

ORIGINAL

RE: DE 22-060

PUC HEARING

August 22, 2024



AVICORE REPORTING

15 Constitution Drive, Suite 1A • Bedford, NH 03110 • (603) 666-4100
info@avicorereporting.com • www.avicorereporting.com

STATE OF NEW HAMPSHIRE
PUBLIC UTILITIES COMMISSION

August 22, 2024, 9:03 a.m.
21 South Fruit Street
Suite 10
Concord, NH

ORIGINAL

RE: DE 22-060
Consideration to the Current Net Metering
Tariff Structures, Including Compensation
of Customer Generators

PRESENT: Chairman Daniel C. Goldner, Presiding
Commissioner Pradip K. Chattopadhyay
Ben Martin-McDonough, Esq./PUC
Legal Advisor

APPEARANCES:

Reptg. Public Service Company of New
Hampshire d/b/a Eversource:
Jessica A. Chiavara, Esq.

Reptg. Liberty Utilities (Granite State
Electric) Corp., d/b/a Liberty Utilities:
Michael J. Sheehan, Esq.

Reptg. Unitil Energy Systems, Inc.:
Patrick H. Taylor, Esq.

Reptg. Community Power Coalition of
New Hampshire:
Clifton Below

Reptg. Clean Energy New Hampshire:
Sam Evans-Brown

Transcribed from Webex Recording by:
Nancy J. Theroux, NH LCR No. 100

1 APPEARANCES: (Continued)

2 Reptg. Standard Power of America:
3 Robert Hayden

4 Representing the Conservation Law
5 Foundation:
6 Nicholas Krakoff, Esq.

7 Representing Residential Ratepayers:
8 Donald M. Kreis, Esq. Consumer Advocate
9 Office of the Consumer Advocate

10 Reptg. New Hampshire Dept. of Energy
11 Alexandra K. Ladwig, Esq.
12 Paul B. Dexter, Esq.
13 (Regulatory Support Division)

14

15

16

17

18

19

20

21

22

23

24

25

26

27

1	I N D E X	
2		PAGE
3	INTRODUCTORY COMMENTS BY CHAIRMAN GOLDNER	5
4	APPEARANCES TAKEN	6
5	PUBLIC COMMENTS BY:	
6	Mr. Aalto	19
7		
8	WITNESSES: ELIZABETH NIXON, DEANDRA PERRUCCIO, MARK TOSCANO	
9	Direct by Ms. Ladwig	22
	Cross by Ms. Manzelli	39
10	Cross by Ms. Chiavara	53
	Cross by Mr. Krakoff	57
11	Cross by Mr. Evans-Brown	63
	Redirect by Ms. Ladwig	92
12		
13	WITNESS: CLIFTON BELOW	
14	Direct By Ms. Manzelli	95
	Cross by Ms. Chiavara	154
15	Questions by Cmsr. Chattopadhyay	178
	Questions by Chairman Goldner	186
16	Redirect by Ms. Manzelli	203
17		
18	REBUTTAL WITNESSES:	
19	BRIAN RICE, ED DAVIS, JEFF PENTZ, JOE SWIFT and COLLEEN BENNETT	
20	Direct by Ms. Chiavara	206
	Direct by Mr. Taylor	210
21	Direct by Mr. Sheehan	212
	Further direct by Ms. Chiavara	214
22	Cross by Ms. Manzelli	238
	Cross by Ms. Ladwig	269
23		

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

I N D E X

REBUTTAL WITNESSES: (Continued)	PAGE
Questions by Chairman Goldner	270
Redirect by Ms. Chiavara	272
Redirect by Mr. Taylor	276

SURREBUTTAL WITNESS: CLIFTON BELOW

Direct by Ms. Manzelli	277
Cross by Mr. Taylor	283
Cross by Ms. Chiavara	284
Questions by Cmsr. Chattopadhyay	285
Questions by Chairman Goldner	287

EXHIBITS:

	Page
Exhibits 1-32 admitted	294

--o0o--

1 P R O C E E D I N G

2 CHAIRMAN GOLDNER: Commissioner
3 Goldner and Commissioner Chattopadhyay.

4 We're back here for the second day of
5 a hearing in DE 22-060. Before we begin today's
6 proceedings, I would like to remind everyone that
7 we're proceeding today without an in-person
8 stenographer, and we would like to -- I would
9 like to remind everyone -- sorry -- we are making
10 a verbatim sound recording that will be
11 transcribed pursuant to RSA 541-A:31, VII, and
12 Puc 203.31.

13 As I did at Tuesday's hearing, I want
14 to remind all parties that they need to speak
15 clearly, slowly, and into the microphones. This
16 includes making sure to press the microphone
17 button and make sure the red -- red light is on
18 prior to talking.

19 Finally, we must all identify
20 ourselves prior to speaking. If we do not follow
21 these simple steps, our recording will not be
22 accurately transcribed.

23 Also, by a show of hands, are there

1 members of the public here today who would like
2 to provide public comment and did not do so on
3 Tuesday?

4 Okay. Seeing none, we'll begin by
5 taking appearances, beginning with the New
6 Hampshire Department of Energy.

7 MS. LADWIG: Good morning. Alexandra
8 Ladwig, and with me is co-counsel, Paul Dexter.

9 CHAIRMAN GOLDNER: Thank you.
10 Eversource.

11 MS. CHIAVARA: Good morning,
12 Commissioners. Jessica Chiavara, here on behalf
13 of Public Service Company of New Hampshire, doing
14 business as Eversource Energy.

15 CHAIRMAN GOLDNER: Liberty.

16 MR. SHEEHAN: Good morning. Mike
17 Sheehan for Liberty Utilities/Granite State
18 Electric Corp.

19 CHAIRMAN GOLDNER: Unitil.

20 MR. TAYLOR: Good morning,
21 Commissioners. Patrick Taylor appearing on
22 behalf of Unitil Energy Systems, Inc.

23 CHAIRMAN GOLDNER: The Office of the

1 Consumer Advocate.

2 MR. KREIS: Good morning,
3 Mr. Chairman. I'm Attorney Donald Kreis doing
4 business as the Consumer Advocate.

5 CHAIRMAN GOLDNER: Thank you. Clean
6 Energy New Hampshire.

7 MR. EVANS-BROWN: Good morning,
8 Commissioners. Sam Evans-Brown of Clean Energy.

9 CHAIRMAN GOLDNER: Community Power
10 Coalition of New Hampshire.

11 MS. MANZELLI: Good morning. Good
12 morning, Commissioners. Amy Manzelli here for
13 the Coalition.

14 CHAIRMAN GOLDNER: Thank you. The
15 Conservation Law Foundation.

16 MR. KRAKOFF: Good morning,
17 Commissioners. Nick Krakoff on behalf of the
18 Conservation Law Foundation.

19 CHAIRMAN GOLDNER: Granite State
20 Hydropower Association. Not here.

21 Standard Power of America.

22 MR. HAYDEN: Good morning. Robert
23 Hayden from Standard Power.

1 CHAIRMAN GOLDNER: Thank you. And
2 Walmart.

3 MR. HORNE: Good morning. Melissa
4 Horne appearing on behalf of Walmart, Inc.

5 CHAIRMAN GOLDNER: Thank you.

6 Okay. Before we resume testimony, I
7 want to lay out the process for the remainder of
8 the hearing and address a few procedural issues.

9 On Tuesday we completed the direct and
10 cross-examination of the witnesses from Dunsky,
11 who completed the value of distributed energy
12 resources study. With one exception that I'm
13 going to address in a moment, we also completed
14 the direct and cross-examination of the joint
15 parties' witnesses.

16 For today, that leaves the direct and
17 cross-examination of the Department of Energy and
18 CPCNH witnesses. For the schedule we agreed to
19 on Tuesday, the DOE will go first, followed by
20 CPCNH.

21 At that point, as we agreed on
22 Tuesday, we will entertain requests from the
23 joint parties to present additional rebuttal

1 testimony, if appropriate.

2 There are a few things we need to
3 consider before moving to testimony. The first
4 relates to Liberty's witnesses. Liberty did not
5 present witnesses on Tuesday. It represented
6 that one of the two witnesses who contributed to
7 the joint parties' pre-file direct testimony,
8 filed as Exhibit 2, Mr. Kommineni has since left
9 the company. It further represented that its
10 other witness, Laura Sasso, would -- would adopt
11 her pre-filed testimony today.

12 So we have two questions for Liberty.
13 First, does the fact that Mr. Kommineni is not
14 here today to adopt his testimony affect what
15 evidence the Commission can consider?

16 MR. SHEEHAN: I don't think so. The
17 issue of adopting testimony is something that's
18 been kicked around at the Commission for a while.
19 You have every right to accept the document as
20 has been marked as an exhibit. To the extent a
21 live person wasn't here to adopt it, it would go
22 to your consideration of the weight of that
23 evidence.

1 I can tell you the evidence that
2 Liberty has within that testimony is some of the
3 Liberty-specific numbers. If the Commission has
4 any questions that couldn't be answered by live
5 witness, we can certainly take a record request
6 on those. However, I don't think they're
7 particularly material to the bigger issues that
8 are before you.

9 Jumping to the second question.
10 Unknown to me Tuesday, Ms. Sasso is simply not
11 available this week for personal reasons, and I
12 apologize for not getting ahead of that to
13 resolve it.

14 So -- so the issue with Mr. Kommineni
15 who has left, Ms. Sasso won't be able to be here
16 this week, we have the same issue for both of the
17 Liberty witnesses on the direct panel.

18 I do note -- do know Mr. Garcia is in
19 the room. He was participating in the rebuttal
20 testimony. The direct testimony was filed before
21 he joined Liberty. So not to put him on the
22 spot, but if there is a Liberty-specific
23 question, there's a chance Mr. Garcia could

1 answer it. Again, if not, we'd have to take a
2 record request and follow that procedure.

3 CHAIRMAN GOLDNER: Okay. Thank you,
4 Attorney Sheehan.

5 The second issue relates to a motion
6 by CLF to allow post-hearing briefing. We grant
7 that motion. We note that on Tuesday, the
8 parties already requested or agreed to brief
9 several issues, including: One, whether the
10 Commission should take administrative notice of
11 utility witness testimony in a prior docket; two,
12 whether the costs of net metering to ratepayers
13 where the utilities will calculate both the
14 dollar amount and bill impact of the subsidy for
15 both residential and commercial classes
16 constitutes an unfair subsidization; and three,
17 whether the Commission has the authority to
18 guarantee a particular rate recovery formula for
19 a set period.

20 I want to give everyone a chance to
21 speak on this. In doing so, please let me know
22 if there are any issues that we agreed to brief
23 on Tuesday that I am -- that I am missing.

1 So we can start with the New Hampshire
2 Department of Energy.

3 MS. LADWIG: Alexandra Ladwig.
4 Apologies. You mean speak on the issues right
5 now?

6 CHAIRMAN GOLDNER: Yes. We just want
7 to -- we're just trying to summarize the results
8 from the Tuesday hearing and to align on those
9 issues before we move forward with testimony
10 today.

11 MS. LADWIG: Are you -- and, again,
12 apologies for clarifying. Are you asking whether
13 we want to do post-hearing brief on those issues,
14 or do a preliminary addressing of those issues
15 right now?

16 CHAIRMAN GOLDNER: Yes, thank you.
17 Attorney Martin-McDonough was highlighting -- was
18 clarifying your question.

19 No, we're just trying to align on the
20 topics, not to give testimony or any -- any
21 evidence.

22 MS. LADWIG: Alexandra Ladwig. Thank
23 you. That is helpful. Yes, I believe, off the

1 top of my head, those were the topics, and we're
2 fine with that.

3 CHAIRMAN GOLDNER: And we'll also
4 check in before we leave today, so we're just
5 trying to get alignment before witness testimony
6 on the topics.

7 Okay. Very good. We'll move to
8 Eversource.

9 MS. CHIAVARA: I would actually,
10 respectfully, request that you repeat the second
11 and third topics. I'm not writing very quickly
12 this morning.

13 CHAIRMAN GOLDNER: Excellent.
14 Excellent. Will do.

15 I'll repeat all three just to -- just
16 so that folks can -- can get comfortable with the
17 topics.

18 So the first was whether the
19 Commission should take administrative notice of
20 utility witness testimony in a prior topic.

21 Two was whether the costs of net
22 metering to ratepayers, where the utilities will
23 calculate both the dollar amount and the bill

1 impact of the subsidy for both residential and
2 commercial classes, constitutes an unfair
3 subsidization.

4 And, three, whether the Commission has
5 the authority to guarantee a particular rate for
6 every formula for a set period.

7 MS. CHIAVARA: So I would say I --
8 I -- as to the second issue, whether the cost to
9 ratepayers and the utilities calculating
10 residential versus business classes constitutes
11 unfair or unreasonable subsidization, I'm -- I'm
12 not sure exactly how to approach that as a -- as
13 a legal issue, as a legal analysis, but I can --
14 I can confer with my colleagues maybe during
15 lunch break today.

16 We have no objections to the other two
17 topics. I was just wondering, will there be
18 opportunity, should other issues arise today, to
19 include those in the briefing as well?

20 CHAIRMAN GOLDNER: Yes, and I'll --
21 I'll add that, before we leave today, we'll --
22 we'll circle back on the alignment, and the
23 Commission will -- will -- will publish a

1 post-hearing order with -- with the exact -- with
2 the exact summary so that there's clarity, given
3 that there's no stenographer here today, and it
4 may take some time to get the transcript. We'll
5 publish that straightaway after the -- after the
6 hearing.

7 MS. CHIAVARA: Great. Thank you.

8 CHAIRMAN GOLDNER: Thank you.

9 Liberty.

10 MR. SHEEHAN: I have nothing further
11 to add. The conversations so far make sense to
12 us.

13 CHAIRMAN GOLDNER: Until.

14 MR. TAYLOR: Yeah, I have nothing to
15 add either. Thank you.

16 CHAIRMAN GOLDNER: The Office of the
17 Consumer Advocate.

18 MR. KREIS: I think those three issues
19 are reasonable ones, and we're prepared to
20 state -- statement -- take positions on them at
21 the appropriate time.

22 CHAIRMAN GOLDNER: Thank you. Clean
23 Energy New Hampshire.

1 MR. EVANS-BROWN: We have no comments.

2 CHAIRMAN GOLDNER: The Community Power
3 Coalition of New Hampshire.

4 MS. MANZELLI: Thank you,
5 Mr. Commissioner. I have a couple of clarifying
6 questions. First of all, I would ask to clarify
7 that briefing on the three issues that you have
8 integrated would be either optional or mandatory,
9 and I would also suggest that the briefs be
10 optionally permitted to cover all of the topics
11 noticed for this docket as an option.

12 Acknowledging that that may make for
13 lengthy briefing, you know, we would not be
14 opposed to a suggested page limit at the
15 Commission's discretion. Thank you.

16 CHAIRMAN GOLDNER: Thank you. The
17 Conservation Law Foundation.

18 MR. KRAKOFF: Yeah, thank you. Nick
19 Krakoff, Conservation Law Foundation.

20 When I made my motion on Tuesday, I
21 think my -- my intent was to brief, you know,
22 basically the relevant law governing this case.
23 And so that I think you get at that with the

1 second question you asked. However, I think it's
2 a broader question than just whether there's
3 unfair subsidization. I think you need to look
4 at the whole legislative history and
5 particularly, you know, the statutory language
6 under, you know, RSA 362:A-9.

7 So I mean, I think -- you know, I
8 would sort of frame that a little broader, sort
9 of what's the governing -- the governing law and
10 the governing statutory structure for this case,
11 rather than just sort of the -- you know, just
12 sort of leading -- leading question that's been
13 provided on whether there's unfair subsidization
14 or not.

15 CHAIRMAN GOLDNER: Thank you, Attorney
16 Krakoff.

17 We'll move now to Standard Power of
18 America.

19 MR. HAYDEN: No comment.

20 CHAIRMAN GOLDNER: And to Walmart.

21 MS. HORNE: Walmart has -- Walmart has
22 nothing to add to this discussion. Thank you.

23 CHAIRMAN GOLDNER: Thank you. Okay.

1 So I'll summarize as best I can at
2 this point, and we'll further refine it over the
3 course of today's proceeding.

4 So the idea is to provide two rounds
5 of briefing. Specifically in the first round,
6 the parties could lay out clear terms for the
7 actions that they're requesting the Commission to
8 take, summarize all evidence in favor of their
9 positions, and address any relevant legal issues
10 that spoke to Mr. Krakoff's point. This briefing
11 would include responses to the issues as
12 discussed above.

