, 53:10, 53:24, 53:25, 54:1, 54:2, 54:9, 54:11, 61:13, 62:2, 62:16, 62:17 careful [2] - 37:9, 68:5 carefully [2] - 26:21, 62:3 carry [1] - 31:14 case [25] - 7:2, 8:6, 9:18, 13:24, 13:25, 20:20, 22:3, 22:5, 27:3, 28:5, 37:15, 37:17, 40:19, 46:9, 49:12, 49:22, 51:20, 52:11, 53:25, 54:2, 54:10, 55:7, 55:10, 64:21, 71:11 cases [5] - 9:15, 19:4, 19:20, 26:19, 66:21 category [1] - 39:22 causes [1] - 73:18 Cedar [1] - 21:6 certain [4] - 28:12, 43:21, 57:4, 72:14 certainly [7] - 24:22, 35:21, 71:21, 72:11, 73:2, 73:21, 74:15 CERTIFICATE [1] - 76:2 Certified [2] - 76:6, 76:19 CERTIFY [1] - 76:8 CFR [2] - 15:2, 30:24 chair [3] - 4:5, 46:15, 48:21</p>	<p>CHAIRMAN [45] - 1:11, 1:11, 3:1, 3:9, 10:11, 10:14, 10:18, 16:19, 19:23, 20:23, 22:16, 29:16, 32:20, 35:24, 37:12, 37:20, 46:17, 48:14, 49:1, 49:3, 49:15, 52:4, 52:13, 53:9, 53:20, 54:7, 54:14, 54:24, 55:25, 61:7, 61:12, 62:4, 69:8, 69:11, 69:16, 69:19, 69:22, 72:1, 72:4, 72:23, 73:24, 74:9, 74:13, 74:22, 75:1 Chairman [14] - 16:18, 19:22, 22:14, 32:22, 35:23, 37:19, 37:22, 46:20, 49:9, 55:8, 56:2, 61:25, 67:5, 70:6 challenging [1] - 73:7 change [5] - 15:20, 16:1, 22:3, 57:17, 65:12 changer [1] - 12:3 changes [1] - 14:1 changing [2] - 15:16, 15:22 chastised [1] - 63:12 Cheri [3] - 1:21, 61:8, 76:18 CHERI [1] - 76:5 chosen [1] - 60:11 CHRIS [1] - 1:11 chris [1] - 1:15 circuit [4] - 12:20, 52:19, 61:20, 61:21 circumstance [2] - 49:17, 60:2 circumstances [1] - 30:1 cite [1] - 9:22 cited [2] - 9:17, 19:4 cites [3] - 9:14, 19:21, 66:21 clarification [1] - 68:12 clarify [3] - 49:13, 53:5, 70:9 Clark [1] - 4:9 clash [1] - 43:5 Clean [1] - 12:11 clear [5] - 15:1, 15:18, 21:6, 45:3, 45:23 clearer [1] - 46:2 clearly [2] - 35:19, 46:8 client [1] - 60:17</p>
<p style="text-align: center;">B</p> <p>backing [4] - 8:6, 8:12, 8:25, 9:3 bad [2] - 61:6 bag [1] - 28:2 ballpark [1] - 47:25 bargaining [2] - 45:13, 46:2 base [7] - 30:5, 34:1, 34:3, 34:5, 34:16, 59:14 baseball [1] - 43:20</p>	<p style="text-align: center;">C</p> <p>calculate [1] - 24:10 calculated [5] - 7:13, 42:20, 59:2, 60:9, 64:9 calculating [4] - 9:20, 13:7, 25:5, 53:11 calculation [22] - 10:2, 10:21, 11:6, 11:9, 11:23, 14:11, 18:5, 19:7, 19:16, 22:7, 22:10, 23:23, 29:25, 31:11, 32:3, 38:3, 41:12, 42:17, 42:18, 50:25, 52:12, 52:25 calculations [6] - 13:14, 13:16, 15:20, 16:12, 16:15, 19:2 cancelled [1] - 70:22 candle [3] - 59:23, 60:1, 60:3 cannot [4] - 26:24, 28:4, 30:5, 55:13 cap [4] - 13:2, 53:2,</p>	<p style="text-align: center;">C</p>	<p style="text-align: center;">C</p>	<p style="text-align: center;">C</p>

<p>closing [1] - 44:20 CO2 [2] - 73:4, 73:12 coal [26] - 5:4, 5:5, 5:8, 5:21, 6:3, 6:6, 6:14, 6:15, 6:20, 6:21, 7:8, 7:9, 8:7, 8:12, 14:16, 14:22, 33:20, 34:22, 40:16, 40:17, 40:22, 41:15, 41:18, 59:13, 59:14, 59:16 Coalition [1] - 12:4 coastal [1] - 12:8 cogenerator [1] - 67:1 cognizant [1] - 72:15 colleagues [1] - 18:8 comfortable [3] - 10:12, 74:5, 74:6 coming [1] - 36:4 commenced [1] - 50:21 commencing [1] - 2:5 commend [2] - 11:4, 11:25 comment [2] - 61:23, 62:3 comments [4] - 23:14, 24:1, 25:14, 73:20 commission [1] - 39:23 COMMISSION [3] - 1:1, 1:10, 1:13 Commission [45] - 4:6, 11:11, 19:11, 19:17, 27:8, 27:10, 27:17, 27:23, 29:10, 30:5, 30:15, 31:18, 31:22, 32:2, 32:5, 32:16, 35:18, 36:12, 36:25, 39:25, 44:6, 45:4, 46:15, 47:17, 48:2, 48:7, 49:6, 49:21, 51:10, 51:23, 52:2, 54:23, 55:4, 55:7, 55:13, 56:5, 58:21, 60:20, 66:16, 67:6, 68:4, 69:9, 71:3, 71:24, 74:19 Commission's [7] - 15:5, 16:11, 23:24, 30:19, 45:22, 48:9, 60:11 Commissioner [18] - 3:2, 3:3, 3:25, 48:17, 48:19, 49:1, 52:9, 56:14, 69:14, 70:5, 72:1, 72:2, 72:11, 72:19, 73:22, 74:3, 74:10 COMMISSIONER [20]</p>	<p>- 1:12, 3:8, 48:21, 49:2, 56:2, 58:6, 58:9, 58:16, 60:10, 69:15, 70:6, 70:13, 71:9, 72:3, 72:5, 72:25, 74:3, 74:11, 74:17, 74:24 Commissioners [5] - 22:18, 70:2, 72:8, 73:3, 73:16 commissions [1] - 29:4 commit [4] - 27:11, 39:14, 50:4, 55:20 commitment [4] - 26:5, 28:14, 29:14, 49:23 commits [2] - 21:8, 47:16 committed [2] - 27:16, 46:10 committee [2] - 3:3, 3:7 Compel [1] - 51:8 complains [1] - 33:4 COMPLAINT [1] - 1:4 completely [1] - 42:24 complex [1] - 72:13 complicated [1] - 18:14 complicating [1] - 60:3 complied [1] - 71:6 components [1] - 30:11 comported [1] - 71:6 compute [1] - 69:1 concern [1] - 58:12 conclude [1] - 22:14 concluded [1] - 75:3 conclusion [1] - 46:13 concur [1] - 52:7 conditional [1] - 26:11 conditions [5] - 30:13, 30:21, 32:6, 35:3, 42:10 confidentiality [1] - 68:3 confused [1] - 44:19 Congress [3] - 13:2, 39:21, 52:16 Conservation [2] - 11:24, 13:14 conservative [2] - 48:5, 48:6 consider [19] - 8:21, 12:15, 13:9, 15:15, 15:18, 16:2, 16:16, 17:8, 24:14, 24:23, 28:11, 35:20, 37:4,</p>	<p>38:12, 38:14, 44:10, 62:15, 65:1 considerable [4] - 14:18, 14:19, 18:19, 43:12 consideration [5] - 4:19, 24:16, 32:11, 42:6, 46:16 considerations [1] - 73:5 considered [6] - 16:14, 16:15, 36:23, 42:22, 45:20, 52:22 considering [2] - 25:24, 44:7 consistent [2] - 9:8, 19:17 constant [1] - 54:5 constraints [1] - 56:23 consultation [1] - 36:24 consumers [5] - 23:7, 28:24, 28:25, 29:2, 29:3 contact [1] - 47:7 contained [1] - 30:23 continued [1] - 21:13 continues [1] - 41:19 continuing [1] - 21:13 contract [10] - 20:3, 20:25, 21:4, 28:8, 28:11, 39:2, 39:11, 40:6, 47:14, 50:16 contrary [1] - 15:7 conversation [1] - 44:2 convince [1] - 43:24 correct [14] - 37:13, 38:18, 40:12, 42:11, 42:17, 63:4, 64:2, 69:5, 71:20, 72:12, 72:14, 73:1, 74:1, 76:12 correctly [2] - 34:11, 63:25 cost [112] - 5:7, 5:13, 5:16, 6:3, 6:5, 6:14, 6:15, 6:23, 6:24, 7:3, 7:6, 7:8, 7:9, 7:24, 8:17, 9:5, 9:11, 9:20, 10:3, 10:5, 10:22, 14:11, 16:23, 17:11, 17:17, 17:23, 17:25, 18:12, 18:25, 19:7, 19:10, 20:6, 20:11, 20:14, 20:15, 20:21, 23:5, 23:24, 24:11, 24:17, 25:5, 25:6, 26:6, 27:7, 27:10, 27:24, 28:4, 28:15,</p>	<p>28:19, 29:6, 29:7, 29:8, 29:12, 29:25, 30:5, 30:11, 30:22, 30:24, 31:7, 31:10, 31:11, 31:13, 33:17, 33:25, 34:7, 34:14, 34:18, 34:23, 38:1, 38:3, 40:16, 40:17, 41:13, 41:16, 41:20, 41:25, 42:16, 44:23, 45:8, 47:2, 47:4, 47:17, 47:24, 49:6, 49:7, 50:25, 51:1, 51:2, 52:5, 52:12, 52:14, 52:25, 54:1, 54:2, 54:10, 54:11, 55:21, 55:23, 58:11, 59:6, 61:15, 62:2, 63:5, 66:17, 66:24, 66:25, 67:9, 67:15, 69:1 costing [1] - 23:7 costs [76] - 8:17, 9:19, 9:24, 10:4, 10:8, 11:6, 11:14, 11:25, 13:8, 13:17, 14:19, 16:23, 17:2, 17:14, 17:15, 18:5, 18:23, 19:6, 19:16, 19:17, 22:7, 22:10, 23:23, 24:2, 24:4, 24:8, 24:16, 29:12, 30:6, 30:9, 31:2, 31:6, 31:12, 33:10, 33:13, 33:23, 34:4, 34:11, 35:22, 36:14, 36:16, 37:1, 37:7, 37:23, 38:1, 38:11, 39:8, 41:6, 41:9, 42:20, 42:25, 45:2, 45:5, 47:22, 51:6, 52:21, 53:10, 53:24, 56:4, 59:15, 61:13, 62:16, 62:17, 63:7, 63:8, 63:25, 64:10, 67:8, 67:16, 71:11, 71:12, 71:14, 71:19 council [1] - 14:9 Council [1] - 13:14 Council's [1] - 11:24 country [2] - 56:24, 67:10 COUNTY [1] - 76:3 couple [4] - 15:11, 43:15, 44:3, 66:21 course [5] - 12:3, 20:14, 27:20, 35:17, 58:11 Court [3] - 12:13, 52:18, 63:13</p>	<p>court [3] - 26:19, 36:1, 37:10, 70:12 courts [1] - 55:18 create [5] - 26:3, 27:13, 28:4, 55:17, 55:19 created [20] - 21:7, 23:25, 26:10, 26:24, 27:1, 28:7, 28:9, 29:13, 31:1, 35:4, 35:20, 39:17, 42:12, 46:1, 49:8, 55:2, 55:6, 55:14, 68:23, 73:17 creates [1] - 33:4 creating [1] - 43:9 creation [1] - 40:11 credibility [2] - 36:12, 36:22 credit [1] - 39:5 Creek [1] - 21:7 CREMER [2] - 29:18, 53:14 Cremer [2] - 1:14, 53:9 criticisms [1] - 14:14 CRR [1] - 1:21 crunch [1] - 43:18 current [18] - 14:25, 15:7, 15:13, 16:2, 16:11, 16:13, 30:13, 30:20, 32:5, 35:3, 42:10, 42:21, 45:4, 45:6, 56:6, 56:12, 64:8 current-information [1] - 15:13 curve [1] - 7:12 customers [2] - 25:8, 25:9 cutting [1] - 72:23 cynical [1] - 63:10</p> <hr/> <p style="text-align: center;">D</p> <hr/> <p>D.C [4] - 12:20, 52:19, 61:20, 61:21 DAKOTA [2] - 1:2, 76:1 Dakota [12] - 2:2, 2:4, 4:10, 4:13, 14:17, 23:4, 30:3, 30:8, 39:6, 76:7, 76:13 damages [1] - 51:22 danced [1] - 73:13 date [3] - 22:12, 40:8, 42:13 Dated [1] - 76:13 Daugard [1] - 1:15 days [2] - 5:3, 55:15</p>
--	--	---	--	--