13 The second would allow the parties to
14 respond to issues raised by the initial briefing.
15 We note that the briefing would be limited to
16 argument, and the parties would not be allowed to
17 present additional evidence.

18 So, given that summary, I'll just
19 check in to see if there's any additional
20 comments to that -- that layout.

21 Okay. Seeing none. Okay. So we
22 will -- we will have one more discussion on this
23 before the end of the -- end of the proceeding

1 today, but the Commission will issue a procedural
2 schedule after the hearing, laying out the scope
3 and timeline of this briefing schedule and the
4 topics as well.

5 Okay. Before we move on, are there
6 any other issues that we need to address before
7 we go to testimony? Yes?

8 MR. AALTO: Pentti Aalto representing
9 myself.

10 I do have left over from the -- some
11 references from previous dockets, where I was
12 able to provide something that may be useful
13 here (indiscernible).

14 CHAIRMAN GOLDNER: Oh, Mr. Aalto, if
15 you can find a microphone, and keep it to two
16 minutes, please.

17 MR. AALTO: In front?

18 CHAIRMAN GOLDNER: Yes, in front would
19 be perfect.

20 MR. AALTO: I see the red button.

21 There are two docket items. The first
22 was DE 16-576, comments on this 716.18, and that
23 concerns a mechanism for allocating the

1 transmission and distribution costs in a way that
2 manipulates markets; that is to say, the price
3 changes with loading on the system. And the
4 concept is to have a system broken down in those
5 main segments, each of them providing a price
6 adder that shows up to the individual customer on
7 a real-time basis.

8 The intent is to have the customer
9 have the information necessary to respond to
10 system conditions. Heavily loaded line would see
11 a high price. Low lines would be likely less.
12 And they could either buy or sell at that price.

13 The second item is DE 06-061. That
14 goes back a few years, and that was a proposal by
15 myself and Roy Morrison to do a pilot of a
16 customer metering system that we had operating at
17 the time that provided for 5-minute price signal,
18 calculation of the cumulative prices, 10 kilowatt
19 hours at the meter, and the communication of
20 those back to the central facility, where they
21 would be available.

22 The process also allowed for direct
23 control, based on the price, the customer's

1 appliances as they chose to program them. If the
2 price went over a dime, you could shut your water
3 heater off.

4 All of that was in it. It was an
5 operating system that I was able to test for
6 about six months in an installation in Lowell,
7 Massachusetts.

8 So it applied for both the price
9 development. It did require communication, but
10 the metering was -- at that time used a simple
11 analog meter with a false output, and the
12 processor had processor memory and transceivers
13 do a lot of the communication. At that point, it
14 used the pager -- two-way paging networks that
15 were available. There was no interest at the
16 time.

17 I would be glad to discuss any of that
18 with anyone, if there's a need to do so, and
19 answer any questions about the individual
20 thoughts that go behind it.

21 Thank you. And thank you very much
22 for the opportunity to add this.

23 CHAIRMAN GOLDNER: Thank you.

1 Okay. Seeing no questions, let's move
2 on to the DOE. One at a time. Can you please
3 state your name for the record.

4 MS. NIXON: Elizabeth Nixon.

5 MS. PERRUCCIO: Deandra Perruccio.

6 MR. TOSCANO: Mark Toscano.

7 CHAIRMAN GOLDNER: Thank you. One at
8 a time. I'm sorry, can you please raise your
9 right hands.

10 (Whereupon, ELIZABETH NIXON, DEANDRA
11 PERRUCCIO and MARK TOSCANO were duly sworn by
12 Chairman Goldner.)

13 CHAIRMAN GOLDNER: Thank you. Okay.
14 The witnesses are ready for direct. Before
15 taking testimony, I'll just reiterate that we
16 have the witnesses' pre-file testimony, and we'd
17 ask that any direct testimony today be limited to
18 clarifications and/or corrections of that
19 pre-file testimony.

20 DIRECT EXAMINATION

21 BY MS. LADWIG:

22 Q. Thank you. Alexandra Ladwig questioning. I'm
23 going to have you state your names again, and,

1 also, please, your position with the department.

2 A. (Nixon) Elizabeth Nixon, Electric Director.

3 A. (Toscano) Mark Toscano, Utility Analyst.

4 A. (Perruccio) Deandra Perruccio, Administrator of
5 Sustainability.

6 Q. Alexandra Ladwig questioning.

7 And did you prepare testimony in this
8 docket that was filed on December 6th, 2023?

9 A. (Nixon) Ms. Nixon. Yes, we all did.

10 Q. Alexandra Ladwig questioning.

11 And that testimony is marked as
12 Exhibit 7 in this proceeding?

13 A. (Toscano) Yeah. Mark Toscano, yes.

14 Q. Alexandra Ladwig questioning.

15 Do you have any corrections or changes
16 you'd like to make to that testimony today?

17 A. (Toscano) Mark Toscano responding.

18 No corrections, but we'll talk about
19 it further regarding application fees. There's
20 been development since we initially did our
21 testimony.

22 Q. Alexandra Ladwig. Thank you.

23 And on that note, do you adopt that

1 testimony as your sworn testimony in this
2 proceeding? And if you could each answer that.

3 A. (Toscano) Mark Toscano. Yes.

4 A. (Nixon) Nixon. Yes.

5 A. (Perruccio) Deandra Perruccio. Yes.

6 Q. Alexandra Ladwig.

7 And I want to start with a couple of
8 quick clarification questions. First, when
9 Dunsky testified on Tuesday, they stated an order
10 number that developed the scope of the VDER
11 study. CLF brought up some confusion on whether
12 that was the correct order number.

13 Could you just please clarify what was
14 the order and order number that developed the
15 study scope?

16 A. (Perruccio) Deandra Perruccio.

17 It was Order 26,316 that was issued
18 December 18th, 2019.

19 Q. Alexandra Ladwig questioning.

20 And then the Settlement Agreement,
21 Exhibit 1, refers on Bates 2 to the DOE VDER
22 study. Could you also just clarify the
23 relationship of the Department to the VDER study?

1 A. (Perruccio) Deandra Perruccio.

2 Sure. So the VDER study was directed
3 by the Commission in Order 26,029. It did
4 layouts of specific scope requirements in that
5 order.

6 The study scope was then further
7 developed through stakeholder processes that were
8 facilitated by Commission staff at that time and
9 approved, then, finally by the Commission.

10 Dunsky was then selected by Commission
11 staff to conduct the study, and staff facilitated
12 that contract.

13 And as the Department was created,
14 Department staff continued to facilitate that
15 consultant to complete the study.

16 That was our role and has continued to
17 be our role.

18 Q. Alexandra Ladwig. Thank you.

19 And without launching necessarily into
20 a detailed summary of your testimony, could you
21 just briefly describe your positions and
22 testimony.

23 A. (Toscano) Mark Toscano responding.

1 Yes, the current net metering tariff
2 seems appropriate based on -- as demonstrated by
3 the results of the VDER study. We recommend the
4 current net metering compensation rate structure
5 continue for distributed generation systems less
6 than 5 megawatts.

7 We propose that the appropriate
8 time-of-use rates be reviewed, developed, and
9 implemented. As the VDER study indicated, that
10 the value of these systems does vary by time, and
11 it's been well discussed here.

12 We propose the renewal energy
13 portfolio costs and prior reconciliation costs be
14 included in equal energy rates. And we stated
15 that the rate and bill impact study shows
16 minimal -- very minimal cost shifting to
17 non-net-metered customers; and therefore, we have
18 proposed that this kind of structure stay in
19 place for all customer generators.

20 It's stated also that currently, we do
21 not see any reason to limit the generating
22 capacity eligible for net metering in terms of
23 system-wide.

1 We propose that the customer
2 generators have the option to be placed on TLV
3 rate, if it's available and if it's appropriate.

4 And we have recommended development of
5 standardized application fees be addressed in the
6 working groups established by the study IP in '22
7 (indiscernible).

8 We will follow that up if needed
9 regarding our comments on the settlement
10 discussion.

11 Q. Alexandra Ladwig questioning. Thank you.

12 And have you read the Settlement
13 Agreement in this docket that was filed on August
14 1st, 2024, and is marked as Exhibit 1?

15 A. (Toscano) Mark Toscano responding. Yes.

16 A. (Nixon) Liz Nixon. Yes.

17 A. (Perruccio) Andrea Perruccio. Yes.

18 Q. Alexandra Ladwig questioning.

19 And there's five recommendations in
20 the Settlement Agreement that are listed on Bates
21 1 through 2. The agreement, on Bates 1, states
22 that it resolves all issues among the settling
23 parties. And on Bates 7, it states that approval

1 by the Commission and implementation of the terms
2 of settlement as proposed that will -- will
3 result in rates that are just and reasonable.

4 Whether or not you agree with those
5 five recommendations, do you believe there are
6 any issues or questions that need to be resolved
7 in this proceeding that are not addressed in the
8 Settlement Agreement?

9 A. (Toscano) Mark Toscano. No.

10 Q. Alexandra Ladwig questioning.

11 Okay. Now I want to walk through the
12 Department's position on the issues that are
13 raised in the Settlement Agreement.

14 First, relating to the legacy period.
15 Could you explain the Department's position on
16 the legacy period proposed in the settlement?

17 A. (Toscano) Mark Toscano responding.

18 We believe the status quo is adequate,
19 especially given that this will be explored in
20 great detail in upcoming efforts over the next
21 couple of years.

22 Q. Alexandra Ladwig questioning.

23 And just to be clear, when you say

1 "status quo," you mean keep the current date of
2 2024 for -- apologies -- 2040, meaning that
3 anyone who begins net metering following this
4 proceeding would still be able to lock into the
5 current net metering tariff structure until 2040?

6 A. (Toscano) Mark Toscano. Yes.

7 Q. Alexandra Ladwig questioning.

8 And could you please explain the
9 reasons why the Department is not in support of
10 extending the legacy period past 2020 -- I keep
11 saying it -- past 2040 as part of this
12 proceeding?

13 A. (Toscano) Mark Toscano responding.

14 And since this will be addressed over
15 the next two years, we feel that the status quo
16 makes sense. And others have said, during this
17 hearing, that any additional complexity and
18 administrative efforts now does not make sense to
19 us given -- especially given the general
20 agreement or disagreement that the current
21 compensation structure is adequate.

22 But further, the end date of 2040, in
23 our view, will minimize some of the capacities

1 that utilities have to deal with regarding end
2 dates. If people start drawing on different
3 times, the utilities would either have to do it
4 on a monthly basis, or I believe they mentioned
5 they would reconcile on an annual basis, but they
6 still have to have varying end dates. And,
7 again, it adds additional complexity, when we're
8 going to be revisiting all of these things in the
9 very near future. So we felt that it just makes
10 sense to keep what it is.

11 Moreover, since there are substantial
12 changes, possibly with NEM 3.0, within the next
13 two years or so, including time-varying rates
14 that add additional compensation categories,
15 which I believe most are quite supportive of.
16 We're not confident it makes sense to lock in the
17 status quo for 20 -- that go beyond 2040.

18 Q. Alexandra Ladwig questioning.

19 And what is your response to the
20 settling parties' argument that, without the
21 ruling 20-year legacy period, renewable
22 development in New Hampshire would be
23 dis-incentivized?

1 A. (Toscano) Mark Toscano responding.

2 The Department is not -- we're not
3 convinced by argument that -- and the
4 illustrations provided that the 2040 -- the
5 ending of the 2040 legacy period would end --
6 excuse me, in short term -- let me restate that.
7 I apologize.

8 I'll go off what I have, so forgive
9 me. I'm just going to get back to what I have.

10 In the exhibits, you know, Bates --
11 excuse me, for the -- in the Settlement
12 Agreement, on Bates 29, they have Scenarios 1A
13 and 2B that show an end of compensation in 2040.
14 Which is, as you mentioned, the current end --
15 that's the current end of net metering.

16 However, even if net metering were to
17 end, there are other avenues, as was discussed
18 last Tuesday, for power generators that still has
19 value and could be sold under different fees,
20 either through to ISO New England markets or
21 contracts. This was -- again, this was discussed
22 on Tuesday.

23 While it's -- the other comment is

1 it's highly unlikely that net metering is going
2 to end in 2040. There will be something in
3 place, and we're going to be working on that, and
4 other folks will be working on it over the next
5 couple of years. So that's our -- that's our
6 view.

7 And it is certainly possible, as was
8 discussed, that the actual compensation rates
9 could be less, but they could be more, ending in
10 2040, again. So it wouldn't end in 2040. It
11 would just be a different way. And that's
12 assuming that nobody ever did anything regarding
13 NEM 3.0.

14 Q. Alexandra Ladwig questioning.

15 And to your knowledge, are there
16 existing facilities that could be eligible for
17 net metering but are receiving compensation in
18 some other way?

19 A. (Toscano) We think that this -- this could be
20 explored over the next couple of years as part of
21 the collection effort stabling process proposed
22 in the Settlement Agreement.

23 A. (Nixon) Elizabeth Nixon.

1 Could I also add to that? I think
2 there are others now that are currently under the
3 ISO wholesale rate that are switching to net
4 metering. So they are getting other compensation
5 in, as well as some of the net metering
6 customers, also (indiscernible) generators, but
7 they're getting additional compensation.

8 Q. Alexandra Ladwig questioning. Thank you.

9 And I just want to end with, at this
10 time would the Department be comfortable with any
11 legacy period other than the current one that
12 ends in 2040?

13 A. (Nixon) I think this was -- Liz Nixon.

14 As we've stated earlier, we think that
15 it makes sense to keep what is there now and
16 explore that in the future.

17 Q. Alexandra Ladwig questioning. Thank you.

18 And now I want to move on to the topic
19 of application fees. Have you reviewed the
20 settling parties' proposal on application fees?

21 A. (Toscano) Mark Toscano. Yes.

22 Q. Alexandra Ladwig questioning.

23 And what is your position on the

1 settling parties' proposal?

2 A. (Toscano) As I mentioned earlier -- Mark Toscano
3 responding.

4 With the more developed proposal that
5 is included with the Settlement Agreement, we
6 support it.

7 Q. Alexandra Ladwig questioning.

8 And do you support the annual
9 reconciling mechanism for application fees that
10 was described in the Settlement Agreement and
11 further explained by the settling parties in
12 their testimony on Tuesday?

13 A. (Toscano) Mark Toscano. Yes.

14 Q. Alexandra Ladwig questioning.

15 And in your testimony, I believe --
16 or perhaps it didn't come up. I can't remember,
17 to be honest. Do you have any concerns about
18 double counting with the application fee
19 proposal?

20 A. Mark Toscano responding.

21 We had concerns in the beginning, and
22 there's been a lot of development since. We
23 believe utilities will do their best efforts to

1 provide transparency. However, the utilities
2 need to ensure that they're tracking everything
3 appropriately. If some parts are not compensated
4 elsewhere, then there's all of this. We've all
5 just seen, there's a lot of different places that
6 things show up.

7 So the Department will continue to
8 work with the utilities to identify any necessary
9 (indiscernible).

10 Q. Alexandra Ladwig questioning.

11 A question about your TOU rates. So
12 in your testimony, you recommended that net
13 metering customers could be put on time-of-use
14 rates, if available. Is that still your
15 recommendations?

16 A. (Toscano) Mark Toscano responding.

17 Yes. Existing utility rates can be
18 applied now under NEM 2.0. Then the current
19 compensation -- compensation structure would
20 apply to that. So for the smaller -- 100 percent
21 of the energy -- 100 percent, excuse me, 25
22 percent, for the smaller generator, as I
23 mentioned, or just 80 for the larger.

1 A. (Nixon) Liz Nixon.

2 I just want to add to that. I believe
3 that there actually are existing NEM customers
4 under TOU rates, at least under -- in Liberty's
5 territory. I'm not sure about others. But so
6 there are existing TOU customers.

7 Q. Alexandra Ladwig questioning.

8 As it relates to further study that
9 was recommended in the Settlement Agreement and
10 that you use in your testimony, the Settlement
11 Agreement recommends undertaking a data
12 collection effort as part of developing proposed
13 net metering time-of-use rates. What is the
14 Department's position on the data collection
15 effort that's described in the Settlement
16 Agreement?