<p>dead [4] - 62:15, 63:1, 63:17, 63:18</p> <p>deal [3] - 9:18, 23:1, 35:2</p> <p>dealing [4] - 3:15, 14:4, 51:21, 71:13</p> <p>dealt [3] - 4:15, 9:19, 71:14</p> <p>debate [3] - 43:5, 43:23, 74:23</p> <p>decide [3] - 18:10, 51:23, 59:25</p> <p>decided [1] - 21:16</p> <p>deciding [2] - 74:5, 74:6</p> <p>decision [26] - 5:23, 8:9, 8:23, 9:18, 9:22, 9:23, 12:4, 12:7, 12:20, 17:17, 18:22, 18:24, 19:12, 19:15, 37:2, 39:20, 39:21, 40:11, 45:23, 54:9, 54:22, 54:23, 57:24, 65:17, 70:17, 71:20</p> <p>decisions [3] - 51:18, 71:24, 74:18</p> <p>defer [2] - 74:13, 75:1</p> <p>deference [3] - 72:7, 72:19, 73:21</p> <p>definitely [2] - 25:15, 63:2</p> <p>definition [3] - 6:23, 8:17, 66:17</p> <p>delayed [4] - 11:13, 11:17, 11:20, 51:22</p> <p>deliver [14] - 26:20, 26:22, 26:24, 28:14, 39:2, 40:3, 40:7, 49:7, 49:11, 50:5, 51:11, 52:2, 55:14, 55:21</p> <p>delivering [3] - 27:11, 39:4, 39:6</p> <p>demonstrative [3] - 5:1, 5:11, 36:2</p> <p>denying [1] - 32:1</p> <p>describe [1] - 10:17</p> <p>desire [1] - 72:20</p> <p>determination [7] - 9:8, 9:9, 12:10, 18:4, 23:25, 29:11, 29:13</p> <p>determine [6] - 27:17, 30:21, 32:6, 36:12, 42:19, 46:3</p> <p>determined [3] - 9:24, 26:6, 47:17</p> <p>determines [1] - 34:11</p> <p>developer [1] - 38:22</p> <p>developers [2] - 4:15, 4:18</p>	<p>development [1] - 40:1</p> <p>devote [1] - 43:12</p> <p>difference [2] - 21:3, 23:16</p> <p>different [15] - 10:21, 11:8, 13:23, 14:10, 42:24, 44:8, 54:16, 55:11, 56:21, 57:15, 58:8, 65:10, 66:11, 68:25, 73:14</p> <p>differing [1] - 35:8</p> <p>difficult [1] - 36:9</p> <p>difficulties [1] - 73:18</p> <p>difficulty [2] - 51:5, 59:5</p> <p>diminished [1] - 62:18</p> <p>direct [1] - 44:16</p> <p>directed [1] - 62:5</p> <p>direction [2] - 57:10, 66:12</p> <p>directions [1] - 73:14</p> <p>directly [1] - 49:5</p> <p>disagree [4] - 25:15, 26:3, 33:6, 38:19</p> <p>disagreement [1] - 37:6</p> <p>disagreements [1] - 59:1</p> <p>disappeared [1] - 47:7</p> <p>discount [2] - 13:20, 31:20</p> <p>discounted [3] - 13:19, 31:24, 32:17</p> <p>discriminate [1] - 41:7</p> <p>discriminating [1] - 17:20</p> <p>discriminatory [1] - 44:22</p> <p>discuss [3] - 25:17, 25:25, 74:19</p> <p>discussed [2] - 44:11, 45:20</p> <p>discussion [4] - 3:25, 28:24, 45:21, 69:24</p> <p>dispatch [1] - 10:1</p> <p>displaced [2] - 9:4, 41:12</p> <p>displacement [3] - 34:14, 34:18, 34:19</p> <p>displacing [2] - 14:23, 34:15</p> <p>dispositive [1] - 35:16</p> <p>disputes [2] - 46:6, 46:7</p> <p>DO [1] - 76:8</p> <p>docket [2] - 26:1, 48:22</p> <p>doctrine [1] - 38:20</p> <p>document [2] - 62:6,</p>	<p>68:24</p> <p>dollars [1] - 47:14</p> <p>done [8] - 7:18, 21:21, 46:12, 56:9, 57:2, 60:20, 66:2, 74:20</p> <p>down [12] - 8:6, 8:12, 8:25, 9:3, 25:12, 40:22, 41:2, 41:3, 41:15, 60:22, 60:23, 66:19</p> <p>dropped [1] - 15:24</p> <p>due [1] - 30:2</p> <p>duly [1] - 76:8</p> <p>duly-appointed [1] - 76:8</p> <p>during [5] - 25:17, 27:19, 33:3, 33:24, 34:2</p>	<p style="text-align: center;">E</p> <p>early [4] - 13:19, 16:7, 20:1, 46:25</p> <p>easily [2] - 58:22, 59:2</p> <p>East [1] - 2:3</p> <p>effect [1] - 30:11</p> <p>effort [1] - 18:19</p> <p>EIA [13] - 10:22, 13:21, 13:23, 14:7, 14:14, 15:17, 15:22, 18:13, 37:14, 37:16, 37:17, 57:15, 65:10</p> <p>either [15] - 6:18, 6:19, 7:2, 8:1, 9:6, 14:2, 15:14, 17:23, 19:20, 30:10, 40:24, 41:4, 41:5, 54:19, 56:7</p> <p>EL11-006 [2] - 1:4, 3:15</p> <p>Electric [1] - 9:24</p> <p>electric [2] - 32:7, 66:25</p> <p>electrical [1] - 19:14</p> <p>emission [1] - 13:8</p> <p>emissions [2] - 12:24, 63:3</p> <p>employ [1] - 60:15</p> <p>employees [1] - 28:23</p> <p>employment [1] - 64:13</p> <p>encourage [2] - 40:1, 73:2</p> <p>end [10] - 35:11, 35:21, 44:14, 45:14, 45:25, 46:2, 47:24, 47:25, 48:5, 60:3</p> <p>endangerment [2] - 12:16, 12:17</p> <p>energy [5] - 4:12,</p>	<p>34:5, 34:6, 55:14, 67:1</p> <p>Energy [12] - 1:17, 10:20, 16:5, 18:6, 18:8, 18:14, 22:13, 31:14, 37:2, 37:25, 56:18, 63:5</p> <p>ENERGY [2] - 1:4, 1:5</p> <p>Energy's [7] - 23:10, 23:15, 26:4, 31:7, 32:14, 43:2, 62:7</p> <p>enforce [3] - 26:17, 27:4, 39:24</p> <p>enforceable [16] - 15:4, 19:24, 21:2, 21:3, 21:5, 21:7, 21:24, 25:22, 26:14, 26:15, 30:14, 42:12, 50:3, 50:11, 51:12, 51:25</p> <p>engage [1] - 20:18</p> <p>enjoyed [1] - 71:10</p> <p>enormous [1] - 51:4</p> <p>ensure [2] - 50:23, 50:24</p> <p>ENTER [1] - 1:5</p> <p>entered [1] - 28:8</p> <p>Entergy [1] - 9:17</p> <p>entities [2] - 18:19, 65:12</p> <p>entitled [2] - 2:2, 76:10</p> <p>EPA [12] - 12:5, 12:9, 12:14, 12:16, 12:23, 37:8, 52:17, 52:25, 61:16, 63:11, 65:16</p> <p>EPA's [3] - 14:4, 14:6, 63:2</p> <p>equal [2] - 28:15, 43:4</p> <p>equation [3] - 6:19, 8:2, 61:3</p> <p>equations [1] - 36:21</p> <p>equipment [1] - 49:22</p> <p>error [2] - 12:21, 65:9</p> <p>escalation [1] - 22:8</p> <p>especially [2] - 24:21, 48:23</p> <p>essentially [9] - 6:24, 7:19, 8:4, 8:24, 11:19, 12:23, 28:21, 38:15, 38:24</p> <p>establish [3] - 31:23, 32:17, 51:2</p> <p>established [1] - 30:15</p> <p>establishes [1] - 46:25</p> <p>establishment [1] - 32:9</p> <p>estimate [7] - 11:25,</p>	<p>24:10, 31:13, 31:17, 31:19, 32:15, 58:3</p> <p>estimates [8] - 11:2, 30:6, 31:10, 36:11, 36:13, 48:1, 52:11, 65:9</p> <p>estimating [2] - 38:6, 65:8</p> <p>event [1] - 65:7</p> <p>evidence [9] - 22:3, 22:12, 27:8, 31:16, 35:9, 36:15, 37:10, 44:13, 71:4</p> <p>evidentiary [2] - 31:12, 31:15</p> <p>exact [1] - 61:16</p> <p>exactly [2] - 65:21, 66:2</p> <p>example [17] - 5:1, 8:11, 13:2, 14:4, 17:4, 17:7, 17:8, 18:13, 43:20, 46:5, 50:18, 51:21, 54:8, 55:11, 58:24, 59:7, 65:16</p> <p>except [1] - 36:10</p> <p>excess [2] - 5:9, 34:5</p> <p>exchange [1] - 47:6</p> <p>exclude [1] - 32:11</p> <p>exclusively [1] - 30:6</p> <p>excuse [3] - 27:9, 40:16, 68:25</p> <p>exercise [3] - 31:22, 32:17, 56:25</p> <p>exhaustive [2] - 43:16, 56:24</p> <p>Exhibit [1] - 36:5</p> <p>exhibit [3] - 36:7, 36:10, 44:17</p> <p>exist [3] - 24:6, 24:12, 42:4</p> <p>existing [2] - 9:20, 26:6</p> <p>exists [4] - 40:25, 41:1, 41:5, 51:25</p> <p>expect [3] - 12:2, 48:16, 66:15</p> <p>expectation [2] - 10:8, 12:25</p> <p>expecting [1] - 74:20</p> <p>expense [1] - 14:18</p> <p>expensive [4] - 5:25, 13:1, 13:18, 53:1</p> <p>experience [1] - 7:15</p> <p>experiencing [1] - 38:11</p> <p>expert [4] - 35:7, 36:22, 43:8, 66:3</p> <p>experts [3] - 36:17, 36:24, 43:5</p>
--	---	---	--	---	---

<p>explain [2] - 19:18, 19:19 explanation [1] - 37:25 explore [1] - 44:8 expression [1] - 59:23 extensively [1] - 11:4 extent [6] - 15:21, 34:17, 34:21, 36:25, 57:4, 65:20 extremely [2] - 13:1, 73:7</p>	<p>56:15, 70:5, 72:11, 74:3, 74:10 FIGEN [13] - 1:11, 49:2, 56:2, 58:6, 58:9, 58:16, 60:10, 70:6, 70:13, 71:9, 74:11, 74:17, 74:24 Fiegen's [1] - 72:20 fighths [1] - 59:3 figure [8] - 10:5, 10:7, 17:1, 17:2, 33:13, 43:10, 56:4, 58:11 figures [1] - 37:3 figuring [1] - 18:20 file [1] - 51:7 filed [3] - 29:19, 66:10, 70:23 filing [2] - 62:18, 63:24 final [5] - 48:10, 48:11, 57:3, 66:9, 71:24 finally [3] - 32:16, 35:22, 37:13 finance [1] - 27:25 financially [4] - 28:16, 28:18, 49:12, 50:9 financing [1] - 20:16 fine [4] - 10:13, 48:24, 74:8, 74:15 first [24] - 4:6, 4:22, 5:2, 8:4, 9:17, 16:22, 19:9, 24:1, 26:15, 33:1, 36:2, 44:1, 46:22, 48:19, 51:25, 56:16, 62:24, 64:10, 66:16, 67:20, 68:9, 69:25, 70:6, 71:9 firstly [1] - 64:25 fixed [1] - 59:20 focusing [1] - 64:15 folks [1] - 74:7 follow [2] - 70:20, 71:5 follow-on [2] - 70:20, 71:5 following [3] - 49:16, 65:24, 66:20 follows [1] - 5:20 footnote [1] - 68:16 FOR [1] - 1:5 force [1] - 63:13 forcing [1] - 12:23 forecast [33] - 10:25, 13:13, 13:22, 13:23, 14:8, 14:9, 14:15, 15:3, 15:17, 15:24, 16:6, 17:10, 18:6, 22:8, 41:22, 43:2, 44:14, 57:6, 57:12, 57:13, 57:15, 57:17, 63:23, 64:13, 64:18,</p>	<p>64:20, 64:24, 65:20, 66:5, 66:7, 66:9, 68:13, 68:18 forecasting [2] - 18:18, 65:12 forecasts [3] - 58:1, 65:10, 65:12 foreseeable [1] - 34:8 forestalling [1] - 51:17 forget [2] - 28:25, 29:1 form [2] - 63:19, 66:9 forward [3] - 48:9, 70:2, 70:4 foundation [1] - 44:9 fourth [1] - 25:25 frankly [3] - 24:14, 47:12, 73:14 free [1] - 49:15 front [2] - 4:7, 21:13 full [1] - 29:7 fully [3] - 22:22, 22:23, 48:23 fundamental [4] - 9:5, 16:1, 34:13, 34:17 fundamentally [1] - 26:3 fundamentals [2] - 28:11, 57:16 funded [1] - 14:6 future [9] - 17:6, 18:1, 26:12, 34:9, 58:21, 60:9, 65:4, 72:18, 73:9 futures [1] - 54:13</p>	<p>30:4 given [6] - 15:5, 23:3, 27:11, 49:7, 54:13, 59:6 glean [1] - 54:3 grant [1] - 29:10 granting [2] - 32:4, 32:13 grants [1] - 35:18 great [1] - 23:1 greater [1] - 29:5 green [1] - 5:5 greenhouse [5] - 12:10, 12:24, 13:7, 17:9, 63:3 Greg [2] - 1:14, 61:10 group [2] - 56:22 groups [1] - 56:21 guess [7] - 18:3, 25:18, 36:3, 58:19, 59:23, 68:12, 68:24 guessing [1] - 73:8 guidance [1] - 58:20 guided [2] - 31:23, 32:18</p>	<p>hearings [1] - 48:9 heated [1] - 74:23 heavy [1] - 34:2 hedge [2] - 17:5, 17:25 held [2] - 2:1, 54:5 help [2] - 6:12, 6:18 HEREBY [1] - 76:8 high [7] - 11:15, 33:18, 37:7, 54:2, 54:10, 54:15, 61:15 higher [5] - 6:5, 27:6, 58:2, 63:9, 64:14 hinted [1] - 49:4 hinting [1] - 50:15 historically [1] - 38:5 hold [1] - 71:4 holding [1] - 28:2 honestly [1] - 45:11 hope [2] - 22:23, 23:3 hopefully [3] - 3:13, 22:21, 48:10 hour [4] - 20:11, 20:22, 49:19, 59:19 hours [23] - 5:20, 6:2, 6:4, 6:7, 6:13, 6:16, 6:19, 6:20, 7:5, 7:7, 7:11, 33:8, 33:18, 33:19, 33:24, 34:2, 34:24, 41:23, 42:2, 59:9, 59:13, 67:16 human [1] - 12:11 humorous [1] - 38:17 hurts [5] - 41:1, 41:2, 41:3, 41:7, 41:8 hybrid [31] - 5:14, 5:19, 7:18, 9:16, 29:23, 29:24, 31:3, 32:3, 32:12, 33:2, 33:4, 34:10, 40:13, 42:7, 44:21, 47:20, 58:10, 58:13, 58:14, 59:21, 60:11, 60:16, 61:1, 67:3, 67:11, 67:12, 67:17, 71:18, 72:21, 72:25, 73:1 hydro [1] - 17:7 hypothetical [3] - 5:3, 29:8, 49:20</p>
F				
<p>F.3d [1] - 12:5 faced [1] - 73:19 facilities [4] - 7:15, 17:20, 23:6, 39:21 facility [8] - 7:1, 15:3, 17:2, 17:13, 17:16, 21:8, 39:19, 52:2 fact [12] - 10:2, 24:13, 35:13, 38:12, 45:16, 51:6, 51:10, 53:11, 55:3, 67:4, 72:16, 72:17 factors [2] - 22:8, 38:6 failed [3] - 15:15, 46:23, 62:15 fails [1] - 51:15 fair [2] - 13:11, 60:23 fairly [1] - 59:2 fall [10] - 10:19, 35:12, 35:15, 56:5, 56:13, 56:18, 63:24, 64:18, 64:24, 65:20 far [2] - 10:14, 68:2 fast [2] - 36:2, 64:21 fate [1] - 27:1 feasible [1] - 50:9 February [24] - 15:6, 15:16, 16:9, 22:1, 22:2, 24:1, 30:15, 35:11, 39:3, 40:11, 42:12, 42:23, 47:9, 56:3, 56:9, 56:12, 57:24, 64:15, 64:23, 65:2, 65:23, 66:4, 68:23 fellow [5] - 70:1, 72:7, 73:2, 73:15, 73:22 FERC [5] - 21:5, 21:23, 26:19, 50:1, 50:2 fervently [1] - 23:3 few [3] - 24:1, 61:9, 72:10 Fiegen [7] - 3:2, 49:1,</p>	<p>figures [1] - 37:3 figuring [1] - 18:20 file [1] - 51:7 filed [3] - 29:19, 66:10, 70:23 filing [2] - 62:18, 63:24 final [5] - 48:10, 48:11, 57:3, 66:9, 71:24 finally [3] - 32:16, 35:22, 37:13 finance [1] - 27:25 financially [4] - 28:16, 28:18, 49:12, 50:9 financing [1] - 20:16 fine [4] - 10:13, 48:24, 74:8, 74:15 first [24] - 4:6, 4:22, 5:2, 8:4, 9:17, 16:22, 19:9, 24:1, 26:15, 33:1, 36:2, 44:1, 46:22, 48:19, 51:25, 56:16, 62:24, 64:10, 66:16, 67:20, 68:9, 69:25, 70:6, 71:9 firstly [1] - 64:25 fixed [1] - 59:20 focusing [1] - 64:15 folks [1] - 74:7 follow [2] - 70:20, 71:5 follow-on [2] - 70:20, 71:5 following [3] - 49:16, 65:24, 66:20 follows [1] - 5:20 footnote [1] - 68:16 FOR [1] - 1:5 force [1] - 63:13 forcing [1] - 12:23 forecast [33] - 10:25, 13:13, 13:22, 13:23, 14:8, 14:9, 14:15, 15:3, 15:17, 15:24, 16:6, 17:10, 18:6, 22:8, 41:22, 43:2, 44:14, 57:6, 57:12, 57:13, 57:15, 57:17, 63:23, 64:13, 64:18,</p>	<p>game [7] - 7:20, 12:3, 15:16, 15:22, 45:17, 45:19, 60:2 game's [1] - 59:23 games [1] - 59:24 Garbage [1] - 61:5 garbage [1] - 61:5 Gary [2] - 3:5, 72:24 GARY [1] - 1:12 gas [11] - 5:6, 5:8, 12:24, 13:7, 17:5, 17:9, 22:8, 32:7, 38:4, 56:22, 63:3 gases [1] - 12:10 generally [2] - 10:17, 38:19 generate [2] - 6:25, 66:25 generating [2] - 5:8, 67:9 generation [5] - 5:3, 8:12, 9:1, 14:23,</p>	H	<p>half [3] - 4:9, 5:2, 5:12 halfway [1] - 66:19 handle [3] - 52:10, 58:25, 74:1 handling [1] - 46:6 HANSON [8] - 1:12, 3:8, 48:21, 69:15, 72:3, 72:5, 72:25, 74:3 Hanson [5] - 3:3, 48:19, 69:14, 72:1, 72:2 HAP [1] - 14:4 happy [2] - 20:7, 74:7 hard [1] - 33:15 haul [1] - 4:17 hazardous [1] - 14:5 heading [1] - 57:11 heads [4] - 7:19, 9:11, 33:5, 42:7 health [1] - 12:11 hear [2] - 37:24, 72:3 heard [5] - 7:22, 8:3, 8:16, 38:4, 68:19 hearing [19] - 19:1, 20:9, 35:21, 42:19, 43:4, 44:7, 44:11, 48:11, 53:5, 53:15, 57:19, 60:15, 69:11, 70:8, 70:20, 71:5, 71:15, 75:3</p>
G				
<p>game [7] - 7:20, 12:3, 15:16, 15:22, 45:17, 45:19, 60:2 game's [1] - 59:23 games [1] - 59:24 Garbage [1] - 61:5 garbage [1] - 61:5 Gary [2] - 3:5, 72:24 GARY [1] - 1:12 gas [11] - 5:6, 5:8, 12:24, 13:7, 17:5, 17:9, 22:8, 32:7, 38:4, 56:22, 63:3 gases [1] - 12:10 generally [2] - 10:17, 38:19 generate [2] - 6:25, 66:25 generating [2] - 5:8, 67:9 generation [5] - 5:3, 8:12, 9:1, 14:23,</p>	<p>game [7] - 7:20, 12:3, 15:16, 15:22, 45:17, 45:19, 60:2 game's [1] - 59:23 games [1] - 59:24 Garbage [1] - 61:5 garbage [1] - 61:5 Gary [2] - 3:5, 72:24 GARY [1] - 1:12 gas [11] - 5:6, 5:8, 12:24, 13:7, 17:5, 17:9, 22:8, 32:7, 38:4, 56:22, 63:3 gases [1] - 12:10 generally [2] - 10:17, 38:19 generate [2] - 6:25, 66:25 generating [2] - 5:8, 67:9 generation [5] - 5:3, 8:12, 9:1, 14:23,</p>			
H				
<p>half [3] - 4:9, 5:2, 5:12 halfway [1] - 66:19 handle [3] - 52:10, 58:25, 74:1 handling [1] - 46:6 HANSON [8] - 1:12, 3:8, 48:21, 69:15, 72:3, 72:5, 72:25, 74:3 Hanson [5] - 3:3, 48:19, 69:14, 72:1, 72:2 HAP [1] - 14:4 happy [2] - 20:7, 74:7 hard [1] - 33:15 haul [1] - 4:17 hazardous [1] - 14:5 heading [1] - 57:11 heads [4] - 7:19, 9:11, 33:5, 42:7 health [1] - 12:11 hear [2] - 37:24, 72:3 heard [5] - 7:22, 8:3, 8:16, 38:4, 68:19 hearing [19] - 19:1, 20:9, 35:21, 42:19, 43:4, 44:7, 44:11, 48:11, 53:5, 53:15, 57:19, 60:15, 69:11, 70:8, 70:20, 71:5, 71:15, 75:3</p>	<p>firstly [1] - 64:25 fixed [1] - 59:20 focusing [1] - 64:15 folks [1] - 74:7 follow [2] - 70:20, 71:5 follow-on [2] - 70:20, 71:5 following [3] - 49:16, 65:24, 66:20 follows [1] - 5:20 footnote [1] - 68:16 FOR [1] - 1:5 force [1] - 63:13 forcing [1] - 12:23 forecast [33] - 10:25, 13:13, 13:22, 13:23, 14:8, 14:9, 14:15, 15:3, 15:17, 15:24, 16:6, 17:10, 18:6, 22:8, 41:22, 43:2, 44:14, 57:6, 57:12, 57:13, 57:15, 57:17, 63:23, 64:13, 64:18,</p>			<p>idea [2] - 18:16, 38:16 ignored [1] - 15:15 illegal [1] - 67:13 illusory [1] - 29:14 illustrative [1] - 5:17</p>