17 A. (Toscano) Mark Toscano responding.

18 We support it.

19 Q. Alexandra Ladwig questioning.

20 And the Settlement Agreement and the
21 settling parties' testimony on Tuesday proposed
22 that the data collection effort via stakeholder
23 process that includes the Department of Energy,

1 or at least that the Department would be welcome
2 to participate in it, do you have a petition --
3 sorry, position on the Department being involved
4 in any data collection effort that may take place
5 following this proceeding?

6 A. (Toscano) Mark Toscano.

7 Yes, we would like to be involved
8 (indiscernible).

9 Q. Alexandra Ladwig questioning.

10 So just to sum up, if the Commission
11 were to adopt the Department's recommendations as
12 described in testimony and further explained
13 today, would there be any change to the net
14 metering tariff itself coming out of this
15 proceeding?

16 A. (Nixon) Yes. Our understanding is the tariff
17 would need to cover the 1 to 5 megawatt category,
18 normally the (indiscernible).

19 Q. Alexandra Ladwig questioning.

20 And that 1 to 5 megawatts, though,
21 would be the same compensation structure that
22 exists currently for larger customer
23 generators?

1 A. (Nixon) Yes. That's what we're proposing.

2 Q. Alexandra Ladwig questioning.

3 And so what we refer to as the
4 alternative NEM metering or NEM 2.0 that's
5 currently in place, if the Commission adopts your
6 recommendations, NEM 2.0 would still stay in
7 place following this proceeding?

8 A. (Nixon) Liz Nixon. Yes.

9 Q. Alexandra Ladwig questioning.

10 And, finally, could you please
11 summarize what the Department recommends for next
12 steps following this proceeding?

13 A. (Toscano) Toscano responding.

14 Yes. The stakeholder group would be
15 determined, I believe, if necessary -- necessary
16 to help determine premium rates and the cost
17 portion of storage.

18 Q. Alexandra Ladwig questioning.

19 And that is all the Department has on
20 direct. The witnesses are available for
21 cross-examination.

22 CHAIRMAN GOLDNER: Okay. Thank you.

23 We'll start cross-examination with CPCNH.

1 CROSS-EXAMINATION

2 BY MS. MANZELLI:

3 Q. Thank you. Good morning. My name is Amy
4 Manzelli for the Coalition. I have some general
5 questions for whoever in the witness panel would
6 like to answer.

7 Just to clarify some of your direct
8 testimony, referring to, I believe, Exhibit 7,
9 just make sure here.

10 Yeah. It is your testimony, correct,
11 that net metering compensation based on
12 time-of-use rates would -- and I'm quoting from
13 your testimony -- encourage systems that provide
14 more benefits to the distribution and
15 transmission systems.

16 That is your testimony, correct? It's
17 line -- page 13, line 7, if you want to reference
18 your testimony.

19 A. (Toscano) Yeah. Mark Toscano responding.

20 I just want to make sure we've got the
21 correct reference.

22 Q. Yeah.

23 A. (Toscano) Line 13 on page --

1 Q. Seven -- I'm sorry. Opposite. Page 13, line 7.

2 A. (Toscano) Yes. Yes. That's correct.

3 Q. Thank you. In sticking with page 13, moving down
4 to line 8, you note, quote: The VDER study
5 highlights a number -- that a number of
6 system-wide avoided cost values are time varying.

7 Right?

8 A. (Toscano) Mark Toscano. Correct.

9 Q. Okay. And this is Amy Manzelli questioning.

10 And moving down, also on page 13,
11 getting down to line 19, you also testified,
12 right, that, "DG systems with batteries could
13 potentially provide more benefits and flexibility
14 by providing generation during varying beneficial
15 time periods."

16 A. (Toscano) Mark Toscano responding.

17 That's correct.

18 Q. Thank you. Now, moving on to the Settlement
19 Agreement. Obviously, you testified, but just to
20 contextualize my following questions, the
21 Settlement Agreement requires development of a
22 new time-of-use proposal, right?

23 A. (Toscano) Mark Toscano. Yes.

1 Q. Okay. Amy Manzelli questioning.

2 Is there anything in the Settlement
3 Agreement that requires a new tariff to be
4 approved that incorporates a time-of-use rate?

5 A. (Nixon) Liz Nixon.

6 I don't believe in the settlement,
7 but -- I don't have it here for reference, but I
8 believe that there's something, either in the
9 rules or the statute, that they require approval
10 (indiscernible) time of use. (Indiscernible.) I
11 don't have that in front of me.

12 Q. Okay. So --

13 A. (Nixon) I just remember there was a docket when
14 Liberty was asked to have a system rule change
15 TOU.

16 Q. Okay. But my question is, looking at this
17 Settlement Agreement here, Exhibit 1, it requires
18 the development of a proposal for time-of-use
19 rates, but does it require a tariff that approves
20 that time-of-use proposal or any time-of-use
21 proposal?

22 A. (Nixon) Liz Nixon.

23 I guess I'm not clear in your

1 question. I mean, I think that it would be
2 helpful to have any compensation rates in the
3 tariff. Again, I'm not sure legally what's
4 required, but to have the compensation rates in
5 the tariff is helpful.

6 Q. I guess what I'm getting at is: Is it possible
7 that if this Settlement Agreement were approved
8 and if the time-of-use proposal were made, it
9 might not be approved; is that possible under
10 this Settlement Agreement?

11 A. (Nixon) Liz Nixon.

12 I presume that's possible.

13 Q. And in that vein, Mr. Toscano -- in my
14 questioning, Mr. Toscano especially, you've made
15 several statements today that, you know, things
16 will definitely be changing in the future, and
17 that's part of the rationale why -- for example,
18 maintaining the legacy period to 2040.

19 Can you, in fact, testify with
20 certainty that it -- net metering rates are
21 definitely going to change in the future?

22 A. (Toscano) Mark Toscano.

23 I'm not in a position to say what

1 would definitely be done. We are confident, and
2 I believe everybody, in all we've heard, that we
3 are supportive of time-varying rates and other
4 structures. So I don't see any reason why they
5 would, but I'm in no position to say
6 definitively.

7 Q. Okay. And again, it's possible that they won't?

8 A. (Toscano) It's possible.

9 Q. Changing topics here, and I think these questions
10 are for you, Ms. Nixon, or Mr. Toscano. I have
11 some questions about the Unutil Kingston solar
12 project in Docket 22-073. You're both familiar
13 with this docket?

14 A. (Toscano) Mark Toscano. I am.

15 A. (Nixon) Somewhat. It's been a while since I've
16 visited it.

17 Q. Okay. Understood. In this instance -- and this
18 is Amy Manzelli questioning.

19 You both provided testimony in the
20 docket?

21 A. (Toscano) Mark Toscano. Yes.

22 A. (Nixon) Liz Nixon. Yes.

23 Q. Now, I have a copy of -- a copy of your testimony

1 in that docket, if it's going to help to refresh
2 your memory. Would you agree that the basis of
3 the value of energy there was the ISO New England
4 energy rate futures? Do you recall that?

5 A. (Toscano) Mark Toscano. Yes, I do.

6 Q. And do you recall that the testimony in that case
7 was that even then, those estimates were
8 reasonable and probably conservative?

9 A. (Toscano) Mark Toscano responding.

10 Generally speaking, yes.

11 Q. And do you recall that Unitil based the local
12 transmission cost benefits on the local network
13 service rate?

14 A. (Toscano) Toscano. Yes, I do.

15 Q. And the ancillary service charge were based on a
16 recent bill from Eversource Energy, which is
17 Unitil's transmission service provider?

18 A. (Toscano) Mark Toscano. That is correct.

19 Q. And I apologize. This is Amy Manzelli
20 questioning.

21 Do you recall Unitil based the
22 regional transmission rates on the regional
23 network service and -- excuse me, and open access

1 transmission tariff rates?

2 A. (Toscano) Mark Toscano. Yes.

3 Q. Do you recall there was testimony that the
4 Department believed that these assumptions were
5 reasonable?

6 A. (Toscano) Mark Toscano. Yes.

7 Q. And do you recall there was testimony that there
8 was agreement that the Department signed on to
9 the joint letter supporting approval of the
10 petition counting credit for projected avoided
11 transmission costs?

12 A. (Toscano) Subject to check, I believe that would
13 be correct, yes.

14 Q. Thank you. This is Amy Manzelli questioning.

15 And finally, on this line of
16 questioning. Do you recall that included support
17 for the project as presented in the company's
18 direct and supplemental filings without
19 modification or conditions?

20 A. (Toscano) Mark Toscano. Yes, correct.

21 Q. Thank you. Now, I think these questions would be
22 best directed to you, Ms. Nixon.

23 Are you familiar with Liberty

1 Utility's Battery Storage pilot from Docket
2 17-189?

3 A. (Nixon) I am, but I think others on the panel
4 are as well. Liz Nixon responding.

5 Q. Sure. Thank you for that. I wasn't aware of
6 that. And this is Amy Manzelli questioning.

7 Are you familiar with the November
8 2022 Guidehouse Interim Valuation Report prepared
9 for Liberty?

10 A. (Nixon) Liz Nixon responding.

11 Again, I'm aware of it, but it's not
12 something I reviewed recently.

13 Q. Understood. And I have a copy of that if we need
14 to reference that, so just let me know. But I'll
15 ask you if you recall certain things, and you can
16 certainly let me know if you do not.

17 Do you recall that during Phase 1 --
18 that this report stated that during Phase 1, the
19 average monthly coincident peak performance was
20 79 percent and that exceeded the target of 75
21 percent?

22 A. (Nixon) Honestly, I have not looked at that
23 recently, so I can't recall any specific data

1 from that.

2 Q. Yeah, that's absolutely fine. I -- this is Amy
3 Manzelli. I can imagine, were I in your shoes, I
4 would not recall those numbers either.

5 MS. MANZELLI: Let me ask the
6 Commission's permission to approach the witness
7 to provide a copy of the report.

8 CHAIRMAN GOLDNER: Yes, please.

9 MS. LADWIG: Commissioners, if we --
10 if it's possible to provide a copy of the report
11 to others in the room as well, I think that would
12 be helpful.

13 MS. MANZELLI: We can almost do that.
14 I reported -- I provided -- Amy Manzelli
15 speaking. I provided a full copy of the report
16 to the witness. I believe what we have for the
17 rest of the room is copies of the excerpts that
18 I'm going to be speaking of, so a cover page and
19 then all of my questions regarding page 4. So I
20 think we have copies of page 4 for the rest of
21 the room.

22 MS. LADWIG: Alexandra Ladwig. Thank
23 you.

1 Is there a link to a docket or
2 anything that would have the full report either?

3 MS. MANZELLI: Yeah, absolutely. It
4 will be -- excuse me, Amy Manzelli speaking.

5 It will be in the virtual file room
6 for Docket 17-189. The report is totally
7 available.

8 CHAIRMAN GOLDNER: Do you have a
9 tab -- a tab number?

10 MS. MANZELLI: I do not, but I will be
11 able to provide that on the record after the next
12 break, or if the Commission wishes to recess, I
13 can certainly grab that real quick.

14 MR. SHEEHAN: Mr. Chairman, Mike
15 Sheehan speaking. It is the very last tab in
16 that docket, 22.

17 CHAIRMAN GOLDNER: Thank you.

18 MS. MANZELLI: With the Commission's
19 leave, I'm just going to wait until everybody has
20 a copy. Would the Commissioners like a paper
21 copy?

22 CHAIRMAN GOLDNER: No, I think we'll
23 use the tab, but just give us a moment to get

1 there.

2 Mr. Sheehan, could you -- could you
3 share that tab number again?

4 MR. SHEEHAN: Again, it is the very
5 last item on the sheet. It's Exhibit 22.

6 CHAIRMAN GOLDNER: So it's -- it's
7 under Exhibits. I was just -- I was looking at
8 tabs. It's under Exhibits, and it's marked as
9 22.

10 Okay. Are you there, Commissioner
11 Chattopadhyay, or do you need more time?

12 CMSR: CHATTOPADHYAY: Okay.

13 CHAIRMAN GOLDNER: Okay. Please
14 proceed.

15 MS. MANZELLI: Thank you.

16 BY MS. MANZELLI:

17 Q. And I apologize. My page reference in my
18 examination notes was mistaken. I'm going to
19 call everyone's attention to native document page
20 9, Bates stamp page 10. In the room's copy, the
21 text is highlighted, but the text of interest is
22 Section 2.1, Coincident Peak Demand Impacts.

23 And my question is: Does this report

1 state that during Phase 1, the average monthly
2 coincident peak performance was 79 percent, and
3 the annual coincident peak performance was 81
4 percent, and that both of those exceeded the
5 target, which was 75 percent?

6 A. (Nixon) Nixon. That's what the report says.

7 Q. Thank you. And does the report also say that, on
8 average, participants reduced their monthly bills
9 by 33 percent or the equivalent of \$60?

10 A. (Nixon) Liz Nixon.

11 Could you provide a reference to that?

12 I don't see a rate or reference for it.

13 Q. Yes, I can. Just give me a moment.

14 CHAIRMAN GOLDNER: Attorney Manzelli,
15 a couple of things. If you could move from the
16 microphone just a little bit. We're having a
17 hard time picking you up, and --

18 MS. MANZELLI: Yeah, I'm clearly --
19 yes, I will. Amy Manzelli speaking. I'm clearly
20 traumatized from the microphone not usually
21 working yesterday.

22 CHAIRMAN GOLDNER: It's -- it's hard
23 to get it right in this room.

1 And then secondly, Attorney

2 Manzelli -- this is Commissioner Goldner.

3 I just want to understand the point of
4 the line of questioning. Like, if you could just
5 kind of share where you're going, that would be
6 helpful.

7 MS. MANZELLI: Sure. The point of the
8 line of questioning is that information and
9 techniques available to develop net metering
10 exist today and are successful, doable, realistic
11 and efficient, and that supports the positions
12 that we've put forward in direct testimony and
13 will be putting forward in the following panel.

14 CHAIRMAN GOLDNER: Okay. Please
15 proceed.

16 BY MS. MANZELLI:

17 Q. Apologies for flopping on the page reference
18 there. It's native page 17, Bates stamp 18. And
19 you want to be drawing your attention to Section
20 2.3, Bill Savings.

21 And just to refresh the question. The
22 question is: Does this report state that, on
23 average, participants reduced their monthly bills

1 by 33 percent or \$60?

2 A. (Nixon) Again, I see the words on the page of
3 the report as well. And I'm not commenting any
4 further on that because, again, I haven't looked
5 at this report for a long time.

6 Q. Thank you. When the Department was actively
7 working with this report, though, the Department
8 didn't have any reason to, you know, doubt this
9 report?

10 A. (Toscano) Mark Toscano responding.

11 I spent a bit of time looking at that
12 report, and there was no reason to doubt the
13 report, and the report was fairly robust.

14 I will comment that, by simply
15 changing the battery degradation rate from 80
16 percent, which was the assumption used, to 70
17 percent, which is listed on the -- which was
18 listed on the -- the website, changed the benefit
19 cost value to 0.897.

20 So -- my point simply is that, yes,
21 the report is accurate, but when I looked at it,
22 it was right on the edge, depending on which
23 assumptions that you use. And that's true in any

1 valuation that one does.

2 Q. Understood. Thank you for the elaboration.

3 (Brief pause.)

4 MS. MANZELLI: All right. Amy
5 Manzelli speaking. Thank you to the panel. I
6 have no further questions.

7 CHAIRMAN GOLDNER: Okay. Thank you.
8 We'll move now to the joint parties for
9 cross-examination.

10 CROSS-EXAMINATION

11 BY MS. CHIAVARA:

12 Q. Thank you. Jessica Chiavara. I have just a
13 couple of clarifying question. This should only
14 take a couple of minutes.

15 The first is for Ms. Nixon. You
16 mentioned that net metered customers can
17 supplement revenue using -- or supplement the
18 compensation using ISO New England revenue. And
19 it's -- it -- my understanding, I believe
20 Eversource witnesses have testified in their
21 direct testimony that that is not possible, which
22 is why Eversource collects that revenue and
23 applies it to -- to decrease the costs of net

1 metering.

2 Would -- did you misspeak with that,
3 or -- or do you want to clarify that topic?

4 A. (Nixon) Liz Nixon. Yes, I'll clarify.

5 The ones that I'm aware of are the
6 settlement-only generators that actually say --
7 that I'm aware that Eversource does receive that
8 revenue, as many other utilities do. But it's
9 not for every unit, but -- or every system. But,
10 yes, that revenue does go to the utility, that
11 I'm aware of, not to the customer. But I don't
12 know every customer out there, so that's my
13 understanding, like you stated.

14 Q. Okay. Perfect. Thank you.

15 And then the second question, I guess,
16 would be for everyone. To the extent, I believe,
17 Mr. Toscano mentioned that we'd all be back here
18 in a couple of years when the utilities file
19 their net metered time-of-use rates, given that
20 that's two years going, which isn't a terribly
21 long time, at which point we could revisit the
22 legacy period and its efficacy or what kind of
23 expansion that it's created.

1 To the extent that the DOE believes
2 that the legacy period is an expansion, isn't it
3 a fairly discrete and pretty limited expansion,
4 since it would only apply to projects that newly
5 net meter in -- over the course of the next two
6 years until the legacy period would be revisited?

7 A. (Toscano) Mark Toscano responding.

8 It is true that it is a discrete
9 period, and it would be a limited number. But
10 our observation over the last few years, recently
11 in particular, with the 1 to 5 change, we're
12 seeing a number of larger systems come online,
13 and because of the 20-year time period being
14 so -- being so long, we're not -- we haven't done
15 the evaluation on it yet, but we had a little bit
16 of concern that we'd be locking in people to
17 things that may or may not be ideal. So that was
18 the impression.

19 Q. And -- I'm sorry.

20 A. (Nixon) Liz Nixon.

21 Just adding, just, to Mark. As
22 Mr. Toscano said, units coming online. It's also
23 units shifting from the wholesale market to the

1 net metering market. It's not just the new ones,
2 so --

3 Q. Right. Just that newly begin net metering?

4 A. (Nixon) Yeah, so -- yeah.

5 Q. And -- sorry. Jessica Chiavara.

6 And you mention -- referenced the
7 20-year period, but really, this 20-year period
8 is just a -- like about a five-year extension
9 from the existing date, correct? So we're not
10 talking about an additional 20 years.

11 A. (Toscano) Mark Toscano. That is correct.

12 Q. And then the other item is just sort of a cleanup
13 clarifying item. Some -- I believe you -- the
14 panel mentioned that the settlement does not
15 address 1 to 5 megawatt projects, but I want to
16 call your attention to the bottom of page 2 in
17 Exhibit 1, where it states that, "Electric
18 utilities shall continue to apply the large
19 customer tariff terms to projects from 1 to 5
20 megawatts as approved in Order 26,029, as
21 projects of this size are limited to municipal
22 hosts, and there's no evidence of unjust or
23 unreasonable costs for such projects."

1 Would you say that that covers
2 projects from 1 to 5 megawatts?

3 A. (Nixon) Liz Nixon responding.

4 Yes, it does. And I think that
5 what -- maybe I'm not sure what you're referring
6 to, but we were thinking the current tariff does
7 not address it --

8 Q. Oh, okay.

9 A. -- not the settlement necessarily.

10 Q. Oh, okay. Thank you very much. That's --

11 MS. CHIAVARA: Jessica Chiavara.

12 That's all I have. I believe there are other
13 settling parties that may have questions for the
14 panel.

15 CHAIRMAN GOLDNER: Okay. Anyone else
16 from the settling parties have any questions for
17 the -- oh, Attorney Krakoff, would you like to
18 begin?

19 MR. KRAKOFF: Yes, thank you.

20 CROSS-EXAMINATION

21 BY MR. KRAKOFF:

22 Q. Attorney Krakoff for Conservation Law Foundation.

23 My first line of questioning is about,

1 you know, ways some of this -- with respect to
2 the scope of the VDER study. And, you know,
3 thank you for clarifying that it was really
4 Order No. 26,316 that's in that scope.

5 And so you said that that scope was
6 developed through the stakeholder process, right?

7 A. (Perruccio) Deandra Perruccio. That's correct.

8 Q. And that -- that involved a lot of parties in
9 this room, right, in that stakeholder process?

10 A. (Perruccio) Deandra Perruccio. Yes.

11 Q. Again, Nick Krakoff, Conservation Law Foundation.

12 And what was then Commission staff at
13 the time, they issued an RFP for the study,
14 correct?

15 A. (Perruccio) Correct. Deandra Perruccio.

16 Q. Okay. Nick Krakoff again.

17 Now, the Commission, they approved the
18 scope of that study, right?

19 A. (Perruccio) Deandra Perruccio. Yes, that is
20 correct.

21 Q. And, you know, if there had been certain things
22 that the Commission had wanted the -- you know,
23 the report to look into, they could have included

1 that in their order approving the scope of the
2 study, correct?

3 A. (Perruccio) Deandra Perruccio. Yes.

4 Q. So -- Nick Krakoff again.

5 So had they wanted to -- you know, the
6 study to look at different analyses or conduct
7 different cost/benefit analyses or different rate
8 -- rate and bill impact analysis, they could have
9 specified that in their order, correct?

10 A. (Perruccio) Deandra Perruccio. Yes.

11 Q. Then the other day -- again, Nick Krakoff.

12 Sorry.

13 The other day I asked a few questions
14 of Dunsky about the environmental externalities
15 sensitivity included in the analysis, and I guess
16 that was also included in the -- in the order
17 approving the scope, correct, that requirement?

18 A. (Perruccio) Deandra Perruccio.

19 Yes, I believe the study scope
20 approval order did direct that the environmental
21 externalities be included as the sensitivities.

22 Q. Now, would it be fair to say that that -- that
23 that requirement to study the environmental

1 externalities sensitivity was related or based on
2 RSA 362-A:1, which includes the purposes and
3 objectives of net metering for New Hampshire?

4 A. (Perruccio) Deandra Perruccio.

5 I would have to look at the Commission
6 analysis as to why they decided to include the
7 scope -- to include the externalities in the
8 scope.

9 Q. Okay. Fair enough.

10 And if you recall, wasn't the
11 intention -- sorry, Nick Krakoff again. This is
12 awkward.

13 Wasn't the intention for the study to
14 inform the development of future rates by the
15 Commission?

16 A. (Perruccio) Deandra Perruccio. Yes, that's
17 correct.

18 Q. Thanks. Nick Krakoff again.

19 Shifting gears a little bit, just to
20 some of your testimony about the legacy period.

21 When -- when Order 26029 was approved
22 by the Commission, at that time, the legacy
23 period lasts for 23 years, correct?

1 A. (Perruccio) I believe that is correct. Deandra
2 Perruccio.

3 Q. Because the order went into effect in 2017, and,
4 you know, from then it was 24 years -- 23 years,
5 correct?

6 A. (Perruccio) Deandra Perruccio. That's correct.

7 Q. Nick Krakoff. Were a party -- sorry. Were a net
8 meter to interconnect today in 2024, that would
9 be a 16-year legacy period, right?

10 A. (Perruccio) Deandra Perruccio. That's correct.

11 Q. Nick Krakoff again.

12 So, you know, with the qualification
13 that we don't know what's going to happen after
14 2040, we don't know what the rates will be after
15 2040 for net meterers, but couldn't -- couldn't
16 somebody that interconnects in 2024 be worse off
17 than somebody that interconnected earlier than
18 that period?

19 A. (Perruccio) Deandra Perruccio.

20 Without knowing what future tariffs
21 may be, I don't think I could say that with
22 certainty.

23 Q. But isn't it -- again, Nick Krakoff.

1 But isn't it possible that, were net
2 metering tariffs to change after 2040, that
3 somebody that connects today could be in a worse
4 position than somebody that connected a year or
5 two ago?

6 A. (Perruccio) Deandra Perruccio.

7 It could be worse. It could be
8 better. I think there's uncertainty --
9 additional uncertainty in there.

10 Q. So you would -- Nick Krakoff.

11 You'd agree that having a continually
12 decreasing legacy period creates uncertainty for
13 interconnectors?

14 A. (Perruccio) Deandra Perruccio. Yes.

15 MR. KRAKOFF: Okay. Thank you. No
16 further questions.

17 CHAIRMAN GOLDNER: Mr. Evans-Brown, do
18 you have some questions?

19 MR. EVANS-BROWN: A couple. Sam
20 Evans-Brown speaking.

21 Mr. Krakoff did address several of the
22 issues that I was hoping to narrow in on, so let
23 me just go through and determine where to start.

CROSS-EXAMINATION

BY MR. EVANS-BROWN:

Q. So maybe I'll start here. This is Sam Evans-Brown speaking.

Are you familiar with the content of Order No. 26,221 issued on February 21st, 2019, in the last net metering docket? This is an order approving the scope and timeline of the VDER study.

A. (Perruccio) Deandra Perruccio.

Somewhat familiar, although I have not looked at that in quite a while, yeah.

Q. Sam Evans-Brown questioning.

Would you believe me if I told you that the original timeline of the VDER study was that it was to be completed in calendar year 2020?

A. (Perruccio) Deandra Perruccio.

That is entirely possible.

Q. Sam Evans-Brown questioning.

Are you fully confident that the two-year timeline laid out in the Settlement Agreement for proposing new time-of-use tariffs

1 will be met on schedule?

2 A. (Nixon) Liz Nixon responding.

3 I can't guarantee anything. Our hope
4 is it will be a short period, but I can't
5 guarantee any timeline.

6 Q. Sam Evans-Brown questioning.

7 Would you believe me if I told you
8 that this is an additional source of uncertainty
9 in the VDER marketplace that makes it difficult
10 to finance projects?

11 A. (Perruccio) Deandra Perruccio. That sounds
12 reasonable.

13 Q. Okay. Sam Evans-Brown speaking.

14 This is for Mr. Toscano. You stated
15 in your -- your -- one of your responses to one
16 of the previous questions that you -- you say
17 it's highly unlikely that net metering will end
18 in 2040.

19 What's the basis for that statement?

20 A. (Toscano) Toscano responding.

21 Simply that net metering and these
22 systems, as you know, continue to grow in
23 popularity across the country. There's no

1 rational reason to believe that it would happen,
2 and that's an opinion online on my part, of
3 course, but it's -- I doubt there's anybody here
4 that would believe that it would go away.

5 A. (Nixon) And Liz Nixon.

6 I just want to add to your previous
7 question. As I've stated earlier today, customer
8 generator can, with approval, switch to TOU now,
9 and utilities are proposing new and revised TOU
10 rates in recent dockets. So with the lack of a
11 specific net metering docket, I mean, I think
12 that customer -- in our opinion, customer
13 generators could request to be moved to those
14 existing TOU rates if they're beneficial. Those
15 that -- the timeline of a new docket isn't
16 limiting in and of itself.

17 Q. Sam Evans-Brown questioning.

18 I actually would love to have that
19 verified by the utilities, because my experience
20 as a Unitil customer who net meters is that I
21 asked to be moved to a TOU rate, and I was told
22 they are not able to do so, as recently as a year
23 ago.

1 So being a point of order, I am not
2 100 percent sure if it's the right moment to ask
3 that question, but something I would like to
4 raise at a later point.

5 A. (Nixon) Liz Nixon.

6 I just want to add. I mean, I'd have
7 to look at the -- the rules and the law, but I
8 know that there -- I can recall -- I don't have
9 the docket number offhand, but there was a
10 Liberty docket in which customer generators were
11 moved to a TOU rate, so I can get that for you.

12 Q. So maybe it's something we could resolve later?

13 A. (Nixon) Yes.

14 Q. Sam Evans-Brown questioning.

15 In one of your responses, you stated
16 that generators should be able to receive
17 compensation for wholesale markets in 2040.

18 Do you have any data as to what the
19 LMP for the New Hampshire node in the ISO New
20 England markets will be in 2040?

21 A. (Toscano) Mark Toscano responding.

22 You know, if I could do that, I
23 wouldn't be up here now.

1 Q. Sam Evans-Brown questioning.

2 Are you aware of the fact that ISO New
3 England's wholesale markets have only been in
4 existence for 25 years?

5 A. (Toscano) Mark Toscano. Yes, I am.

6 Q. Sam Evans-Brown questioning.

7 Are you aware of how often ISO New
8 England makes changes to its market design?

9 A. (Toscano) Mark Toscano.

10 No, I am not aware of how often that
11 occurs.

12 Q. Sam Evans-Brown questioning.

13 Would you believe me if I told you
14 that lenders often also do not know the answers
15 to any of those questions and are unwilling to
16 put capital at risk based on the assumptions
17 embedded in your statements previously?

18 A. (Toscano) Could you -- could you restate that,
19 please?

20 Q. Sure. Would you believe me if I told you that
21 lenders also do not know the answers to these
22 previous questions and are unwilling to put
23 capital at risk based on the assumptions embedded

1 in some of your answers?

2 MS. LADWIG: Alexandra Ladwig
3 questioning.

4 I would just object, because it seems
5 like Attorney Evans-Brown is testifying in these
6 questions.

7 CHAIRMAN GOLDNER: Mr. Evans-Brown, if
8 you could restate your question.

9 BY MR. EVANS-BROWN:

10 Q. I guess if you'd like, I can go to the next.

11 Last question, and I will say I
12 appreciate the -- the raise, but I am not an
13 attorney, so I will cop to that.

14 My last question here, I think.
15 Mr. Toscano, am I correct that you previously
16 stated, in response to Attorney Manzelli, that
17 the Department has not done any analysis to
18 support its position that a 20-year legacy period
19 is unjust or unreasonable?

20 A. (Toscano) We did not do a -- an analysis per se.
21 There was not a lot of information to base that
22 analysis on. It should have been "an" analysis
23 on.

1 MR. EVANS-BROWN: Thank you. No
2 further questions.

3 CHAIRMAN GOLDNER: Any other questions
4 from the joint parties in cross before we to
5 Commissioner questions?

6 Okay. Seeing none, we'll begin
7 Commissioner questions with Commissioner
8 Chattopadhyay.

9 BY CMSR: CHATTOPADHYAY:

10 Q. Commissioner Chattopadhyay. Good morning.

11 I'm going to first get some
12 clarification on the 1 megawatt to 5 megawatt
13 discussions that have happened. In the -- I'm
14 going to go there. Just a moment.

15 In the settlement document -- this was
16 discussed as to why, "The electric utilities
17 shall continue to apply the large customer tariff
18 terms to projects from 1 to 5 megawatts as
19 approved in Order No. 26,029."

20 This appears in Bates page 2 at the
21 end. "As projects of this size are limited to
22 municipal hosts, and there is no evidence of
23 unjust or unreasonable cost for such projects."

1 My -- I'm just curious. Are there
2 projects from 1 to 5 megawatts out there that are
3 not municipal hosts, not -- you know, or limited
4 to municipal hosts?

5 A. (Perruccio) Deandra Perruccio.

6 The current statute only allows 1 to 5
7 megawatt systems to net meter if they are
8 eligible as municipal group hosts.

9 Q. Thank you. So in the tariff -- for example, I'm
10 looking at the Eversource tariff, and this is
11 general, so I don't need to specify anything.

12 Right now, is there any provisions for
13 1 to 5 megawatts in the tariff? And I think you
14 said no.

15 A. (Nixon) Liz Nixon.

16 I was the one that said that earlier.

17 Q. Yes.

18 A. (Nixon) My understanding -- again, I'd have
19 to -- to -- to look at where you're looking, I'd
20 have to verify. But my understanding is 1 to 5
21 is not included in the tariff. I would need more
22 information.

23 A. (Perruccio) Deandra Perruccio.

1 I'm less familiar with the tariffs
2 themselves. But, yeah, my understanding is
3 they're not -- it's not explicitly addressed in
4 the tariff. It would come under the large
5 customer generator, anything that's addressing
6 them, is my understanding.

7 Q. So this statutory requirement that applies to
8 municipal hosts, does it reside in any --
9 anywhere as a tariff or -- we're just trying to
10 understand that.

11 A. (Nixon) Again, I'd have to pull up the law and
12 the tariff and everything, but my understanding
13 is it references the large customer generator
14 compensation and says to compensate them at that
15 rate. And the large customer compensation rate,
16 I believe, is in this tariff, but not -- it
17 doesn't specifically mention 1 to 5. Again, I'd
18 have to check all of that. This is listening,
19 so --

20 CHAIRMAN GOLDNER: If I could jump in,
21 Commissioner Chattopadhyay. This is Commissioner
22 Goldner.

23 This is one of the items at the

1 prehearing conference -- pardon me -- that we
2 were confused about as a Commission, and we're
3 still confused.