impetus [1] - 13:1
implementation [3] - 11:13, 11:17, 11:20
implemented [1] - 12:22
important [9] - 4:14, 4:19, 12:7, 13:22, 17:25, 21:15, 37:24, 42:6, 61:3
importantly [1] - 28:23
impose [1] - 62:1
imposed [1] - 63:5
improbability [1] - 52:16
IN [1] - 1:4
inappropriate [1] - 15:10
include [9] - 14:8, 18:22, 19:5, 19:6, 19:10, 19:12, 25:4, 37:24, 53:11
included [10] - 10:22, 17:16, 18:5, 19:3, 19:16, 25:16, 29:2, 31:10, 37:1, 63:24
includes [2] - 14:10, 36:6
including [8] - 7:4, 14:10, 15:16, 22:7, 24:17, 38:1, 41:24, 66:5
inclusion [5] - 16:23, 17:24, 23:23, 29:12, 45:8
inconsistent [2] - 9:11, 29:23
incorporate [1] - 17:10
incorporated [2] - 31:3, 31:6
incorrect [1] - 16:15
increase [1] - 15:23
incremental [19] - 5:7, 5:8, 5:13, 5:16, 6:5, 7:3, 7:9, 7:24, 8:19, 8:22, 10:3, 30:6, 41:5, 42:5, 59:15, 66:24, 67:8, 67:15, 67:16
incurred [3] - 15:4, 21:25
indeed [1] - 35:3
indicated [3] - 46:23, 54:25, 68:17
indicating [1] - 47:2
indication [1] - 15:25
indifferent [2] - 7:23, 29:3
individual [1] - 25:1
indulgence [3] -

37:19, 46:15, 48:8
industry [1] - 63:15
inflation [2] - 38:5, 47:15
information [30] - 3:5, 14:25, 15:8, 15:13, 15:15, 16:2, 16:13, 30:25, 42:13, 42:21, 42:22, 45:4, 45:6, 51:5, 51:7, 54:3, 54:12, 56:10, 56:11, 56:13, 57:20, 57:22, 57:23, 64:8, 65:1, 71:5, 71:10, 72:10
informed [1] - 57:23
initial [5] - 3:18, 23:13, 33:3, 33:7, 36:7
inputs [7] - 31:6, 32:7, 56:4, 61:2, 61:6, 71:2, 73:11
instance [2] - 55:12, 64:10
instead [2] - 7:5, 56:12
insufficient [3] - 5:21, 6:16, 6:20
integrated [2] - 19:13, 30:3
intend [1] - 22:22
intended [4] - 32:25, 50:1, 50:2, 52:1
intention [1] - 63:3
Interconnection [1] - 39:13
interested [1] - 21:21
interesting [1] - 20:13
interim [2] - 70:21, 71:6
internal [2] - 30:4, 30:7
INTO [1] - 1:5
investment [1] - 51:18
involved [1] - 16:8
involving [1] - 19:2
irrelevancy [1] - 23:1
irrelevant [1] - 33:22
issue [43] - 11:6, 12:15, 14:24, 15:2, 15:13, 15:14, 19:9, 19:10, 19:24, 22:9, 22:11, 25:20, 25:21, 25:22, 29:22, 33:23, 35:2, 35:19, 38:17, 40:5, 42:9, 42:21, 42:24, 42:25, 43:1, 43:17, 44:6, 45:2, 46:22, 51:12, 51:13, 51:21, 51:23, 51:24, 53:5, 53:10, 54:25, 60:22, 66:17, 68:3,

71:13, 72:13, 73:19
issues [10] - 22:5, 22:6, 22:11, 38:14, 43:6, 44:21, 48:23, 56:23, 73:7, 73:25
items [1] - 14:8
itself [6] - 6:24, 7:1, 26:20, 26:22, 26:23, 59:4

J

January [1] - 47:8
job [2] - 39:22, 60:21
John [4] - 1:13, 61:10, 61:12, 70:9
judgment [3] - 31:22, 32:17, 36:23
judicial [1] - 73:16
juncture [1] - 74:5
June [4] - 12:4, 61:20, 65:17, 70:22
jurisdiction [1] - 12:14
justify [1] - 24:17

K

Karen [1] - 1:14
keep [1] - 25:7
kept [2] - 20:18, 47:2
kind [15] - 5:1, 17:11, 24:9, 38:17, 42:8, 44:5, 45:19, 50:14, 50:15, 52:11, 56:5, 60:6, 61:14, 61:15, 70:15
knowing [1] - 64:18
known [2] - 35:10
knows [2] - 18:15, 53:7
Kristie [1] - 71:14
KRISTIE [1] - 1:11

L

lack [2] - 46:2, 50:22
LaFave [1] - 20:9
LaFrentz [2] - 3:5, 69:16
LAFRENTZ [1] - 69:18
Lands [8] - 18:6, 18:8, 22:12, 31:7, 31:14, 32:14, 37:2, 43:2
language [2] - 29:2, 30:23
last [4] - 3:10, 14:24, 25:14, 42:9
late [2] - 16:7, 59:24

Lauckhart [12] - 7:11, 14:14, 15:14, 16:4, 35:13, 36:13, 57:1, 58:3, 62:14, 64:9, 66:2, 66:8
Lauckhart's [4] - 15:17, 16:12, 42:16, 44:15
law [4] - 15:7, 31:21, 31:25, 59:22
least [2] - 14:20, 23:13
leave [1] - 55:4
left [5] - 16:18, 28:2, 35:23, 45:12, 55:7
legally [16] - 15:4, 19:24, 21:2, 21:3, 21:5, 21:7, 21:24, 25:22, 26:14, 26:15, 30:14, 42:12, 50:3, 50:11, 51:11, 51:24
legged [1] - 28:21
legislation [8] - 11:22, 14:2, 31:19, 31:21, 31:24, 31:25, 32:18, 63:6
legislature [1] - 70:14
legs [1] - 28:22
LEO [38] - 15:6, 23:25, 26:2, 26:3, 26:10, 26:17, 26:24, 26:25, 27:2, 27:14, 27:18, 28:4, 28:7, 28:9, 28:10, 28:13, 29:13, 30:15, 30:25, 32:9, 35:3, 35:19, 35:20, 38:17, 38:20, 39:3, 40:2, 40:11, 45:10, 46:1, 46:22, 49:8, 54:25, 55:6, 55:13, 55:17, 55:20, 68:22
less [5] - 17:21, 25:25, 41:24, 55:24, 65:15
letter [3] - 39:3, 47:9
letters [2] - 20:4, 47:6
level [2] - 27:11, 51:3
levelized [2] - 11:16, 69:1
leverage [1] - 45:15
Lewis [5] - 18:7, 36:15, 43:8, 43:9, 44:9
Lewis's [3] - 31:17, 44:14, 47:24
light [5] - 23:8, 33:8, 33:24, 34:23, 63:2
likelihood [2] - 13:10, 31:20
likely [3] - 43:14, 43:16, 63:18
limitations [1] - 12:23

limited [2] - 3:24, 46:18
line [11] - 3:4, 3:6, 5:4, 5:5, 5:6, 5:15, 5:18, 11:1, 69:13, 69:20, 69:23
liquidated [1] - 51:22
listen [3] - 43:6, 53:6, 53:7
lives [1] - 25:1
LLC [1] - 1:4
load [20] - 5:3, 5:6, 5:9, 5:22, 6:4, 7:8, 8:13, 9:2, 33:18, 33:24, 34:1, 34:2, 34:3, 34:5, 34:16, 34:23, 59:14
lock [1] - 15:9
lock-in [1] - 15:9
long-term [4] - 9:18, 20:15, 20:21, 24:22
look [16] - 6:11, 8:18, 8:19, 13:16, 15:23, 35:1, 43:22, 44:4, 48:9, 53:25, 54:1, 57:25, 65:11, 67:10, 73:9, 73:12
looked [4] - 57:10, 57:14, 64:12, 71:13
looking [12] - 24:20, 24:21, 34:24, 35:4, 41:14, 43:25, 50:13, 59:7, 61:1, 62:6, 62:10, 62:19
looming [1] - 12:22
lose [4] - 7:20, 9:12, 33:5, 42:8
loss [1] - 49:25
low [13] - 6:3, 6:13, 7:6, 7:8, 11:1, 11:2, 33:18, 37:11, 40:16, 40:17, 44:23, 54:1, 54:15
lower [11] - 6:21, 7:16, 33:17, 34:7, 44:14, 44:25, 47:24, 47:25, 48:5, 58:2, 67:22
lowers [1] - 41:9

M

main [1] - 58:12
maintaining [1] - 20:21
Makens [3] - 21:10, 69:21, 69:22
MAKENS [1] - 69:21
Makenses [3] - 4:14, 4:16, 46:10