4 So we can certainly brief it. And we
5 would request that briefing from the parties,
6 because what is included and what's not included
7 in 1 to 5, both in the statute and in the tariff,
8 and in the -- in the joint parties' settlement,
9 we're -- we're struggling with. So -- and I
10 don't think I'm any clearer to -- right now than
11 I was yesterday.

12 So I guess my question -- I'll look at
13 Attorney Ladwig and Attorney Chiavara, if you
14 have a recommendation on how to -- to close this
15 out, because we're -- we're confused.

16 MS. LADWIG: Alexandra Ladwig
17 speaking.

18 Acknowledging it is confusing, because
19 there are multiple cross-references in the
20 statute, so there's no statute that clearly says
21 this is what a municipal host is.

22 Well, there is, but then you have to
23 cross-reference the definition for that and

1 what's included and what the compensation is. So
2 I believe it's all in statute, but you just have
3 to do some cross-referencing to figure out what
4 it is.

5 And then I'm not sure what's in the
6 utility tariff, so I would probably let the
7 utilities answer what's laid out in the tariff.

8 MS. CHIAVARA: Jessica Chiavara.

9 I -- I believe Attorney Ladwig is
10 correct, in that it is all spelled out in
11 statute. And currently, I believe, the most
12 recent addition to the statute says that the
13 Commission should consider whether there should
14 be expansion for projects over 1 megawatt. So I
15 believe it's an open question.

16 And the settling parties have done
17 that review. They have considered it. And at
18 the bottom of page 2 on Exhibit 1, they have made
19 their recommendation regarding projects from 1 to
20 5 megawatts. So we believe that the settling
21 parties have made an answer to that.

22 As to the utility tariffs, I believe
23 there is a mention that projects from 1 to 5

1 megawatts must be municipal group hosts to
2 qualify for credits.

3 CHAIRMAN GOLDNER: So I just want to
4 repeat that back and make sure that Commissioner
5 Chattopadhyay has a chance to close with this on
6 the witnesses.

7 I believe that the position from the
8 joint parties is that from 1 to 5 megawatts,
9 those participants should get the net metering
10 rate if they're -- if, and only if, they're a
11 municipal host.

12 MS. CHIAVARA: Correct.

13 CHAIRMAN GOLDNER: And does the
14 Department -- I'll look at Attorney Ladwig --
15 agree with that? Does the Department agree with
16 that recommendation?

17 MS. LADWIG: Alexandra Ladwig. Yes.

18 CHAIRMAN GOLDNER: And so the issue is
19 that when the Commission issues an order, the
20 request is that we -- that we address the
21 specific issue so that the utilities can put it
22 in their tariff?

23 MS. CHIAVARA: Yes, I believe that

1 direction would be helpful.

2 CHAIRMAN GOLDNER: Okay. Attorney
3 Ladwig?

4 MS. LADWIG: Alexandra Ladwig.

5 I agree.

6 CHAIRMAN GOLDNER: Okay. And this was
7 Commissioner Goldner asking the questions.

8 Okay. Commissioner Chattopadhyay,
9 hopefully that helps our line of questioning.
10 I'll turn it back over to you.

11 BY CMSR. CHATTOPADHYAY:

12 Q. Commissioner Chattopadhyay. I think it helped,
13 but, again, I'll maybe get a confirmation.

14 So really, when DOE is saying that the
15 tariff, as it is, for 1 to 5 megawatts should
16 continue, that is in agreement with what the
17 settlement has?

18 A. (Nixon) Liz Nixon. Yes.

19 Q. Okay. I wanted to get that confirmation.

20 A. (Nixon) I'll just elaborate more. That for --
21 it's for the large -- the municipal host would
22 get the large customer generator compensation,
23 which is energy at this point.

1 Q. Yeah, I think that's helpful at this point, to
2 make sure both are on the same page, meaning the
3 joint utilities and the DOE.

4 To me, the -- obviously, I'm looking
5 at other stuff, and I have other dockets to worry
6 about. So as I was looking at it, it wasn't very
7 clear whether there was -- whether the DOE was
8 saying that we believe it should be part of the
9 tariff and that includes, not just municipal
10 hosts, but others.

11 So I have now clarification that
12 you're still talking about the municipal hosts as
13 far as the tariff is concerned, because you
14 assume that's there, and that's what you were
15 talking about?

16 A. (Nixon) Correct. Just municipal host. This is
17 Liz Nixon, sorry.

18 Q. So it is my understanding, then, that the joint
19 utilities party -- sorry, you know, the settling
20 parties, their positioning is different from the
21 DOE's positioning on the grandfathering
22 provisions or on legacy -- on the legacy period,
23 correct?

1 A. (Toscano) Mark Toscano. Yes, that's correct.

2 Q. Okay. Any ratepayer that is interested in NEM
3 comes to -- forward, whether it's up to 1
4 megawatt or whether it's for a municipal host
5 greater than 1 megawatt, and they have to think
6 about financing, right now. Let's say it's gonna
7 happen through 2024, 2025. Your recommendation
8 is the legacy period should continue to be what's
9 in the tariff, which is 2040, and so it has fewer
10 years, certainly, in terms of continuation of the
11 tariff structure.

12 If we extend that to, let's say,
13 2046 -- just a hypothetical example here. So
14 essentially, you're sort of trying to ensure that
15 the financial risks are less for those NEM
16 customers.

17 Do you think that is always the right
18 thing to do? Is it possible that -- why
19 should -- why should the financial risk be the
20 other rates that -- other ratepayers' problem?

21 I just want to get a sense of what
22 your opinion is on that issue.

23 A. (Nixon) This is Liz Nixon.

1 I guess I don't understand how that
2 would translate to the other ratepayers. I don't
3 understand how you're translating that.

4 Q. Because that would keep the rate structure in
5 place for a longer period, and you might find
6 that the rate structure for those extra years --
7 you're talking 20 years into the future. It may
8 not be the right rate structure as far as what is
9 just and reasonable. That's -- that's -- that's
10 my question.

11 A. (Toscano) Mark Toscano responding.

12 That's really the essence of not
13 locking in now, because in at least -- I'll speak
14 on behalf of myself, and I believe it's among all
15 of us, and that is, the only thing I've heard, if
16 we develop these rates correctly, there will be
17 more opportunity to increase revenue with the new
18 structure.

19 So I'm not quite sure how that answers
20 your -- your question of then do we develop -- we
21 didn't see any point in locking things in when
22 we're -- really, everybody agrees that we want to
23 develop something like -- some new structure.

1 Q. Understood. But I agree that your confirmation,
2 basically -- you're not precisely attributing
3 the -- the reasons why you didn't accept the --
4 you know, the settlement position on legacy
5 period. But, you know, we sort of just started
6 off by stating that the financial risk, that is
7 the essence in some places.

8 That's all I needed. Thank you.

9 That's all I have.

10 BY CHAIRMAN GOLDNER:

11 Q. Okay. I'll start with an opportunity to comment
12 on the same question I asked yesterday, which is
13 that -- maybe to, like, explain why this small
14 generator tariff or rates for outgoing energy is
15 different than large generators.

16 What's the Department's logic and
17 their reasoning on that, that difference; in
18 other words, between getting default service for
19 large customers on outgoing energy versus default
20 service plus transmission plus a quarter of
21 distribution? What's the Department's position
22 on why those are different?

23 A. (Nixon) Liz Nixon. I'll start.

1 At this point, we were just saying it
2 makes sense, according to the VDER study, to stay
3 in the status quo, which is the way that it was
4 proposed before, and the VDER study supports
5 that. Others want to elaborate more?

6 Q. Yeah, could you?

7 A. (Toscano) I'm sorry. Mark Toscano responding.

8 As you heard on Tuesday, the reality
9 is they have different values, depending on where
10 they are in the system, right? So it does make
11 sense to get compensation levels -- that they
12 will vary based on where the system is and what
13 it does?

14 And for me, having been doing this
15 type of thing for a long time, we recognize that
16 there's a big value. But we also recognize
17 there's a massive complexity to try and put the
18 systems in place that allow these things to
19 happen. Yes, you can do it on a smaller pilot
20 scale, as you've heard, get some customers to see
21 how it goes, meaning time-varying rates.

22 Ultimately, that's the goal, is to get
23 to time and -- you know, (indiscernible) the

1 price signal, as you heard, and to reflect the
2 real value of that power.

3 Right now, the capability doesn't exist
4 on a large scale, at least to our knowledge, to
5 my knowledge. But having the different
6 compensation levels for different types of system
7 or -- (indiscernible) makes sense, as you heard,
8 because of the local system where the power needs
9 to get -- it's more local, and the power gets
10 absorbed locally.

11 So I think that's the reason for the
12 support now. And, as Liz Nixon said, that's what
13 the meter says, right now, what the current
14 levels of penetration of solar.

15 Q. Okay. So just to restate, the Department agrees
16 with the joint parties' position on why those
17 rates are different, being that the -- the small
18 supplier is more distributed, more spread out,
19 and the larger customer is more concentrated, and
20 so the -- the benefit is higher for the -- the
21 smaller customer. Did I rephrase that correctly?

22 A. (Toscano) Toscano responding.

23 Essentially correct, although you

1 heard -- you know, there are other components of
2 compensation that the larger folks would
3 appreciate having value, that you heard. But in
4 essence, yes.

5 Q. And so, just to follow up on that, what I heard
6 yesterday was that for these large generators,
7 any capital that the utility has to put in place
8 to support those larger systems is paid for by
9 the applicant.

10 For the residential ratepayer, the
11 small customer, there's the assumption that there
12 is no additional capital required, so there's no
13 charges or no cost to the small customer for --
14 for -- for being on the net metering tariff.

15 A. (Toscano) Mark Toscano responding.

16 That's how I understood everything as
17 well. We can say that in some areas, because
18 we're involved with some other things, that there
19 are some utilities that, when a residential
20 customer will decide to connect, they contribute
21 to a transformer or some other contribution to
22 increase the infrastructure somewhat. You're
23 starting to see that. Not in this docket, just

1 for your --

2 Q. Okay. So to repeat that back, if a residential
3 solar customer goes on the system and -- and
4 there is some kind of upgrade needed, that that
5 residential customer would pay for that or would
6 not pay for that today?

7 A. (Toscano) Mark Toscano responding.

8 To my understanding, they do not pay
9 for that now, but I'm not going to speak on
10 behalf of utilities.

11 Q. And is that something that would be locked in
12 this two-year study and would than part of the
13 study, or is that something that's not -- not a
14 topic of discussion?

15 A. (Toscano) It is part of an investigative and
16 rulemaking proceeding that's going to start as a
17 result of SB 391, that that's going to be looked
18 at in great detail. It was looked at in
19 the prior investigation that I referenced
20 earlier. That would be 20 -- 22-001. So that --
21 that's going to be kicked off imminently, and
22 those types of things will be looked at in great
23 detail.

1 A. (Perruccio) Deandra Perruccio.

2 Just clarifying the costs. I believe
3 this residential scale, there are no initial
4 fees, and it's a simpler application. But I
5 believe if it triggers upgrades, like
6 transformers, things like that, depending on the
7 upgrade, the -- the customer generator is
8 required to pay for the upgrades to the system
9 beyond sort of the base level metering
10 replacement, is my understanding.

11 Again, I don't want to speak for each
12 utility, but that's my general understanding.

13 Q. Thank you. Are any of the three of you
14 participating in either the Eversource or Liberty
15 rate cases?

16 A. (Nixon) Liz Nixon. Yes, both.

17 Q. Both. That's -- that's me too. Me too.

18 So yeah, we heard Eversource
19 yesterday, you know, talk about this, when
20 additional capital is put in place and the
21 customer pays for it. We were just talking about
22 this, and -- and now I understand it more
23 completely, and I appreciate the explanation.

1 How does that show up in a rate case?

2 So the company has to purchase the capital. They
3 have to do a lot of work in order to put these
4 solar arrays on the system. It's charged back to
5 the applicant, so -- for the most part. I know
6 there's some exceptions, but it sounds like it's
7 mostly charged back to the applicant.

8 How does it show up in a rate case?

9 The company has to -- has to purchase the
10 capital, but then it -- then it get charged back
11 to the -- to the applicant? How does that work
12 in a rate case? How would it look to the
13 Commission?

14 A. (Toscano) Mark Toscano responding.

15 I only heard a little bit about this
16 in conversation with regard to the Eversource
17 case this morning, so I'm not in a position to
18 comment. But essentially, it -- depending on how
19 they do it, it could be booked as revenue, or it
20 could be booked as an asset; and then when it
21 gets paid back, then it comes off the books.

22 But I -- it's a little outside my
23 wheelhouse in that regard. But they're supposed

1 to be adjusted out with -- for instance, when the
2 utility gets paid, it shows up. And then when
3 they get paid back, that will -- it should be
4 adjusted.

5 A. (Nixon) Liz Nixon adding.

6 Again, I'm not the expert on this
7 subject area either, but my understanding is that
8 there's some investment paperwork out there that
9 we -- that we review, at least a select portion
10 of them, and verify if they -- we think it's done
11 appropriate or not, and we'll signal out whether
12 we think things should be disallowed or not
13 included as part of our testing.

14 Q. Okay. Very good. I think the Commission, given
15 this docket, is sensitized to the net metering
16 transaction. And so when we go to the rate case,
17 we'll want to know more about, you know, how that
18 transaction works. And so if that's something
19 that the Department could help us with when we
20 get to that point in the rate cases, that would
21 be -- that would be appreciated. But
22 understanding the transaction was very helpful,
23 so thank you for that.

1 A. (Nixon) Liz Nixon.

2 Just to confirm, we are looking at it.

3 Q. Okay. Okay. Thank you. I just didn't want to
4 surprise you in the rate case that more questions
5 are coming.

6 A. (Toscano) Can I add additional to that?

7 Q. Yes.

8 A. So one of the things the application fees are
9 supposed to do, when they're outlined and
10 upgraded, is to help offset some of the costs for
11 software-type things for processing some
12 applications and things like that.

13 And how that gets reconciled, like I
14 said, we will be moving into that; for instance,
15 some of the front-end systems that the utilities
16 are putting in place, PowerClear and things of
17 that nature. So where those costs get accounted
18 for, we are very much looking into.

19 Q. Okay. What I understood that it meant their
20 costs to cover were the people that the utilities
21 need to provide to do the work, plus some of the
22 software pieces; is that correct?

23 A. (Toscano) That's my understanding. Mark Toscano

1 speaking. Yes.

2 Q. Okay. Thank you. Yes. Commissioner Goldner
3 questioning.

4 Okay. Thank you. Okay. So I'll just
5 ask this one last line of questioning, then we'll
6 take a break and wrap up with Commissioner
7 questions and then go to -- go to redirect.

8 So if the Commission were to approve
9 the joint parties' proposal, with the adjustment
10 as recommended by the Department, if that were
11 the outcome, would there be any Puc 900 rules
12 that would need to change?

13 A. (Perruccio) Deandra Perruccio.

14 Beyond the ones that already require
15 updating? I think no. It's part of the -- the
16 logic there is that it reduces all of the
17 administrative, you know, costs and time to make
18 those changes, especially considering if it's
19 going to be revisited in a couple of years.

20 Q. And if the -- if the Commission were to approve
21 the joint parties' settlement in its entirety,
22 would it require any changes to the 900 rules?

23 A. (Toscano) Mark Toscano responding.

1 I would think so. We know so.
2 Depending on what ultimately comes out of this,
3 they will be incorporated into the 900 rule
4 update, which we are in the process of doing
5 right now.

6 Q. Okay. And then if the CPCNH proposal is approved
7 in its entirety, I think it's fair to say that
8 there would be updates to the 900 rules as well?

9 A. (Perruccio) Deandra Perruccio.

10 Yes. I think that would be a more
11 significant set of changes. I believe the
12 settling parties would -- the legacy period as
13 well would likely need to be addressed there.

14 Q. Okay. And can -- for -- can the Department share
15 its plan. Because as you said, the 900 rules
16 require a number of updates in any case. Can you
17 share the timeline that the Department is on for
18 the -- the current updates and then sort of some
19 idea of -- of any updates with either the two
20 scenarios of how long it would take to update the
21 900 rules or an idea of the current timeline?

22 MS. LADWIG: This is Attorney Ladwig.
23 I can take that quick.

1 I believe Mr. Toscano mentioned
2 there's a -- the Department is required to open
3 an investigation and rulemaking into
4 interconnection as a result of SB 391, which
5 deals -- which is an extensive part of the 900
6 rules.

7 So I believe you'll be seeing an
8 investigation of rulemaking into the 900 rules
9 from the Department shortly. But we don't have
10 the specific timeline at the moment.

11 CHAIRMAN GOLDNER: Okay. The
12 Commission hopes to collaborate with the
13 Department on this topic, given that it's -- it
14 affects both the PUC and the Department. Okay.
15 Thank you.

16 Commissioner Chattopadhyay, do you
17 want to have one more question before the break?

18 BY CMSR. CHATTOPADHYAY:

19 Q. Commissioner Chattopadhyay.

20 Do any of -- do any one of you know
21 much about FERC Order 2222?

22 A. (Toscano) Mark Toscano.

23 Very little. I have read it, and I

1 have not absorbed it yet, but it -- and a lot of
2 things, as you heard the other day, have -- the
3 utilities have not had a chance to start
4 implementing some of that.

5 Q. So -- Commissioner Chattopadhyay.

6 My understanding is it's -- informs me
7 about the DER application, and it tries to
8 facilitate that and allow it to be part of the
9 wholesale electric markets. I'm just explaining
10 what it is. So -- and then it might take time to
11 happen.

12 I assume it has -- I think, my
13 understanding, it has complied with those
14 requirements. So I'm just indicating that a lot
15 of the discussions that you're going to have over
16 the next two years may have to be also informed
17 by that order, because this is a -- situation is
18 in a flux, really, going forward. So I would --
19 I would just highlight that.

20 I would appreciate if the DOE is
21 making sure it's looking at that aspect as well.

22 A. (Nixon) This is Liz Nixon.

23 I just want to note that the person

1 that probably knows the most about that is not
2 part of this panel, so -- but the DOE is aware.

3 Q. I think I heard this for the first time, so thank
4 you.

5 A. (Nixon) Yeah.

6 CHAIRMAN GOLDNER: Okay. Let's take a
7 -- let's take a 30-minute break, returning at
8 five of, and we'll return with the final
9 Commission inquiries, if any, and then move to
10 redirect. Off the record.

11 (Recess taken.)

12 CHAIRMAN GOLDNER: Okay. Back on the
13 record. The Commissioners have no further
14 questions, and we'll move to redirect.

15 REDIRECT EXAMINATION

16 BY MS. LADWIG:

17 Q. Alexandra Ladwig. Thank you.

18 Attorney Manzelli on cross asked you a
19 couple of questions about Unitil Kingston solar
20 project and Liberty's battery storage pilot.

21 Could you explain your position on
22 those two pilots or -- apparently, Unitil was a
23 pilot -- those two topics or programs as they

1 relate to your recommendations in this docket?

2 A. (Toscano) Mark Toscano responding, initially to
3 Liberty's battery project.

4 And that was, and is, very much a
5 pilot project, and the intent was to learn from
6 that project. And Liz Nixon can further comment
7 on some of the historical parts and concerns, but
8 one of them was that Liberty did not have the
9 capability at the time to necessarily communicate
10 when -- when (indiscernible) load shifting
11 periods were there. And ultimately, they had to
12 require -- and also to ensure that renewable
13 energy was used to charge the batteries, because
14 that's still kind of the statute for net
15 metering -- in the statute for net metering. So
16 they rely on the Tesla company to do that.

17 So the long story short is, it's a
18 pilot project that we're learning from. And what
19 we learned from that, ultimately, the intent is
20 to some day then bring that out to a larger group
21 of customers, assuming that it continues to make
22 sense.

23 In the case of Kingston solar -- the

1 Kingston solar project, while that's not
2 technically a pilot from your comment, it is very
3 much a learning experience to operate as a load
4 reducer, and we heard talk about that on Tuesday.

5 And it was -- just some of the
6 comments and questions that came earlier were
7 very valid. That we're looking at projections.
8 We're going to look at how it actually performs
9 versus the basic assumptions that went into it.

10 So it's not something that you can
11 extrapolate across the entire energy system, in
12 our view and -- at least not now, because these
13 are very specific projects.

14 A. (Nixon) If I can just add a little more on the
15 Liberty battery storage and the customer
16 generator piece of that.

17 For the customers that are
18 participating in that pilot that have solar, we
19 had concern that the batteries could charge from
20 the -- that the batteries needed to charge from
21 the solar in order for them to get net metering
22 compensation, and Tesla was able to guarantee to
23 us that they were -- that they could guarantee

1 that that was happening.

2 But otherwise, we're not sure that
3 there's a guarantee that those batteries will be
4 charged from the solar for the renewables, which
5 is the statutory requirement.

6 MS. LADWIG: Alexandra Ladwig.

7 Thanks. That's all I have.

8 CHAIRMAN GOLDNER: Okay. Thank you to
9 the DOE witnesses for testimony today. The
10 witnesses are excused, and we'll invite the CPCNH
11 witness to the witness box.

12 (Brief pause.)

13 CHAIRMAN GOLDNER: Okay. Moving on to
14 CPCNH. I will ask the witness to please identify
15 himself for the record.

16 THE WITNESS: I am Clifton Cross
17 Below.

18 CHAIRMAN GOLDNER: Thank you. And can
19 you please raise your right hand.

20 (Whereupon, CLIFTON BELOW was duly
21 sworn by Chairman Goldner.)

22 CHAIRMAN GOLDNER: Thank you. The
23 witness is ready for direct.

DIRECT EXAMINATION

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

BY MS. MANZELLI:

Q. Thank you. And, Mr. Below, could you please state your title with the Coalition?

A. I am the chair of the Coalition, the chair of the board of directors.

Q. Thank you. And as -- Amy Manzelli questioning.

And as I stated before, to avoid the alphabet soup, we're going to call the Community Power Coalition of New Hampshire the "Coalition" for the purposes of your testimony today, okay?

A. Okay.

Q. Now, just briefly, concisely, imaging you're talking to a room full of sixth graders here with no background in energy. Tell us what it is that the Coalition does and who they are.

A. (Below) Yes. Clifton Below responding.

The Coalition is a governmental instrumentality, which wouldn't be understood by, necessarily, a young person, but that means it's an extension of subdivisions of the state by operating -- exercising municipal and county authorities.

1 And it is comprised of 58 municipal
2 members and two county members, and it operates
3 through a joint powers agreement that the
4 governing boards of all of our communities have
5 executed.

6 And it also functions as a joint power
7 agency, procuring power to supply power to
8 customers of our members who have launched mini
9 power aggregations.

10 Q. And could you just clarify, by what authority
11 does the Coalition operate? You know, are you
12 chartered in the 1800s or -- just identify the
13 authority, please.

14 A. (Below) It's RSA 53-A, which concerns the joint
15 exercise of powers by subdivisions of the state
16 and state agencies.

17 Q. Thank you. Now, again, without getting into the
18 substance of your testimony yet, do you have any
19 updates or corrections to your pre-filed
20 testimonies on behalf of the Coalition, which are
21 in this docket marked as Exhibits 13 and 14?

22 A. (Below) Yes, I do.

23 Q. All right. Could you please go over those

1 corrections for us?

2 A. (Below) Just a few. Clifton speaking.

3 In Exhibit 13, at page 5, it's just
4 some of the background on the Coalition, so I
5 need to update that. At line 4, it reads the
6 Coalition is a joint powers agency of 48. It's
7 now 58 New Hampshire municipalities. And one
8 county; it's now two.

9 Our current members comprise about, at
10 that time -- I wrote this half a year ago -- 30
11 percent of the state's population. That's now
12 about 36 percent of the state's population.

13 We currently serve -- it said 80,000.
14 About 80,000 customers in 14 communities. It's
15 now -- we're now serving over 140,000 customers
16 and 36 communities power aggregations -- serving,
17 actually, 42 municipalities, including
18 (indiscernible) state programs that are operating
19 on an opt-out basis as alternative defaults for
20 the supplier.

21 Q. Thank you. And with those updates, do you adopt
22 your testimony?

23 A. (Below) I have an update to Exhibit 14 as well.

1 Q. I apologize. Amy Manzelli speaking.

2 Please, Mr. Below, continue your
3 update.

4 A. (Below) Yes. Clifton speaking.

5 On Bates -- Exhibit 14, at Bates page
6 15, line 8, there's a reference to CPCNH 1-001.
7 That's incorrect. It should be CPCNH 1-003E.

8 And there's actually one other
9 correction, I think, to Exhibit 13. Hold on just
10 a second. (Brief pause.)

11 Oh, maybe it's in Exhibit 14, I'm
12 sorry. Ah, I'm sorry. I misplaced where it is,
13 but -- but there is a calculation in here that
14 refers to .08 per kilowatt hour concerning the
15 RPS compliance obligation, and it should be .008,
16 and that -- but the resulting calculation from
17 that number is actually correct.

18 I apologize that I can't put my finger
19 on it, but --

20 Q. Amy Manzelli speaking. Thank you, Mr. Below. I
21 think the correction is understood.

22 Any other corrections to your
23 testimony --

1 A. (Below) No.

2 Q. -- marked as Exhibits 13 and 14? Okay.

3 With those updates and corrections, do
4 you adopt your testimonies marked as Exhibit 13
5 and 14 as your sworn testimonies in this case?

6 A. (Below) Clifton speaking. Yes.

7 Q. Okay. And then, it is fair to say that inside
8 those testimonies, especially in Exhibit 13, they
9 document much of your extensive experience in the
10 energy sector?

11 A. (Below) Yes.

12 Q. And again, just keeping at a high level here
13 without getting into many of the details, is it
14 fair to say that you have a comprehensive,
15 well-rounded, and deep experience in energy that
16 stems from being a legislator, a regulator, and a
17 lot of other roles in the energy field?

18 A. (Below) Yes.

19 Q. And again, keeping this at a very high level, is
20 it fair to say that a great deal of your
21 experience is relevant to net metering?

22 A. (Below) Clifton speaking. Yes.

23 Q. Amy Manzelli questioning.

1 With your experience and background in
2 mind -- and again, keeping things high level
3 here -- please explain, how did we get to this
4 docket for consideration of changes to the
5 current net metering tariff structure, including
6 compensation with customer generators, and what
7 should the Commission be doing here?

8 A. (Below) Clifton speaking.

9 About a decade ago, which was already
10 about 16 or 18 years after the original act of
11 connecting of net metering, after there had been
12 some legislative expansions of net metering, such
13 as from 100 KW as the maximum size to 1 megawatt,
14 there was growing concern in the legislature that
15 there might be some excess compensation or
16 subsidy, if you will.

17 And so, in the follow-up to 2015,
18 Senator Bradley drafted legislation. He was then
19 the chair of the Senate Energy Committee, that
20 triggered the last review of net metering. They
21 put into statute the first legislative mandate to
22 update net metering tariffs, and delegated that
23 to the Commission.

1 The -- in fact, I participated in
2 that. There were actually two dueling
3 settlements, and I and others tried to bring the
4 parties together. There ended up being a lot of
5 overlap. I ended up being the only party who had
6 filed testimony initially, who wasn't part of the
7 two settlements. The PUC staff wasn't either.
8 And the -- I advocated for somewhat middle
9 ground. The Commission did that.

10 And one of the frustrations, I think,
11 about the Commission at the time, and the parties
12 had, was a lack of data, so that obviously -- one
13 of the things that came out of that was the need
14 for better data.

15 And since that time, the legislature
16 has continued to add text to the statute, asking
17 the Commission to do additional review of net
18 metering, and that's what has brought us here
19 today.

20 Q. Thank you. Amy Manzelli questioning.

21 Calling your attention to Exhibit 13,
22 which is your direct testimony, and in particular
23 your attachments, you have emphasized the words

1 here in lots of different ways. So calling your
2 attention to the words, on Bates stamp page 49,
3 that you have highlighted and italicized. Could
4 you please explain what your opinion is of the
5 significance of that text? Again, that's page --
6 Bates stamp page 49 of the attachments in your
7 Exhibit 13.

8 A. (Below) And Bates page 48 is where it begins.

9 That is an annotated -- this was
10 annotated by me -- description of some of the
11 legislative history and, essentially, a review of
12 all the language -- statutory language around net
13 metering.

14 And what you see is words that have
15 been added since 2016, first -- since the first
16 enactment of everything after Roman 15, or Roman
17 15 going down. Roman 15 is the grandfathering
18 provision that the legislature put in, to 2040.

19 And what we see is that since then,
20 and -- this was since the outcome of the last
21 docket on net metering. The legislature has
22 added additional language here, such as, I think,
23 directing the Commission to continue to develop,

1 and periodically review, alternative -- new and
2 alternative net metering tariffs.

3 And they actually added some
4 additional language about -- in the review of
5 what the Commission shall consider, including
6 balancing the interests of customer generators
7 with those of electric utility ratepayers, by
8 maximizing any net benefits, while minimizing any
9 negative cost shifts from customer generators to
10 other customers, and from other customers to
11 customer generators.

12 And the -- the significance of that is
13 that the legislature was recognizing that there
14 was a possibility of subsidy in both directions.
15 And they want the Commission to consider how we
16 can maximize net benefits while minimizing those
17 potentially negative cost shifts in either
18 direction.

19 And then you also see -- and, of
20 course, the Commission put much of this in their
21 Order of Notice. Through the rest of the
22 chapter, up to Bates page 52, are additional
23 questions that the Commission -- that the

1 legislature asked the Commission to consider at
2 some point, and in particular, some specific
3 questions about what's appropriate for larger
4 than 1 megawatt projects, in this -- essentially,
5 in this proceeding, because it says, once the
6 distributed energy resource valuation study is
7 completed and the Commission opens a docket, it
8 asks the Commission to consider a number of
9 questions, which our testimony -- my testimony on
10 behalf of the Coalition goes to some length to
11 try to address how the Commission can, in fact,
12 better achieve and take into consideration all
13 these questions that the Commission -- that the
14 legislature has asked the Commission to try to
15 resolve through an adjudicative procedure.

16 Q. Thank you. Amy Manzelli questioning.

17 And so, the -- Mr. Below, the question
18 that you've identified in the statute, this
19 Commission has never yet, until this docket, had
20 an opportunity to answer these questions; is that
21 correct?

22 A. (Below) Well, they certainly haven't had the
23 legislative directive to do it. Whether they

1 could have on their own, I'm not sure. But yes.
2 This would be the first time many of these
3 considerations are addressed.

4 Q. Amy Manzelli questioning.

5 I want to draw your attention to
6 Exhibit 32, which is a collection of the
7 Coalition's answers to a handful of record
8 requests.

9 Are there any record requests from the
10 Commission that speak to the overarching purpose
11 for which we're here today that you would like to
12 address at this time?

13 A. (Below) Yes. Clifton speaking.

14 Exhibit 32, at page 5, provides a
15 little bit of context. It was in response to the
16 Commission's question about, is any amount of
17 cross-subsidization appropriate and acceptable?

18 And I pointed out that in that last
19 docket, DE 16-576, I observed that net metering
20 started out and developed prior to 2016 as a
21 rough justice, legislatively determined, and that
22 the development of alternative net metering
23 tariffs, net metering 2.0, by statute, is to be

1 reviewed and approved by the Commission.

2 And that in that last case, it was an
3 opportunity to make rough justice somewhat more
4 granular and accurate. And in this case, I think
5 the Commission has an opportunity to continue to
6 refine that rough justice, make it more accurate,
7 and, in the process, minimize undue and not
8 reasonably necessary cost shifting or
9 cross-subsidization that may be considered unjust
10 and unreasonable because it's undue. It's not
11 really necessary to continue certain cross-
12 subsidizations.

13 Q. Thank you, Mr. Below. Amy Manzelli questioning.

14 Now, just last sort of big-picture
15 question before we move to the Coalition's eighth
16 recommendations here.

17 Can you just please briefly explain
18 the Coalition's overarching concerns that are
19 driving the Coalition's eight recommendations?

20 A. (Below) Oh, yes. I think our concern is that
21 we -- we don't want to see New Hampshire make,
22 arguably, some of the mistakes that Massachusetts
23 and Maine, for example, have made.

1 And what I refer to is the lack of
2 temporal price signals. We've heard already
3 testimony in recognition that all kilowatt hours
4 are not the same. And yet, current -- the
5 current status quo essentially says, all kilowatt
6 hours are equal.