<p>marbles [2] - 45:16, 45:19</p> <p>March [1] - 56:9</p> <p>margin [1] - 65:8</p> <p>Market [3] - 10:20, 16:5, 56:18</p> <p>market [57] - 5:13, 5:18, 5:22, 5:25, 6:4, 6:7, 6:12, 6:17, 6:18, 7:6, 7:10, 7:16, 7:25, 8:7, 8:14, 8:20, 8:21, 8:24, 9:4, 9:6, 9:7, 9:23, 10:1, 16:1, 30:6, 30:13, 30:20, 32:6, 32:7, 33:9, 33:10, 33:17, 33:18, 34:7, 34:9, 34:15, 34:20, 35:3, 40:19, 40:23, 40:24, 40:25, 41:4, 41:6, 41:11, 41:22, 41:24, 42:3, 42:4, 42:10, 50:7, 57:11, 57:17, 59:9, 59:10, 59:19</p> <p>marketplace [1] - 40:17</p> <p>markets [2] - 56:22, 67:8</p> <p>Markey [10] - 11:14, 11:18, 11:20, 52:17, 52:24, 62:15, 63:1, 63:14, 63:17</p> <p>mathematical [1] - 36:20</p> <p>Matt [2] - 69:21, 69:22</p> <p>MATTER [1] - 1:4</p> <p>matter [12] - 2:2, 31:13, 40:2, 44:5, 48:10, 49:10, 51:8, 51:10, 52:2, 55:15, 66:16, 76:10</p> <p>matters [4] - 19:2, 42:14, 48:11, 72:8</p> <p>maximizing [1] - 6:9</p> <p>MCCOMSEY [1] - 76:5</p> <p>McComsey [2] - 1:21, 76:18</p> <p>mean [23] - 23:19, 23:20, 25:2, 35:6, 38:11, 38:23, 40:18, 43:23, 44:1, 49:13, 49:24, 50:3, 57:3, 57:4, 58:23, 60:13, 60:18, 60:24, 61:3, 61:5, 65:5, 65:15, 66:2</p> <p>means [2] - 55:16, 66:24</p> <p>meant [3] - 4:25, 71:1, 71:3</p>	<p>measure [1] - 43:23</p> <p>meet [5] - 6:14, 7:8, 8:13, 34:3, 59:14</p> <p>meeting [3] - 3:1, 28:12, 74:14</p> <p>megawatt [5] - 4:9, 20:11, 20:22, 27:15, 49:19</p> <p>members [2] - 4:5, 67:5</p> <p>mentioned [1] - 62:25</p> <p>mere [2] - 26:25, 35:13</p> <p>merely [1] - 27:12</p> <p>merits [1] - 70:17</p> <p>met [1] - 3:10</p> <p>method [26] - 5:20, 29:23, 29:24, 31:3, 32:3, 32:12, 33:2, 33:4, 34:10, 41:21, 47:20, 52:19, 58:10, 58:13, 58:14, 59:1, 60:6, 60:8, 60:12, 67:3, 71:18, 72:21, 73:1, 73:2</p> <p>methodology [18] - 5:15, 7:19, 9:10, 9:16, 29:25, 40:14, 42:7, 42:8, 44:22, 45:1, 59:3, 59:21, 60:16, 61:2, 61:4, 67:11, 67:12, 67:18</p> <p>metrics [1] - 43:22</p> <p>Michael [1] - 1:17</p> <p>mid [1] - 11:2</p> <p>middle [2] - 11:1, 58:4</p> <p>might [11] - 18:9, 22:9, 24:22, 49:12, 50:11, 51:18, 52:8, 53:5, 60:25, 65:15, 74:24</p> <p>million [3] - 23:8, 54:10, 54:12</p> <p>mind [1] - 25:7</p> <p>minds [1] - 28:12</p> <p>minimum [1] - 55:20</p> <p>minute [1] - 37:12</p> <p>minutes [18] - 3:18, 3:19, 3:22, 3:23, 16:19, 19:23, 20:23, 22:17, 22:24, 29:17, 32:21, 32:24, 35:24, 46:19, 46:21, 61:9</p> <p>minutes' [1] - 37:21</p> <p>mischaracterization [1] - 23:2</p> <p>mistakes [2] - 23:4, 23:6</p> <p>mobile [1] - 12:18</p> <p>model [5] - 9:25, 10:1, 31:6, 36:22, 63:15</p> <p>Modeling [1] - 18:14</p>	<p>models [1] - 43:10</p> <p>modified [1] - 31:7</p> <p>money [3] - 4:16, 49:19, 57:13</p> <p>Montana [8] - 11:8, 19:9, 19:11, 19:12, 23:4, 23:7, 38:13, 58:24</p> <p>month [3] - 47:6, 64:1, 64:20</p> <p>months [5] - 47:7, 56:20, 65:6, 65:21, 65:24</p> <p>most [5] - 7:15, 21:6, 21:15, 28:23, 57:2</p> <p>motion [24] - 3:16, 4:20, 9:15, 14:24, 16:21, 23:11, 23:17, 23:19, 25:17, 29:19, 32:2, 32:4, 32:8, 32:11, 32:13, 33:1, 35:18, 36:5, 47:21, 66:14, 67:25, 70:7, 70:11, 70:12</p> <p>Motion [2] - 51:8, 62:8</p> <p>motions [2] - 29:21, 70:23</p> <p>Mountain [2] - 19:15, 19:19</p> <p>move [4] - 10:4, 13:2, 70:2, 70:4</p> <p>moved [1] - 57:17</p> <p>movement [1] - 57:14</p> <p>MR [7] - 4:5, 10:13, 10:16, 10:19, 16:20, 19:24, 20:24, 22:18, 32:22, 35:25, 37:13, 37:22, 46:20, 49:9, 49:16, 52:8, 52:15, 53:17, 53:22, 54:8, 54:20, 55:8, 56:14, 58:8, 58:14, 58:17, 60:13, 61:11, 61:13, 61:19, 61:23, 61:25, 62:5, 62:9, 62:10, 62:12, 62:14, 62:24, 63:20, 63:22, 63:23, 64:3, 64:5, 64:7, 64:15, 64:17, 64:18, 64:25, 65:19, 66:1, 66:13, 66:22, 66:23, 67:2, 67:3, 67:5, 67:19, 68:2, 68:4, 68:7, 68:8, 68:15, 68:16, 68:19, 69:3, 69:5, 69:6, 69:7, 69:21, 70:10, 70:14</p> <p>MS [3] - 29:18, 53:14, 69:18</p> <p>multiple [1] - 43:5</p>	<p>must [1] - 17:16</p> <p>mute [2] - 72:6, 72:7</p> <p>mutual [1] - 28:12</p> <p>mythological [1] - 8:10</p> <p style="text-align: center;">N</p> <p>name [1] - 62:7</p> <p>National [1] - 18:14</p> <p>national [1] - 56:22</p> <p>natural [1] - 32:7</p> <p>nature [2] - 4:8, 30:8</p> <p>near [2] - 18:6, 22:23</p> <p>nearly [1] - 22:20</p> <p>necessarily [3] - 25:2, 60:17, 68:22</p> <p>need [25] - 9:21, 10:11, 10:15, 13:6, 13:9, 16:2, 17:1, 17:2, 17:5, 17:18, 18:1, 22:3, 26:13, 26:21, 37:4, 42:2, 42:3, 49:5, 49:19, 58:21, 68:24, 69:12, 70:17, 71:17, 73:10</p> <p>needed [2] - 18:4, 47:3</p> <p>needs [3] - 7:5, 9:10, 59:14</p> <p>negative [1] - 41:25</p> <p>negotiate [7] - 21:16, 21:19, 21:20, 21:24, 40:10, 45:24, 46:24</p> <p>negotiated [1] - 50:19</p> <p>negotiating [1] - 27:13</p> <p>negotiation [1] - 40:9</p> <p>NELSON [44] - 1:11, 3:1, 3:9, 10:11, 10:14, 10:18, 16:19, 19:23, 20:23, 22:16, 29:16, 32:20, 35:24, 37:12, 37:20, 46:17, 48:14, 49:1, 49:3, 49:15, 52:4, 52:13, 53:9, 53:20, 54:7, 54:14, 54:24, 55:25, 61:7, 61:12, 62:4, 69:8, 69:11, 69:16, 69:19, 69:22, 72:1, 72:4, 72:23, 73:24, 74:9, 74:13, 74:22, 75:1</p> <p>Nelson [2] - 3:2, 52:9</p> <p>never [3] - 36:9, 40:18, 41:16</p> <p>news [3] - 64:19, 64:21</p> <p>next [5] - 9:13, 24:9,</p>	<p>24:11, 25:20, 52:14</p> <p>night [1] - 59:24</p> <p>nobody [2] - 18:15, 20:20</p> <p>none [1] - 73:25</p> <p>nonstarter [1] - 20:17</p> <p>NOPR [2] - 61:16, 61:18</p> <p>normal [1] - 10:8</p> <p>normally [1] - 28:10</p> <p>North [1] - 14:17</p> <p>Northwest [1] - 13:13</p> <p>NORTHWESTERN [1] - 1:5</p> <p>Northwestern [90] - 1:17, 3:18, 3:21, 3:23, 5:20, 6:6, 6:19, 6:20, 7:5, 8:5, 8:6, 8:11, 8:18, 8:23, 9:3, 9:14, 11:7, 11:24, 15:14, 16:11, 16:22, 19:5, 19:21, 20:2, 20:20, 20:24, 21:9, 21:12, 21:16, 22:17, 23:10, 23:15, 23:22, 24:4, 24:14, 24:20, 25:7, 25:9, 25:11, 25:21, 26:4, 27:9, 29:9, 31:5, 32:21, 33:6, 33:8, 33:9, 33:11, 33:13, 33:19, 33:20, 33:23, 33:24, 34:11, 34:15, 34:21, 37:25, 38:10, 38:13, 38:21, 39:13, 39:16, 40:6, 40:15, 41:11, 41:19, 42:1, 46:11, 46:17, 46:23, 47:1, 47:8, 47:15, 48:2, 50:16, 51:5, 51:14, 51:15, 62:2, 62:7, 63:5, 67:4, 67:6, 67:20</p> <p>NorthWestern's [30] - 3:16, 4:12, 5:9, 5:17, 6:4, 6:6, 6:14, 7:4, 7:24, 11:23, 13:14, 13:16, 16:21, 23:7, 24:11, 25:8, 25:9, 26:9, 27:7, 30:2, 30:7, 30:16, 31:4, 32:8, 32:11, 34:2, 35:18, 41:6, 45:7, 59:14</p> <p>Notary [2] - 76:7, 76:18</p> <p>nothing [6] - 13:19, 13:25, 27:3, 28:17, 37:15, 44:2</p>
---	--	---	--	--

<p>notwithstanding [1] - 65:3</p> <p>November [5] - 15:17, 15:21, 56:17, 56:19, 66:9</p> <p>number [13] - 7:13, 12:8, 13:23, 14:1, 15:24, 18:18, 21:6, 43:22, 62:21, 63:20, 72:17, 73:7, 73:13</p> <p>numbers [13] - 43:18, 54:15, 64:5, 64:13, 64:22, 65:3, 65:6, 66:11, 67:21, 67:22, 69:2, 69:4</p> <p>nuts [1] - 38:23</p>	<p>OF [6] - 1:2, 1:4, 2:1, 76:1, 76:3</p> <p>offer [6] - 26:11, 27:14, 27:15, 27:18, 28:3, 39:15</p> <p>offered [3] - 27:6, 27:15, 67:4</p> <p>offering [1] - 27:12</p> <p>offers [1] - 47:15</p> <p>old [7] - 56:12, 61:5, 64:19, 64:21, 71:12, 71:16</p> <p>Olson [1] - 1:17</p> <p>once [4] - 27:23, 49:5, 50:2, 51:1</p> <p>one [34] - 7:2, 8:4, 9:14, 11:5, 14:14, 17:23, 18:25, 19:20, 22:10, 34:24, 35:7, 39:25, 40:4, 41:7, 41:14, 46:7, 47:23, 48:23, 50:13, 50:22, 53:4, 56:18, 57:6, 58:23, 60:13, 61:4, 61:11, 62:21, 65:22, 66:13, 67:11, 71:21, 72:16, 74:4</p> <p>Onida [1] - 76:13</p> <p>opening [1] - 62:25</p> <p>operate [2] - 42:2, 49:24</p> <p>operating [10] - 5:5, 5:8, 6:5, 7:3, 30:7, 30:9, 34:1, 41:18, 59:16, 67:7</p> <p>operation [1] - 34:9</p> <p>opinion [8] - 36:19, 44:1, 53:2, 55:20, 57:12, 58:20, 65:4, 65:18</p> <p>opinions [5] - 36:17, 36:18, 43:3, 43:17, 44:8</p> <p>opportunity [1] - 48:22</p> <p>opposed [2] - 25:19, 38:15</p> <p>opposition [1] - 67:25</p> <p>Opposition [1] - 62:8</p> <p>option [1] - 27:1</p> <p>oral [2] - 33:3, 33:7</p> <p>order [15] - 3:2, 16:11, 21:17, 22:1, 30:20, 30:21, 48:9, 49:18, 55:1, 60:11, 69:12, 70:21, 71:2, 71:6, 74:16</p> <p>orders [1] - 21:17</p> <p>organizations [1] - 43:12</p>	<p>organized [1] - 67:7</p> <p>originally [1] - 70:21</p> <p>outcome [2] - 9:9, 16:9</p> <p>outer [2] - 11:15, 13:18</p> <p>output [7] - 8:25, 20:5, 21:8, 26:11, 50:4, 50:5, 51:15</p> <p>outstanding [1] - 61:17</p> <p>own [9] - 5:22, 6:6, 10:3, 13:14, 17:22, 22:13, 30:4, 41:6, 53:18</p> <p>owns [1] - 45:16</p>	<p>peakers [1] - 34:10</p> <p>peaking [4] - 5:24, 7:4, 59:8, 59:11</p> <p>penalty [3] - 40:8, 50:17, 50:19</p> <p>people [7] - 4:15, 43:15, 43:21, 44:3, 52:24, 56:22, 59:24</p> <p>per [2] - 11:16, 14:11</p> <p>perfect [1] - 56:7</p> <p>perfectly [1] - 18:9</p> <p>perform [2] - 51:3, 51:16</p> <p>performance [5] - 50:17, 50:18, 50:23, 50:24, 51:22</p> <p>perhaps [1] - 17:24</p> <p>period [3] - 47:6, 65:23, 66:5</p> <p>permit [1] - 15:7</p> <p>perspective [1] - 73:10</p> <p>Perspective [3] - 10:20, 16:5, 56:18</p> <p>Petition [1] - 27:17</p> <p>picked [1] - 18:5</p> <p>Pierre [2] - 2:4, 22:19</p> <p>place [7] - 8:22, 9:1, 13:20, 40:7, 42:5, 45:21, 51:25</p> <p>plain [1] - 23:1</p> <p>plainly [1] - 20:17</p> <p>plan [8] - 3:17, 11:8, 11:12, 11:13, 11:24, 17:4, 19:13, 19:14</p> <p>planning [6] - 19:8, 24:15, 24:16, 24:17, 24:23, 53:24</p> <p>plant [2] - 35:15, 40:22</p> <p>plants [14] - 7:9, 8:7, 14:13, 14:16, 14:22, 33:21, 34:1, 34:6, 34:7, 34:10, 34:22, 41:15, 41:18, 59:16</p> <p>play [2] - 45:17, 50:7</p> <p>played [1] - 59:24</p> <p>player [3] - 18:11, 43:21, 43:22</p> <p>playing [2] - 7:19, 59:19</p> <p>plays [1] - 42:4</p> <p>plus [2] - 5:5, 36:11</p> <p>point [43] - 9:2, 9:14, 11:21, 11:22, 13:5, 13:11, 13:21, 14:7, 15:19, 16:10, 17:19, 18:3, 20:12, 21:16, 21:22, 21:23, 21:24, 25:3, 25:13, 25:14,</p>	<p>28:20, 35:17, 36:8, 40:14, 41:4, 41:10, 42:1, 42:17, 47:23, 48:17, 49:21, 50:5, 50:10, 50:15, 55:11, 55:19, 57:21, 60:20, 64:12, 69:24, 70:3, 71:7</p> <p>pointed [1] - 72:15</p> <p>points [3] - 11:5, 16:17, 69:25</p> <p>pollutants [1] - 14:5</p> <p>portfolios [1] - 14:23</p> <p>portion [6] - 10:1, 30:19, 32:1, 32:4, 32:13, 47:15</p> <p>portions [1] - 32:10</p> <p>Posey [1] - 18:11</p> <p>position [5] - 26:4, 29:20, 45:3, 45:12, 72:10</p> <p>possibilities [1] - 54:17</p> <p>possible [6] - 24:7, 25:13, 35:4, 51:18, 52:13, 59:19</p> <p>possibly [1] - 21:10</p> <p>potential [5] - 13:7, 26:5, 31:24, 32:18, 61:15</p> <p>Power [4] - 9:24, 13:13, 19:15, 19:19</p> <p>POWER [1] - 1:5</p> <p>power [15] - 7:1, 7:12, 8:7, 11:24, 21:20, 24:21, 28:14, 33:11, 33:14, 39:4, 46:12, 47:16, 55:21</p> <p>practical [4] - 38:20, 40:5, 51:12, 55:15</p> <p>precedential [1] - 19:20</p> <p>precipitously [1] - 15:25</p> <p>predominantly [1] - 30:4</p> <p>prefer [2] - 63:16, 74:12</p> <p>preferred [1] - 13:3</p> <p>prefiled [1] - 44:15</p> <p>prepared [1] - 57:14</p> <p>preparing [1] - 57:5</p> <p>presence [1] - 74:15</p> <p>present [2] - 3:3, 3:6</p> <p>presentation [1] - 23:13</p> <p>presented [3] - 31:12, 31:16, 36:13</p> <p>presently [1] - 19:10</p> <p>presumably [2] - 5:25,</p>
O		P		
<p>OAK [1] - 1:4</p> <p>Oak [53] - 1:17, 3:15, 3:17, 3:22, 3:24, 5:14, 5:19, 6:2, 7:23, 20:1, 23:11, 24:13, 25:4, 25:17, 26:8, 26:9, 27:6, 27:9, 27:11, 29:19, 30:18, 31:9, 31:11, 31:18, 32:2, 32:4, 32:13, 33:1, 33:5, 33:11, 33:14, 33:16, 34:23, 36:5, 36:14, 37:21, 38:16, 40:19, 41:1, 41:2, 41:3, 45:11, 46:18, 46:25, 47:6, 47:12, 47:14, 49:6, 55:3, 62:6, 62:8, 66:14, 67:25</p> <p>obfuscation [1] - 23:1</p> <p>objections [1] - 7:21</p> <p>obligation [22] - 12:15, 15:4, 19:25, 21:2, 21:4, 21:5, 21:7, 21:25, 25:23, 26:14, 30:14, 39:24, 41:19, 42:12, 45:24, 49:7, 49:11, 50:3, 50:5, 50:11, 51:12, 51:25</p> <p>obligations [1] - 39:25</p> <p>obtain [1] - 20:16</p> <p>obtaining [1] - 20:2</p> <p>obviously [5] - 21:14, 33:6, 33:15, 49:22, 50:21</p> <p>occurred [2] - 15:6, 22:1</p> <p>October [5] - 1:8, 2:4, 74:14, 76:11, 76:14</p>		<p>p.m [2] - 2:5, 75:3</p> <p>package [3] - 71:23, 74:2, 74:12</p> <p>page [10] - 62:11, 62:17, 62:19, 62:20, 64:6, 64:23, 66:15, 66:19, 68:1</p> <p>paragraph [5] - 62:19, 62:20, 64:6, 64:22, 66:21</p> <p>paragraphs [1] - 62:23</p> <p>parliamentary [1] - 70:12</p> <p>part [9] - 4:19, 24:23, 25:17, 33:1, 41:11, 41:12, 44:15, 61:3, 63:11</p> <p>partial [2] - 3:16, 4:20</p> <p>particular [6] - 26:1, 46:9, 60:2, 63:6, 64:11</p> <p>parties [6] - 25:15, 26:1, 28:6, 30:20, 31:13, 55:1</p> <p>parties' [1] - 29:21</p> <p>party [3] - 6:25, 8:25, 21:11</p> <p>passed [1] - 14:3</p> <p>past [2] - 34:8, 40:15</p> <p>pay [10] - 17:1, 17:21, 24:5, 25:10, 28:18, 28:19, 29:5, 40:8, 47:3, 48:4</p> <p>payers [5] - 4:13, 24:5, 48:3, 72:17, 72:18</p> <p>paying [5] - 17:21, 25:2, 25:11, 55:22, 55:23</p> <p>pays [1] - 25:9</p> <p>peaker [1] - 34:7</p>		

<p>8:25 pretend [3] - 40:25, 41:1, 41:4 pretty [5] - 10:17, 12:1, 18:2, 18:16, 54:21 previously [2] - 29:18, 62:25 price [25] - 17:1, 21:19, 22:8, 27:6, 27:13, 27:15, 27:18, 28:7, 28:14, 28:15, 31:17, 31:19, 31:20, 31:23, 32:7, 32:12, 32:14, 32:18, 39:10, 40:3, 40:8, 47:10, 54:11, 55:1, 55:6 prices [3] - 5:13, 17:6, 38:5 pricing [1] - 47:13 principle [5] - 9:5, 16:24, 34:13, 34:17, 38:2 privy [1] - 16:8 probabilities [1] - 37:5 probability [6] - 31:25, 37:6, 37:11, 53:11, 53:13, 54:18 probable [1] - 24:8 problem [8] - 5:14, 5:19, 6:2, 6:11, 33:8, 33:16, 45:21, 51:4 proceed [3] - 4:2, 4:4, 9:14 proceeding [7] - 11:10, 14:22, 23:9, 31:15, 38:15, 50:21, 70:12 PROCEEDINGS [1] - 2:1 Proceedings [1] - 1:8 proceedings [2] - 76:9, 76:12 process [4] - 16:8, 16:9, 46:13, 66:3 procurement [4] - 11:8, 11:12, 11:13, 19:14 produce [2] - 34:6, 44:25 produces [2] - 60:16, 60:18 product [1] - 57:3 production [1] - 39:5 Professional [2] - 76:6, 76:19 professional [1] - 18:18 professor [1] - 59:22 progress [2] - 3:11,</p>	<p>3:12 prohibited [4] - 29:3, 29:4, 55:22, 55:23 project [12] - 4:9, 4:11, 20:16, 26:12, 27:2, 27:19, 38:16, 38:22, 49:18, 49:24, 50:10 projection [3] - 31:23, 32:18, 64:2 projections [3] - 30:21, 31:8, 32:6 projects [1] - 51:2 PROMOD [1] - 9:25 promoting [1] - 23:6 proper [5] - 22:7, 30:11, 32:6, 37:2, 60:7 properly [1] - 42:20 proposal [1] - 11:10 proposed [3] - 12:17, 31:19, 61:20 proposition [3] - 9:16, 19:5, 19:21 prospective [2] - 9:19, 60:8 provide [3] - 4:11, 20:7, 37:9 provided [2] - 31:14, 31:18 provision [1] - 55:17 provisions [1] - 40:7 prudent [5] - 5:23, 6:8, 8:9, 8:13, 38:13 Public [3] - 55:12, 76:7, 76:18 PUBLIC [2] - 1:1, 1:10 public [2] - 39:23, 57:7 published [1] - 57:7 PUC [1] - 10:5 purchase [5] - 6:25, 24:21, 26:21, 66:25, 67:1 PURCHASE [1] - 1:5 purchaser [1] - 21:11 purchases [2] - 34:19, 34:22 purchasing [2] - 17:15, 33:11 purees [1] - 45:18 PURPA [10] - 28:17, 29:1, 29:2, 29:23, 30:12, 35:5, 39:18, 45:8, 66:20 purposes [2] - 5:11, 5:18 push [2] - 21:13, 21:14 put [4] - 18:19, 40:6, 56:20, 67:24</p>	<p style="text-align: center;">Q</p> <p>QF [11] - 26:5, 26:6, 26:20, 26:23, 27:22, 27:24, 28:16, 34:19, 55:14, 55:16, 55:20 QF's [1] - 27:1 QFs [5] - 9:19, 9:20, 28:18, 29:1, 60:8 qualifying [11] - 7:15, 15:3, 17:2, 17:13, 17:16, 17:20, 21:8, 23:6, 39:19, 39:21, 52:1 questions [14] - 3:12, 3:25, 4:2, 4:3, 48:18, 49:3, 56:1, 61:8, 61:10, 68:19, 69:8, 71:18, 73:4, 74:20 queue [1] - 51:17 quick [5] - 10:10, 16:17, 35:25, 56:3, 58:9 quickly [4] - 10:4, 32:23, 47:23, 65:6 quite [2] - 24:14, 47:12 quoted [1] - 66:20</p> <p style="text-align: center;">R</p> <p>raise [1] - 44:21 range [5] - 10:7, 11:2, 18:17, 39:7, 54:16 rate [23] - 4:12, 7:16, 15:3, 17:17, 19:2, 20:7, 20:11, 20:15, 20:17, 24:5, 27:24, 28:3, 28:18, 30:5, 30:22, 30:25, 48:3, 49:10, 51:10, 52:2, 72:17, 72:18 rates [2] - 31:11, 46:3 rather [4] - 14:22, 18:24, 19:18, 71:23 reached [3] - 36:19, 36:23, 37:2 read [4] - 11:11, 42:11, 61:21, 63:25 reading [2] - 64:1, 66:23 ready [2] - 70:2, 70:3 real [5] - 4:25, 8:10, 10:9, 26:21, 62:7 reality [3] - 8:15, 59:12, 59:17 realize [1] - 68:21 really [14] - 6:11, 8:19,</p>	<p>8:20, 13:22, 18:15, 20:3, 20:5, 21:12, 40:18, 42:7, 44:4, 55:5, 59:17, 59:18 Realtime [2] - 76:6, 76:19 reason [6] - 9:25, 12:7, 16:25, 25:10, 63:11, 67:11 reasonable [1] - 38:8 reasons [2] - 29:9, 53:4 rebuttal [9] - 3:22, 3:23, 3:24, 25:18, 25:19, 37:21, 46:18 recent [3] - 12:3, 34:8, 57:2 recently [1] - 21:6 recess [1] - 69:10 recognize [1] - 41:3 recommends [6] - 32:1, 32:4, 32:8, 32:10, 32:13, 32:16 reconsider [11] - 30:17, 30:19, 31:4, 31:10, 32:2, 32:5, 32:9, 32:14, 70:7, 70:8, 70:23 reconsideration [18] - 3:16, 3:17, 4:21, 9:15, 14:24, 16:22, 23:11, 23:12, 23:15, 23:22, 25:21, 26:9, 29:11, 29:22, 35:19, 36:6, 70:11, 70:16 record [20] - 3:15, 10:15, 19:25, 20:1, 22:2, 22:12, 27:7, 31:12, 31:16, 35:9, 36:15, 40:10, 40:12, 44:12, 44:13, 44:18, 46:25, 53:3, 53:12, 53:18 recoverable [1] - 15:23 red [2] - 5:4, 5:18 reduces [1] - 59:3 refer [3] - 15:11, 23:18, 68:16 reference [5] - 13:24, 14:7, 37:14, 37:17 referenced [1] - 70:21 referred [3] - 13:9, 37:15, 48:12 referring [3] - 64:4, 67:24, 70:24 reflect [2] - 30:8, 65:3 reflected [3] - 35:12, 62:18, 65:20 reflects [1] - 51:1</p>	<p>refresh [1] - 53:20 refuses [1] - 21:24 REFUSING [1] - 1:5 regard [3] - 67:21, 68:20, 72:21 regarding [3] - 29:19, 30:13, 73:4 regardless [1] - 59:18 regards [1] - 72:25 Registered [2] - 76:5, 76:19 regulate [1] - 63:3 Regulation [1] - 12:5 regulation [4] - 17:9, 42:11, 61:15, 63:6 regulations [6] - 12:18, 13:8, 14:3, 14:4, 14:7, 14:16 regulatory [2] - 26:7, 29:4 rejecting [2] - 32:8, 32:10 related [3] - 13:5, 69:1, 69:3 relative [1] - 34:23 relatively [1] - 65:6 reliable [2] - 4:12, 60:19 reliance [1] - 30:10 relied [1] - 10:2 relies [3] - 5:22, 29:18, 30:4 relying [3] - 57:1, 59:8, 59:10 remaining [1] - 22:5 remarks [2] - 22:15, 62:25 remember [3] - 26:18, 33:12, 44:16 remind [1] - 4:8 renewable [1] - 17:7 repeat [1] - 23:4 repeatedly [1] - 26:19 replicable [3] - 58:22, 60:6, 60:19 report [4] - 35:13, 56:7, 67:23 Reported [1] - 1:21 reporter [2] - 36:1, 76:9 Reporter [4] - 76:6, 76:19, 76:19 represent [3] - 4:25, 8:14, 33:19 representatives [1] - 20:2 represented [1] - 5:21 represents [4] - 5:6, 5:15, 5:18, 8:5 request [7] - 23:18,</p>
--	--	---	---	---