7 And we heard from the Dunskey
8 witnesses, for instance, that that structure --
9 there's no financial reason to design projects
10 that help reduce coincident peak demand, for
11 instance. Which has a lot of value, as that
12 study showed, for instance, by allowing storage
13 to be coupled with net metering generation. It
14 increases the value.

15 And likewise, the Unitil single-access
16 tracker shows that you get a different investment
17 when you take into account the temporal value of
18 the production of solar.

19 And we also heard from Brian Rice on
20 behalf of Eversource that Massachusetts, where
21 they essentially have legislatively determined
22 compensation structures, that they saw a rapid
23 build-out over time of projects that, I believe,

1 are almost exclusively designed to optimize the
2 one-hour production at the lowest cost, which is
3 fixed orientation, facing south, so they produce
4 the most solar "noon."

5 And what we see in the Unitil
6 single-access tracker case is that you get a
7 different investment decision, which is,
8 arguably, much better in the long run, because
9 the single-access tracker, for instance, produces
10 more in the morning and more in the late
11 afternoon. So it actually has a production
12 profile that better matches the load.

13 And we also heard that once you build
14 out the hosting capacity, you run into a
15 situation where, without very expensive upgrades,
16 you can't add more distributed resources.

17 New Hampshire has the opportunity, as
18 the legislature has, you know, really asked the
19 Commission to do, to use price signals, temporal
20 price signals, to incentivize smarter and,
21 ultimately, more beneficial investments.

22 And I'll just give an example of this
23 from the City of Lebanon. When the city went to

1 do an RFP to develop some solar projects, we had
2 this one site that has like less than .5 percent
3 shading at the airport, and we had one proposal
4 for dual-access trackers, which are fairly widely
5 used in Vermont, and we had a proposal for a
6 fixed orientation system. And the dual-access
7 trackers were somewhat more expensive. They have
8 more operating costs.

9 But when I analyzed it based on the
10 underlying cost causation, it produced on the
11 order of 20 percent or more value per kilowatt
12 hour, which is similar to sort of what Unitil
13 found with the single-access tracker project.

14 I will also say that the Coalition has
15 been approached by on the order of a dozen
16 developers who have prospective sites in the
17 state, and those sites, in conversations with --
18 with some of them, they've said if there's -- if
19 you get credit for reported transmission costs,
20 we'll build a single-access tracker, like they do
21 in New York, or -- and -- or we'll come up with
22 battery storage. If we don't, if we have the
23 status quo, we'll just build more south-facing

1 solar.

2 So the -- the --

3 Q. Mr. Below, thank you. Amy Manzelli questioning.

4 To summarize the overarching concern,
5 would it be fair to say that the Coalition wants
6 to get it right and get it right now?

7 A. (Below) Yes.

8 Q. Thank you. So let's move on to the eight
9 specific recommendations. For each of the
10 Coalition's recommendations, here's how we're
11 going to do it. I'm going to ask you three
12 overarching questions, and they're going be:
13 First, whether the Settlement Agreement changes
14 the Coalition's position; second, to explain what
15 the Coalition's recommendations is, along with
16 the reasoning behind the recommendation; and then
17 once we're done with that, I'll ask you to
18 identify, to the extent you haven't already, the
19 evidence that supports the Coalition's
20 recommendation, okay?

21 A. (Below) Okay.

22 MR. TAYLOR: If I may, just before we
23 go down this path -- I don't know that I'm going

1 to state this as an objection, perhaps as an
2 observation, that typically direct in these cases
3 is somewhat limited before the witness is open to
4 cross-examination.

5 To the extent that Attorney Manzelli
6 and Mr. Below are going to walk through their
7 testimony, which is already in written format for
8 the Commission, that may not be the -- the best
9 use of the Commission's time today. So, just an
10 observation I'll offer to you.

11 CHAIRMAN GOLDNER: Thank you,
12 Attorney Taylor. The -- I was on the verge of
13 making the same point, Attorney Manzelli. I
14 think, as I mentioned to the Department of Energy
15 but I failed to mention before to the Coalition,
16 we do have the pre-file testimony, and we should
17 just limit it to clarifications or corrections to
18 the pre-filed testimony.

19 So if there's anything you'd like to
20 clarify or correct, please do that. Otherwise,
21 we do understand the Coalition's recommendation.

22 MS. MANZELLI: Thank you, Commissioner
23 Goldner. Certainly, we do not plan to have --

1 nor have we yet had Mr. Below simply take the
2 stand to, you know, read his testimony. None of
3 the panels have done that yet, nor would we plan
4 for that. However, all of the panels have gone
5 over a full review of the substance of their
6 testimony, which is what we plan to do.

7 CHAIRMAN GOLDNER: So let me ask you,
8 which exhibit are you going to work off of?

9 MS. MANZELLI: Exhibit 13, and as well
10 as Exhibits 16 through 32.

11 CHAIRMAN GOLDNER: So I think if -- if
12 you have sort of a -- a brief summary, that would
13 be okay. But I do -- I do think that we have an
14 understanding of what the Coalition is asking
15 for, and I'm most interested in hearing the cross
16 from the DOE and the joint parties.

17 So I think -- I think your testimony
18 is well understood, and I guess I'm grasping for
19 what -- what -- what the Coalition would like to
20 add at this point.

21 MS. MANZELLI: Sure. And it's not so
22 much adding as it is emphasizing. You know, the
23 Commission has noted in this docket, as well as

1 others, that it is, you know, variably buried in
2 papers in these dockets, and that it is, you
3 know, in your position up in the dais, difficult
4 to follow the pile of words that you end up
5 getting, especially now, post-hearing brief,
6 exhibits, position statements.

7 So the hearing is the opportunity to
8 bubble up to the most important points for any
9 given party. So that's the opportunity the
10 hearing presents and the opportunity which, you
11 know, we plan to engage in today.

12 CHAIRMAN GOLDNER: Okay. There are an
13 abundance of filings here. 32 exhibits might be
14 a Commission record of some kind. Former
15 Commissioner Below could maybe find one where
16 there was more, but this is a lot. So I think we
17 will benefit from a boiling down of the issues.

18 MS. MANZELLI: Yeah.

19 CHAIRMAN GOLDNER: And a
20 simplification, and we would like to hear more on
21 that, but please -- please keep it limited to
22 just clarifying for the Commission what your ask
23 is today.

1 MS. MANZELLI: Yeah. And to that
2 point, I will literally read from the question
3 here.

4 BY MS. MANZELLI:

5 Q. Mr. Below, especially where the Settlement
6 Agreement does not change the Coalition's
7 position, you've already written it all down on
8 the record in this docket, so I'm going to
9 encourage you to boil those recommendations down
10 to their essence in your testimony today, so we
11 can move through that material quickly, okay?

12 A. (Below) Okay.

13 Q. Does the Settlement Agreement change the
14 Coalition's recommendations about grandfathering?

15 A. (Below) Only to a very limited extent. And --
16 and let me briefly expand on that. Clifton
17 speaking.

18 We do believe that it's important to
19 have a 20-year certainty as to the general rate
20 structure that new projects will be developed and
21 compensated under. So that is important. We, I
22 think, share the Department's concern, and
23 perhaps some of the concern expressed by the

1 Commission, that just locking into the full
2 default service rate over the next 20 years might
3 not be ideal.

4 And so we are comfortable and
5 confident saying that, yes, there should be a
6 20-year legacy period, particularly if the
7 Commission accepts some of the recommendations of
8 the Department with regard to time-of-use rates,
9 where they could be available sooner than later,
10 as well as -- it's particularly important
11 recognizing credit for avoided transmission
12 costs.

13 Q. And, Mr. Below, I'm going to move on here to
14 refer to -- Amy Manzelli speaking.

15 Please refer to Exhibit 28, and also
16 reference the testimony we heard yesterday, where
17 Unitil testified that its applications are up
18 approximately five times.

19 Can you elaborate on the magnitude of
20 possible new projects coming online as it relates
21 to the importance of not locking in?

22 A. (Below) Yes. Exhibit 28 is a response by
23 Eversource to a question from the Consumer

1 Advocate, which is about the amount of capacity
2 in the queue that are waiting interconnection
3 consideration.

4 And what it shows is that, while
5 there's a lot of projects under 100 KW and only a
6 few over 1 megawatt -- 47 compared to 2400 -- the
7 amount of capacity in the 1 megawatt or greater
8 is about 296 megawatts out of 332 total, which is
9 roughly eight or nine times as much as under 1
10 megawatt.

11 So it indicates there's a potential
12 for a lot of development in the foreseeable
13 future of projects 1 megawatt or greater.

14 Q. And, Mr. Below, if all of these projects were to
15 stay locked in at the current status quo, what
16 would that mean for justness and reasonableness?

17 A. (Below) Well, I think what it would mean is we'd
18 get a lot of suboptimal projects built that are
19 not maximizing value to ratepayers.

20 And I just do want to mention that we
21 heard testimony from Unitil about the rapid
22 increase in proposals. And just a related
23 concern, which I think should be considered, is

1 the fact that it's quite possible and, in my
2 view, more likely than not, that a year from now,
3 the legislature, after it changes with the next
4 election, and we'll have a new Governor.

5 Regardless of who's the Governor, there will be
6 legislation just to open up net metering to 5
7 megawatts without the municipal host construct.

8 Q. I appreciate your perspective, but you can't be
9 certain of that.

10 A. (Below) No, but it's a possibility.

11 Q. Amy Manzelli questioning.

12 And you mentioned several suboptimal
13 projects being the result of all of these
14 projects coming online and being locked into the
15 status quo.

16 Could you explain what you -- what you
17 think would be the impact on the non-NEM
18 customers in that scenario?

19 MR. KRAKOFF: Objection. Speculation.
20 It's Nick Krakoff.

21 CHAIRMAN GOLDNER: Could you rephrase
22 your question, Attorney Manzelli?

23 MS. MANZELLI: Sure.

1 BY MS. MANZELLI:

2 Q. Do you believe that the rate to non-NEM customers
3 would remain just and reasonable in that
4 scenario?

5 MR. KRAKOFF: Again, objection. I
6 mean, I think that's completely speculation.
7 Totally speculative. This is Nick Krakoff.

8 He has no idea what's going to happen
9 in that point in time, so I don't think he should
10 be allowed to answer the question.

11 MS. MANZELLI: With all due respect,
12 why is that any more speculative than the
13 Settlement Agreement that rejects a just and
14 reasonable rate through a legacy period?

15 CHAIRMAN GOLDNER: I'll allow the
16 answer, and the Commission will give it the
17 weight it deserves.

18 THE WITNESS: (Below) Clifton
19 responding.

20 I am concerned that over the long
21 term, just locking into the status quo would not
22 be just and reasonable. I think it's reasonable
23 for the short term, but not the long term.

1 BY MS. MANZELLI:

2 Q. And to the extent that we haven't touched on
3 all of the evidence that supports the
4 Commission's [sic] recommendations with respect
5 to grandfathering, is there any other evidence in
6 the record that you wish to point to at this
7 time?

8 A. (Below) Oh, no, not really. I -- I would just
9 comment that there is a fair amount of evidence
10 in the record about the potential growth of -- of
11 projects.

12 Q. Thank you, Mr. Below. Second recommendation.
13 Let's turn to RSA 362-A:9, XVI(a). So this is
14 asking the question, whether or not exports to
15 the grid by customer generators taking default
16 service should be accounted for as a reduction to
17 what would otherwise be the wholesale load
18 obligation of the load serving entity producing
19 default service absent such exports to the grid.

20 Did the Settlement Agreement change
21 the Coalition's recommendation about this?

22 A. (Below) Clifton answering. No.

23 Q. Okay. So, given that this is one of the

1 recommendations the Coalition has already
2 documented in its testimony, just please, very,
3 very briefly touch on, what is the Coalition's
4 recommendation here?

5 A. (Below) Our recommendation is that we need to
6 improve how we account for exports to the grid.
7 They're not accounted for. They're treated as
8 unaccounted-for energy, so the benefit kind of
9 disappears. Although it exists, it's just not
10 transparent, and it's not accounted for, so we
11 can't really put a number on it.

12 So our recommendation is that the
13 Commission direct the utilities to begin planning
14 to consider updating their load settlement
15 systems by competitively soliciting proposals
16 that could modify their load settlement systems
17 to account for exports to the grid as an offset
18 to the supplier's wholesale load obligation.

19 And I do want to mention, we've heard
20 questions about FERC Order 2222. I would simply
21 note that that is sort of a parallel process, in
22 which FERC is saying we need to allow aggregated
23 distributed energy resources to participate in

1 the market where there are temporal price
2 signals. That's as frequently as five minutes,
3 which is the same frequency which supply in the
4 interstate wholesale market to settle that.

5 So we would recommend the Commission
6 direct the parties to convene a stakeholder work
7 group to begin to think about how this might
8 change and how it might be done in a way that is
9 consistent with the requirements that are likely
10 to be implemented from FERC Order 2222.

11 Q. Thank you, Mr. Below. And there are a number of
12 record requests contained in the exhibits that
13 you believe are relevant to these
14 recommendations, correct?

15 A. (Below) Correct.

16 Q. Let's turn to Exhibit 18. Would you please
17 explain briefly how this is relevant to your
18 recommendations?

19 A. (Below) And I will say -- Clifton speaking --
20 that there is quite a subset of these, and I
21 think that in the interests of time, we probably
22 don't need to go through every one of them,
23 although I'd certainly be happy to do that. I

1 think they're there.

2 Q. Mr. Below, with your cue, I could take these in a
3 much quicker fashion.

4 Do you believe that Exhibits 18
5 through 26, which are various record requests,
6 are relevant and support the Coalition's
7 recommendation that we just reviewed?

8 A. (Below) Yes.

9 Q. Okay. Amy Manzelli speaking.

10 And all of these are pre-responses by
11 the Coalition, correct?

12 A. (Below) Correct.

13 Q. Do you wish to adopt these record requests as
14 supplements to your testimony?

15 A. (Below) Clifton speaking. Yes, I do.

16 Q. Thank you. Turning to Exhibit 29, which is a --
17 another record request -- request, but in this
18 instance answered by Joseph Swiss -- Swift,
19 excuse me.

20 Do you believe that that is also
21 relevant to and supports the Coalition's
22 recommendation?

23 A. (Below) Yes. That response, and the one that

1 follows in Exhibit 30 from Unitil, do indicate
2 that the parent line losses that they publish and
3 that they assume, for settlement purposes in
4 Eversource's case, 7.1 percent, are, in fact,
5 much lower because of the added accounted-for
6 energy, of which exports to the grid by net
7 metered customers appear to be a significant
8 component, but not the only component.

9 And what that indicates is there was
10 also a response that it's actually possible for
11 the parent line loss to go negative, which means
12 to supply a megawatt of power on the grid,
13 probably particularly on a sunny, solar-producing
14 day, you have to buy less than 1 megawatt from
15 the ISO New England market to serve that 1
16 megawatt because of the unaccounted-for energy.

17 Q. Thank you, Mr. Below. Amy Manzelli questioning
18 here.

19 So that covers recommendation No. 2.
20 Let's turn to No. 3.

21 A. (Below) Okay.

22 Q. This is the next question in the statute, A-9,
23 Section XXIII, and the question is: The

1 Commission shall consider, as part of its
2 consideration of net metering tariffs that apply
3 to newly constructed customer generators with a
4 total peak generating capacity of greater than
5 1 megawatt, whether or not the monetary credit
6 should include compensation for services and
7 value not currently compensated, such as avoided
8 transmission, distribution, and capacity costs
9 and other grid services.

10 So for this question, did the
11 Settlement Agreement change the Coalition's
12 recommendation?

13 A. (Below) Yes, somewhat.

14 Q. Go ahead and -- Amy Manzelli questioning.

15 Go ahead and explain that, please,
16 Mr. Below.

17 A. (Below) Clifton responding.

18 We recommended some fairly extensive
19 ways to account for avoided transmission and
20 capacity costs. And, of course, the question in
21 the statute refers particularly to over 1
22 megawatt. Our -- I think our -- the key essence
23 of our recommendations at this point is to focus

1 the implementation of credit for actual -- actual
2 avoided transmission costs to those projects over
3 1 megawatt that will almost certainly have
4 interval metering, so the calculation can be
5 done, and to just continue to explore how that
6 could be done for smaller projects. But
7 somewhat, in a way, consistent with the
8 Department's recommendations is where it's
9 possible, either because those customers smaller
10 than 1 megawatt have interval metering or where
11 there's a time-of-use rate that's already
12 developed and potentially available, that those
13 projects going forward, as part of NEM 2.1 or
14 3.0, be given a signal at this time that they
15 will transition within the 20-year legacy period
16 to a rate in which, when it's possible to
17 implement it for over 1 megawatt, that they get
18 credit for actual avoided transmission costs, and
19 for less than that, that they should expect a
20 transition, either to something like that or a
21 time-of-use rate that could provide a similar
22 price signal -- temporal price signal.