23:19, 23:21, 30:17, 30:19, 31:4, 31:9
requested [1] - 71:2
requests [1] - 29:10
require [3] - 28:13, 35:14
required [2] - 29:2, 31:6
requirements [1] - 30:12
requires [2] - 28:17, 30:24
requiring [2] - 29:4, 30:20
reselling [1] - 40:23
reserves [1] - 15:23
resolved [1] - 3:13
resorting [1] - 7:6
resource [16] - 9:2, 9:4, 9:21, 17:4, 17:22, 19:7, 19:13, 24:16, 24:23, 27:21, 39:6, 41:10, 42:2, 51:17, 53:24
resources [32] - 5:10, 5:17, 5:24, 6:6, 6:10, 6:14, 6:17, 6:25, 7:4, 7:5, 7:24, 8:13, 10:3, 17:6, 17:7, 24:20, 24:22, 30:7, 34:3, 34:14, 34:16, 34:18, 34:19, 39:14, 40:1, 41:6, 42:3, 43:13, 59:8, 59:11, 67:9
respect [10] - 23:5, 23:23, 23:24, 25:14, 27:21, 37:14, 45:2, 45:7, 46:22, 47:22
respectfully [1] - 29:9
respond [2] - 33:1, 36:9
response [7] - 8:3, 9:15, 20:5, 25:18, 26:8, 62:22, 68:9
responsible [1] - 4:18
Responsible [1] - 12:5
restrict [1] - 23:14
result [5] - 33:5, 44:25, 54:9, 60:17, 60:18
results [2] - 54:4, 61:6
retirement [1] - 14:15
retiring [1] - 14:22
retrofitting [1] - 14:13
return [1] - 9:3
reverse [2] - 29:11, 29:12
review [1] - 62:3
reviewed [3] - 12:20, 61:20, 61:21

revised [1] - 64:5
rights [1] - 39:17
risk [4] - 17:5, 17:9, 18:1, 54:13
Rislov [7] - 1:14, 62:4, 62:12, 64:3, 67:5, 68:4, 68:8
RISLOV [17] - 62:5, 62:10, 62:14, 63:20, 63:23, 64:5, 64:15, 64:18, 65:19, 66:13, 66:23, 67:3, 67:19, 68:15, 68:19, 69:5, 69:7
road [1] - 25:12
Rocky [2] - 19:15, 19:19
rollcall [1] - 69:12
Room [1] - 2:3
room [3] - 3:3, 3:7, 10:12
rounds [1] - 53:15
Rounds [1] - 1:15
ROUNDS [4] - 53:17, 53:22, 54:8, 54:20
RPR [1] - 1:21
rule [2] - 55:13, 70:11
rules [5] - 23:17, 61:19, 61:21, 62:1, 70:16
run [3] - 14:11, 54:15, 65:11
running [1] - 34:7
Ryan [1] - 18:11

S

safety [1] - 12:11
scenario [2] - 9:12, 61:15
scenarios [8] - 10:21, 10:22, 13:24, 14:10, 14:12, 54:4, 54:15, 65:11
scheduled [1] - 70:22
scientific [1] - 44:5
screen [1] - 36:3
second [10] - 5:12, 8:16, 9:22, 10:9, 17:19, 25:20, 45:2, 45:10, 57:10
secondly [1] - 36:14
see [15] - 5:2, 5:4, 5:7, 5:15, 10:23, 10:25, 27:2, 44:13, 54:11, 57:22, 61:8, 62:12, 65:10, 66:19, 70:2
seem [1] - 72:22
sell [21] - 8:23, 20:5,

21:8, 21:12, 26:6, 26:11, 27:6, 27:12, 27:14, 27:16, 28:3, 28:14, 39:15, 39:16, 47:16, 50:4, 50:6, 50:7, 50:8
selling [9] - 8:7, 8:14, 8:24, 33:10, 34:15, 34:20, 40:17, 40:18, 46:10
sells [2] - 6:7, 33:8
sense [7] - 16:24, 16:25, 17:11, 21:11, 38:7, 45:9, 60:18
sent [2] - 20:25, 39:3
separate [1] - 51:24
serve [2] - 5:22, 6:3
service [1] - 39:23
set [3] - 18:12, 27:10, 40:3
sets [5] - 27:23, 44:22, 49:6, 51:10, 52:3
setting [3] - 23:5, 60:16, 70:15
settled [1] - 26:25
several [3] - 3:11, 47:6, 52:5
several-month [1] - 47:6
shareholders [1] - 28:22
shed [1] - 23:8
Sherry [2] - 4:23, 10:9
shop [1] - 27:19
shopping [1] - 27:24
short [5] - 20:10, 20:14, 20:17, 40:16, 69:10
short-term [3] - 20:10, 20:14, 20:17
shorthand [2] - 76:9
shorthandedly [1] - 13:9
show [2] - 25:11, 55:14
showed [1] - 15:22
shown [2] - 64:22, 64:24
shows [3] - 19:25, 20:1, 27:8
side [5] - 5:21, 6:18, 8:1, 14:12
sides [2] - 48:15, 73:6
signal [1] - 60:7
signed [1] - 39:2
significance [1] - 23:9
significant [2] - 67:22, 72:17
significantly [2] - 62:19, 64:14

similar [1] - 70:11
simple [3] - 7:13, 18:2, 47:13
simplest [2] - 41:21, 60:5
simply [2] - 10:7, 55:3
situation [8] - 7:25, 45:14, 45:15, 46:3, 52:10, 54:9, 55:10, 59:6
situations [2] - 45:25, 73:17
six [9] - 47:7, 56:19, 64:1, 64:20, 65:5, 65:21, 65:24, 73:25
six-month [2] - 64:1, 64:20
sixth [1] - 11:24
slide [9] - 4:22, 5:2, 5:7, 5:12, 10:9, 10:23, 36:2, 36:6, 68:18
slip [1] - 23:18
smarter [1] - 58:18
SMITH [5] - 61:11, 61:13, 61:23, 70:10, 70:14
Smith [2] - 1:13, 61:25
solely [1] - 10:2
solution [1] - 51:20
someone [1] - 53:7
sometime [1] - 65:4
sometimes [4] - 28:25, 43:18, 43:24, 45:14
somewhere [1] - 58:3
sophisticated [1] - 43:10
sorry [2] - 48:8, 72:21
sort [5] - 4:7, 35:15, 58:20, 59:11, 59:20
sorts [1] - 66:18
sources [2] - 12:18, 12:19
South [11] - 2:2, 2:4, 4:10, 4:13, 14:17, 23:4, 30:3, 30:8, 39:6, 76:7, 76:13
SOUTH [2] - 1:2, 76:1
speaks [1] - 53:12
special [1] - 39:22
specific [2] - 24:19, 63:21
specifically [2] - 6:13, 62:10
speculative [2] - 25:5, 29:8
spend [1] - 18:15
spent [1] - 58:10
spring [8] - 16:6, 16:7,

56:8, 57:5, 67:23, 68:13, 68:17
SS [1] - 76:2
stack [1] - 41:10
Staff [26] - 3:19, 4:6, 13:5, 15:12, 29:17, 29:18, 29:23, 30:14, 30:16, 30:18, 31:2, 31:9, 31:21, 32:1, 32:3, 32:8, 32:9, 32:12, 32:16, 36:15, 37:4, 42:10, 42:25, 43:1, 46:15, 61:7
STAFF [1] - 1:13
Staff's [2] - 29:20, 66:14
stale [1] - 65:6
stalled [1] - 11:21
stand [1] - 22:13
standing [1] - 14:18
standpoint [2] - 72:12, 72:19
start [5] - 25:2, 29:1, 36:1, 49:2, 68:15
started [2] - 20:4, 71:11
state [3] - 5:5, 39:23, 55:12
STATE [2] - 1:2, 76:1
State [3] - 2:2, 39:25, 76:7
statement [1] - 37:14
statements [1] - 68:10
states [2] - 12:8
States [1] - 12:13
stationary [1] - 12:18
status [3] - 30:2, 61:13, 61:16
steady [1] - 5:5
step [1] - 26:13
still [6] - 46:10, 54:17, 57:11, 58:25, 64:20, 71:18
Stone [1] - 14:18
stool [2] - 28:21, 28:22
stop [1] - 44:1
straightforward [2] - 7:14, 17:17
strict [1] - 30:10
strike [1] - 47:14
struggled [1] - 58:23
study [2] - 43:16, 65:23
subject [1] - 40:9
subjective [1] - 54:22
submission [1] - 71:3
submissions [1] - 48:15
submit [1] - 45:8

<p>submitted ^[1] - 47:14 subsequent ^[6] - 64:1, 66:5, 66:6, 67:22, 70:19, 71:5 subsequently ^[1] - 65:23 substantial ^[2] - 18:22, 35:14 substantially ^[3] - 53:1, 63:8, 65:18 suddenly ^[1] - 47:8 sue ^[1] - 47:10 sued ^[1] - 12:9 sufficient ^[11] - 6:3, 6:13, 6:21, 7:7, 8:8, 8:12, 15:19, 22:13, 31:14, 34:3, 59:13 suggest ^[4] - 22:9, 33:9, 37:8, 37:10 suggested ^[1] - 37:4 suggestion ^[1] - 53:23 suggests ^[1] - 37:7 SULLY ^[1] - 76:3 summarize ^[1] - 29:20 summary ^[2] - 28:20, 32:1 summer ^[1] - 16:7 support ^[8] - 18:22, 23:14, 30:16, 30:18, 31:4, 31:15, 31:17, 73:3 supported ^[3] - 22:2, 36:16, 43:2 supports ^[1] - 31:9 suppose ^[5] - 49:16, 49:17, 49:20, 51:16 supposed ^[2] - 39:1, 45:11 Supreme ^[3] - 12:13, 52:18, 63:13 surprising ^[1] - 25:24 surprisingly ^[1] - 12:9 suspect ^[1] - 52:24 system ^[1] - 30:9 System ^[1] - 18:14 systems ^[1] - 30:8</p>	<p>technically-recoverable ^[1] - 15:23 telephone ^[3] - 1:12, 69:13, 74:15 tempting ^[1] - 49:9 tendered ^[1] - 50:16 term ^[11] - 9:18, 20:10, 20:14, 20:15, 20:17, 20:21, 21:18, 24:22, 47:13, 52:1 terminology ^[1] - 23:16 terms ^[7] - 20:25, 21:1, 21:4, 21:20, 28:12, 39:11, 44:7 testimony ^[10] - 15:18, 20:9, 21:9, 37:9, 38:4, 44:16, 53:19, 54:18, 54:20, 72:15 Texas ^[1] - 55:12 THE ^[5] - 1:1, 1:2, 1:4, 1:10 themselves ^[1] - 21:4 therefore ^[3] - 21:1, 22:22, 31:3 they've ^[1] - 11:12 thinks ^[1] - 37:1 third ^[2] - 6:25, 8:25 thoughts ^[2] - 70:5, 72:2 threat ^[2] - 12:11, 12:23 three ^[2] - 28:21, 44:21 three-legged ^[1] - 28:21 timelines ^[1] - 3:10 Timothy ^[1] - 1:17 TO ^[1] - 1:5 today ^[25] - 3:13, 4:2, 18:25, 21:14, 21:20, 22:20, 23:10, 24:3, 24:9, 24:21, 28:24, 36:4, 38:10, 39:4, 39:6, 42:22, 46:10, 48:16, 52:6, 52:25, 57:12, 71:10, 71:23, 73:18, 74:1 together ^[3] - 5:10, 56:11, 56:20 ton ^[2] - 11:16, 14:11 took ^[3] - 19:19, 45:21, 76:9 top ^[5] - 62:11, 62:17, 62:20, 64:6, 64:22 totally ^[1] - 33:22 toward ^[1] - 13:2 toxic ^[1] - 14:5 trade ^[4] - 13:3, 53:2,</p>	<p>61:14, 63:16 TRANSCRIPT ^[1] - 2:1 Transcript ^[1] - 1:8 transcription ^[1] - 76:12 transferred ^[1] - 9:3 transmission ^[1] - 56:23 transpired ^[1] - 56:16 TREE ^[1] - 1:4 Tree ^[36] - 1:17, 3:18, 3:22, 5:14, 5:19, 6:2, 7:23, 24:13, 25:4, 26:9, 27:6, 27:9, 27:11, 31:9, 31:18, 33:6, 33:11, 33:14, 33:16, 34:23, 36:14, 37:21, 38:16, 40:20, 41:1, 41:2, 41:3, 45:11, 47:1, 47:6, 47:12, 47:14, 49:6, 55:3, 62:6, 67:25 Tree's ^[17] - 3:15, 3:24, 20:1, 23:11, 25:17, 26:8, 29:19, 30:18, 31:11, 32:2, 32:4, 32:13, 33:1, 36:5, 46:18, 62:8, 66:14 tried ^[1] - 21:10 true ^[7] - 14:6, 27:23, 29:5, 29:7, 30:8, 33:22, 76:11 try ^[9] - 23:13, 23:14, 23:17, 25:1, 32:23, 37:9, 43:10, 46:21, 56:11 trying ^[12] - 17:1, 18:10, 20:18, 24:10, 33:13, 37:9, 38:7, 46:9, 49:13, 52:9, 56:3, 58:11 Tuesday ^[5] - 71:24, 74:8, 74:12, 74:14, 74:18 turn ^[7] - 4:20, 9:13, 22:17, 25:20, 29:16, 48:17, 67:19 turns ^[1] - 60:15 two ^[11] - 5:2, 6:21, 8:4, 9:15, 16:17, 54:4, 62:23, 63:20, 64:25, 70:1, 74:4 typically ^[2] - 7:16, 53:23</p>	<p>10:16, 10:19, 16:20, 19:24, 20:24, 37:22, 49:9, 49:16, 52:8, 52:15, 56:14, 58:8, 58:14, 58:17, 60:13, 61:19, 62:9, 62:12, 62:24, 63:22, 64:3, 64:7, 64:17, 64:25, 66:1, 66:22, 67:2, 67:5, 68:2, 68:7 Uda ^[18] - 1:17, 4:4, 23:12, 24:7, 33:3, 34:13, 37:7, 37:15, 46:23, 47:5, 47:11, 47:23, 48:7, 48:11, 49:4, 68:5, 68:20, 70:25 Uda's ^[1] - 68:9 uncertain ^[2] - 38:2, 38:4 uncomfortable ^[2] - 73:14, 73:15 unconditional ^[4] - 26:5, 39:15, 45:24, 49:23 undead ^[2] - 63:2, 63:19 under ^[5] - 12:11, 16:10, 29:25, 39:17, 70:16 understood ^[1] - 68:8 undisputed ^[2] - 24:3, 40:10 unenforceable ^[1] - 26:11 unfortunately ^[1] - 27:4 unhappy ^[1] - 50:21 unintentional ^[1] - 15:2 unit ^[1] - 9:1 United ^[1] - 12:13 unknown ^[1] - 60:14 unless ^[2] - 74:3, 74:21 untrue ^[1] - 46:24 up ^[17] - 18:6, 18:16, 35:20, 36:11, 36:18, 43:6, 45:14, 45:25, 46:2, 47:3, 55:4, 58:22, 59:1, 59:20, 60:3, 60:6, 74:21 updated ^[2] - 59:2, 69:3 upheld ^[1] - 55:17 Utah ^[2] - 19:15, 19:17 UTILITIES ^[2] - 1:1, 1:10 utilities ^[10] - 14:20, 14:21, 24:14, 28:17,</p>	<p>29:3, 29:5, 45:24, 53:23, 55:22, 67:8 Utilities ^[1] - 55:12 utility ^[29] - 6:9, 6:24, 7:7, 17:5, 17:21, 20:18, 21:23, 24:18, 24:19, 26:18, 26:20, 26:22, 27:4, 27:14, 27:20, 28:2, 28:21, 28:22, 30:3, 38:14, 39:18, 39:23, 45:16, 50:4, 50:6, 59:7, 60:8, 66:24, 66:25 utility's ^[5] - 10:3, 28:15, 28:23, 28:24, 51:1 utilize ^[1] - 30:20</p>
T		U		V
<p>tackle ^[2] - 74:7 tails ^[4] - 7:20, 9:12, 33:5, 42:8 tax ^[2] - 39:5, 61:14 technical ^[8] - 19:2, 22:6, 22:11, 44:6, 48:11, 53:5, 57:19, 60:14 technically ^[4] - 15:23, 49:11, 63:17, 63:18</p>	<p>together ^[3] - 5:10, 56:11, 56:20 ton ^[2] - 11:16, 14:11 took ^[3] - 19:19, 45:21, 76:9 top ^[5] - 62:11, 62:17, 62:20, 64:6, 64:22 totally ^[1] - 33:22 toward ^[1] - 13:2 toxic ^[1] - 14:5 trade ^[4] - 13:3, 53:2,</p>	<p>UDA ^[32] - 4:5, 10:13,</p>	<p>UDA ^[32] - 4:5, 10:13,</p>	<p>vacuum ^[1] - 67:7 valuable ^[1] - 39:6 value ^[5] - 6:9, 7:8, 9:2, 25:16, 41:17 vanishing ^[1] - 52:15 vantage ^[1] - 9:2 variabilities ^[1] - 41:23 variable ^[1] - 33:25 variables ^[1] - 54:4 various ^[6] - 10:21, 14:10, 57:14, 57:25, 65:10, 71:2 Veatch ^[19] - 10:19, 10:25, 11:19, 13:13, 14:21, 16:5, 18:17, 35:12, 36:11, 36:12, 56:18, 57:2, 57:9, 64:2, 65:11, 65:16, 67:24, 68:13, 69:4 Veatch's ^[4] - 7:12, 58:3, 64:13, 65:4 vehemently ^[1] - 73:6 verbalization ^[1] - 10:15 versus ^[2] - 12:5, 18:11 vertically ^[1] - 30:3 vertically-integrated ^[1] - 30:3 viable ^[3] - 11:22, 28:16, 28:18 VICE ^[1] - 1:11 view ^[1] - 63:10 views ^[1] - 35:8 violate ^[2] - 16:23, 45:8 violates ^[1] - 38:1 violative ^[1] - 35:5</p>

<p>Virginia ^[3] - 9:22, 9:23, 9:24 visit ^[1] - 70:1 vote ^[1] - 71:22</p>	Z
W	<p>zero ^[5] - 34:24, 41:16, 41:24, 41:25</p>
<p>wait ^[1] - 74:1 walk ^[1] - 28:1 wants ^[1] - 28:5 Waxman ^[10] - 11:14, 11:18, 11:20, 52:17, 52:24, 62:15, 63:1, 63:14, 63:17 Waxman-Markey ^[10] - 11:14, 11:18, 11:20, 52:17, 52:24, 62:15, 63:1, 63:14, 63:17 ways ^[2] - 36:18, 46:6 Whitehall ^[1] - 19:11 whole ^[6] - 11:6, 32:23, 56:24, 58:8, 71:23, 74:12 willing ^[1] - 45:17 win ^[4] - 7:19, 9:12, 33:5, 42:8 wind ^[1] - 17:7 Wind ^[2] - 19:11, 21:7 WITTLER ^[1] - 76:5 Wittler ^[2] - 1:21, 76:18 words ^[1] - 42:22 workable ^[3] - 58:13, 58:15, 60:12 works ^[1] - 18:15 world ^[2] - 8:10, 8:11 worlds ^[1] - 8:1 worst ^[1] - 8:1 worth ^[3] - 43:24, 59:23, 60:2 writing ^[1] - 20:4 written ^[1] - 48:15</p>	
Y	
<p>year ^[4] - 13:16, 25:25, 71:12, 71:16 years ^[8] - 11:15, 13:18, 13:19, 23:5, 24:9, 24:11, 48:4, 52:14 yourself ^[2] - 39:1, 43:25 Yvette ^[2] - 3:5, 69:16</p>	