23 Q. Thank you, Mr. Below. So the key here is, for

1 this size, to plan now to transition to temporal
2 price signals or actual avoided transmission?

3 A. (Below) Yes.

4 Q. Thank you. And to the extent you haven't already
5 addressed this, I want to call your attention to
6 Exhibit 32, and ask you to explain your rationale
7 for treating greater than 1 megawatt systems
8 differently than the 100 kilowatt to 1 megawatt.

9 A. (Below) Yes. Exhibit 32 at pages 14 to 15 --
10 Clifton responding here -- was a response to a
11 record request by the Commission, and it does
12 provide background on how it came to be that
13 there was this sharp cutoff as a result of a
14 legislative compromise, but goes on and explains
15 why it would make sense to treat greater than 1
16 megawatt differently at this time because of
17 the -- both the magnitude of their potential
18 impact and the feasibility of doing this.

19 And I would just say, you know, part
20 of the recommendation or suggestion at this time,
21 is to recognize the fact that there's actually
22 very few projects over 1 megawatt now, a lot in
23 the queue, but to -- to calculate avoided

1 transmission cost requires a look -- a lookup of
2 12 hourly production figures exported to the grid
3 per year, and an application to that against the
4 regional network's service rate, and that could
5 be done manually, and I think projects of that
6 size could pay for the extra time to do those
7 calculations manually, so that could be
8 implemented, you know, without a cost to other
9 ratepayers.

10 Q. Thank you. And we discussed a little bit
11 earlier, but I want to get into this with a
12 little bit more detail, but still keeping that as
13 brief as you possibly can, the possibility of the
14 magnitude of the increase in projects, the
15 increase in distributed energy resources coming
16 on.

17 And turning your attention to
18 Mr. Woolf's and Mr. Borden's testimony in Exhibit
19 4, we're going to turn to Bates stamp page 19,
20 Figure 1. I'll give you a second to get there.

21 A. (Below) Clifton here. I'm there.

22 Q. So the question is: Keeping in mind the possible
23 magnitude of increase in projects that we talked

1 about, can you please explain whether status quo
2 net metering 2.0 will be just and reasonable,
3 given the magnitude of increased energy --
4 distributed energy resources, according to this
5 testimony in front of you?

6 A. (Below) Clifton speaking.

7 The testimony points to the fact that
8 as -- quoting, as adoption increases,
9 jurisdiction should shift towards compensation
10 and avoided cost.

11 And it talks about several stages.
12 And at Stage 3, it talks about adoption over 10
13 percent. Incentives should focus towards
14 optimizing investment.

15 And I think, if we're not there now
16 yet, we're rapidly and quite possibly within the
17 next couple of years going to get out in that
18 realm.

19 Q. Thank you. And now turning back to Exhibit 13,
20 your testimony. Can you briefly explain your
21 avoided transmission cost rate model? And I
22 would just turn your attention to pages 54 to 61.

23 A. (Below) Oh, the -- those pages are in --

1 Q. Your attachment.

2 A. (Below) -- my attachments.

3 Q. Yes.

4 A. (Below) And I have those. Just a moment.

5 But I will just start out by saying
6 that I tried to collect as many actual data sets
7 for the relevant time period of 2021 and 2022
8 and, through discovery, received data from the
9 utilities, each utility, on their RNS rates for
10 each month, as well as LNS. But the focus on the
11 analysis was just the RNS rate, which was
12 reflected in the testimony that -- at this point,
13 at the logical place to start, would be just
14 giving credit for RNS.

15 LNS is a smaller figure, but by not
16 giving credit for LNS, it helps to ensure that
17 all ratepayers potentially benefit, from an LS --
18 reduction to LNS charges that are not compensated
19 to the distributed generator.

20 But what that -- I looked at ten
21 different data sets and matched up actual
22 production data in almost every case. Sometimes
23 it was only for a year, in some cases for both

1 years, and found that across all of the different
2 data sets, there was significant value
3 produced -- it's sort of a "but for" question.
4 If this generation had not been exported to the
5 grid at the single hour of monthly coincident
6 peak, there would have been significant increased
7 transmission cost in transmission rates.

8 And it just takes the actual
9 multiplied value, the RNS times the output at
10 those coincident peak hours, and then rolls that
11 up to the total production for that data set for
12 the year, and then shows that -- how that
13 converts for either the 2021 or the 2022 periods
14 to the actual value per kilowatt hour for the
15 total export to the grid.

16 Q. Thank you, Mr. Below. We're going to move right
17 along here to the fourth recommendation.

18 So this is -- we're sticking with
19 Statute 362-A:9. Now we are in Section XIII,
20 still. The question here is: The Commission
21 shall consider, as part of its consideration of
22 net metering tariffs that apply to newly
23 constructed customer generators with a total peak

1 generating capacity greater than 1 megawatt,
2 whether or not the cost of compliance with the
3 electric removal portfolio standard, 362-F,
4 inclusive of prior year reconciliations, should
5 be excluded from the monetary credit for exports
6 to the grid.

7 I should have said Amy Manzelli
8 questioning.

9 Did the Settlement Agreement change
10 the Coalition's position on whether or not RPS
11 compliance should be excluded from the monetary
12 credit?

13 A. (Below) No.

14 Q. Okay.

15 A. (Below) Clifton responding.

16 Q. Thank you. And so, given that we've already had
17 this covered in your direct filed testimony, very
18 briefly go over the Commission -- the Coalition's
19 recommendation.

20 A. (Below) While our recommendations is to go ahead
21 and -- at the point in time in which the
22 transmission -- avoided transmission credit
23 becomes available, say to over 1 megawatt or in

1 the smaller group, that the -- that the customer
2 generator transitioned to a reduction in their
3 default service rate compensation, down from the
4 full default service rate to the base default
5 service rate. The base default service rate in
6 Eversource and Liberty filings is equivalent to
7 what is paid to the supplier. And so, doing that
8 enables that to be more readily used as an offset
9 for the supplier's load obligation.

10 And the -- the thing that I want to
11 note, in response to the settlement, because the
12 main argument against this is that this is
13 just -- it's just not that big of a deal. So
14 even though it might be a cost shift, it's not
15 unjust or unreasonable because it's just not that
16 big.

17 And I agree that for over 100 KW
18 today, it's not a net cost shift, because of the
19 lack of compensation for avoided transmission
20 cost. So just getting the full default service
21 rate is still undercompensating compared to the
22 value produced.

23 Q. Mr. Below?

1 A. (Below) Yes.

2 Q. I'm going to bring it back to the hypothetical
3 sixth-graders there in the room.

4 A. (Below) Yes.

5 Q. Yes or no, should the compliance costs be
6 excluded from the default service supply credit?

7 A. (Below) Yes.

8 Q. Thank you. And now I'm going to turn our
9 attention -- we'll do the same thing we did
10 before.

11 So do -- you believe that there are
12 several record requests which are relevant to the
13 Coalition's position here, right?

14 A. (Below) Yes.

15 Q. Okay. So those would be Exhibits 28, 31, 16, and
16 17, correct?

17 A. (Below) Also, Exhibit 15.

18 Q. Thank you for that additional. Amy Manzelli
19 speaking here.

20 Are there any of those which you wish
21 to elaborate on?

22 A. (Below) Just one.

23 Q. Thank you. Please do.

1 A. (Below) On Exhibit 15, on page 2, there is a
2 graphic from an ISO New England presentation
3 about: Renewable energy is on the rise. State
4 policy requirements are a major driver.

5 And it shows, for all of New England
6 states, from 2020 to 2040, what the expected RPS
7 compliance cost is. And what you'll see is New
8 Hampshire sort of flatlined at 2025 at about 25
9 percent, and all the other states continue to
10 rise, significantly higher than New Hampshire.

11 My observation is, to the extent the
12 other parties have testified that this is not a
13 significant problem, we simply observed that it's
14 a distinct possibility that New Hampshire will
15 change its RPS requirement and become more like
16 other states. Other states may also change
17 theirs, like Rhode Island has done, trying to get
18 to 100 percent renewable commitments.

19 In that case, over the next 20 years,
20 this could become a very significant cost shift,
21 and a key point of my testimony is that customer
22 generators do not produce a product which this
23 compensates.

1 By including the RPS credit in the
2 compensation, which is the difference between the
3 base default service and the full default service
4 rate, plus a prior period under collections,
5 other collections, and the cost of administering
6 default service. That is something that could
7 grow in scale, and while it may be only 10
8 percent or less now of the full default service
9 rate, it could become a much more significant
10 part. So that's my point.

11 MR. KRAKOFF: Objection. This is Nick
12 Krakoff. That was a complete speculative
13 response. I mean, there's no law on the RPS
14 or -- you know, that he's referring to. So he's
15 just speculating about, you know, future law that
16 may or may not even pass sometime in the future
17 that we have no idea would happen.

18 CHAIRMAN GOLDNER: Acknowledged,
19 Attorney Krakoff. And again, the Commission will
20 give the response the weight it deserves, based
21 on speculative nature. Please proceed --

22 MS. MANZELLI: Thank you.

23 CHAIRMAN GOLDNER: -- Attorney

1 Manzelli.

2 BY MS. MANZELLI:

3 Q. Attorney Manzelli questioning.

4 Mr. Below, with respect to Exhibits
5 15, 16, and 17, those are responses from the
6 Coalition, correct?

7 A. (Below) Correct.

8 Q. Do you wish to adopt those as your supplemental
9 testimony in this case?

10 A. Yes, I do.

11 Q. Thank you. Moving on to the fifth recommendation
12 from the Coalition. Attorney Manzelli
13 questioning.

14 Would you please explain the
15 Coalition's recommendation and reasoning behind
16 its recommendation for net metering with respect
17 to projects up to 100 kilowatt, which I believe
18 we have heard from your testimony is so-called
19 net metering 3.0?

20 A. (Below) Yes, in general, the recommendation was
21 to continue with the existing compensation
22 structure for under 100 KW, but to also consider
23 adjusting that default service rate from the full

1 rate to the base rate, equivalent to the value of
2 the energy capacity that may be produced.

3 In light -- in light of some of the
4 back-and-forth and arguments in the settlement, I
5 think that's sort of a lower priority at this
6 point in time, because it doesn't have the risk
7 of being an excessive and undue cost shift, just
8 because it's a smaller order of magnitude.

9 And in one of the exhibits, which was
10 a response to a discovery question, I believe,
11 from the joint utilities or Eversource, they make
12 the argument that a lot of smaller systems,
13 particularly residential systems, do not produce
14 RECs, and so you could think of the -- that
15 difference as compensating them for the RECs that
16 are used to help meet RPS obligations, so-called
17 REC sweeping. So that helps mitigate the risk of
18 undue cost shifting there.

19 Q. And just to -- Amy Manzelli speaking.

20 Just to keep the record clear,
21 Mr. Below, are you referring to Exhibits 16 and
22 17 in your prior statement?

23 A. (Below) Yes.

1 Q. Thank you. All right. To the Coalition's sixth
2 recommendation. Please explain the Coalition's
3 recommendation for energy storage,
4 interconnection, and the reasoning.

5 A. (Below) Okay. Clifton responding.

6 The significant thing that I want to
7 note here -- and maybe this is anticipating
8 rebuttal, some arguments that, you know -- that
9 the legislature has specifically said, you can
10 have storage as part of net metering. Although
11 the Commission has found it has the authority to
12 allow such, at least in Liberty's battery pilot,
13 it is also true that the legislature made a
14 significant change, after this docket had
15 initiated, to allow the Commission to enable
16 battery storage as a result of -- through tariffs
17 not just through rules.

18 Previously, the law said it had to be
19 done through rules. The legislature changed
20 that. It went into effect roughly a year ago
21 that, the Commission can do it through an order
22 and adjudicated proceeding, and it can be
23 reflected in tariffs.

1 So the significance of our
2 recommendation at this point is that the
3 Commission should go ahead and ask, in their --
4 as a condition of the Settlement Agreement, that
5 the utilities work with parties to start to
6 develop tariffs that would enable, to some
7 extent, battery storage to be coupled with
8 distributed generation, particularly projects at
9 scale, because it's these 1 to 5 megawatt
10 projects that can potentially produce a great
11 deal of value, as described in the VDER study, by
12 being coupled with storage, by helping to shift
13 what might be overproduction around solar noon to
14 when it is the most valuable and needed later in
15 the day, and to help sort of smooth the duck
16 curve, if you will, of too much in the -- around
17 solar noon and not enough later in the afternoon
18 and evening.

19 Q. Thank you. Amy Manzelli questioning.

20 And the legal change that you were
21 talking about earlier, Mr. Below, is that now
22 codified at RSA 374-H:2?

23 A. (Below) Yes.

1 Q. Thank you. All right. We'll move on to
2 Recommendation No. 7. What is the Coalition's
3 recommendation for implementation, and then, why?

4 A. (Below) Well, our recommendation is,
5 essentially, working with the baseline of the
6 settlement to continue the current structure in
7 the near term, although not necessarily for two
8 more years, or three or four, depending on how
9 long it takes to resolve the next set of
10 proposals; but rather, to begin sort of
11 selectively implementing those components that
12 are easiest and perhaps will minimize customer
13 confusion.

14 I would submit that larger projects
15 over 100 KW, those customer generators are
16 typically sophisticated enough to understand
17 concepts. Like, they may not -- the compensation
18 may be less than full default service rate, for
19 instance, for their energy, then you pass the
20 output. So the issue of bill confusion really
21 doesn't apply to them. So I think that that's
22 illustrative of what I think the Commission could
23 do here.

1 And of course, the other key
2 opportunity, where Unitil has -- is completing
3 their AMI update, interval data is available for
4 all customers. Liberty can do it, to some
5 extent, with time-of-use. Those two utilities
6 are in a position to go ahead and start making
7 some of these -- better price signals available
8 through time-of-use rates or potentially by
9 providing credit based on actual performance.

10 And I think that's what a market
11 structure -- which we desire to see this
12 developed in a competitive marketplace, where you
13 actually pay for performance, rather than just a
14 regulatory projection of what might be produced.

15 Q. And where the Coalition differs from -- Amy
16 Manzelli questioning.

17 And where the Coalition differs from
18 the Settlement Agreement is that the Settlement
19 Agreement would push some of these measures into
20 a potential future, and the Coalition would have
21 some of these measures coming out of the order --
22 coming out of this docket right now; is that
23 correct?

1 A. (Below) Correct.

2 Q. And what you heard earlier, just with respect to
3 time-of-use, you heard the Department of Energy
4 panel testify -- I think I understood this
5 correctly -- that time-of-use rates were
6 available for customers right now.

7 Did you hear that earlier? Like, what
8 is your understanding on that?

9 A. (Below) Yes, to a limited degree. My
10 understanding is Unitil does offer a whole-house
11 time-of-use rating. And my understanding is
12 there's also probably been limited uptake of
13 that, but some, because we know that there's some
14 customers with that that we can't serve because
15 of data issues and settlement issues.

16 In Liberty's case, I believe it's
17 pretty much limited to the battery pilot, but --
18 but that's not actually true. The same kind of
19 time-of-use -- three-part time-of-use rate
20 structure has been made available for EV
21 charging. It's just not clear if that could be
22 coupled with net metering at this point.

23 But they did, in their distribution

1 rate case, propose to move to use the same kind
2 of three-part -- cost-causation based, three-part
3 time-of-use rate, make that available on a
4 residential, for a whole house, which could
5 include net metering, as well as for small
6 businesses.

7 And I think the Commission could send
8 a signal that we don't have to wait another three
9 years to be considering this, when we actually
10 have some structure that we could start to do it
11 sooner than later, even if it's only on a limited
12 basis, which it probably would be if people were
13 doing it on an opt-in basis.

14 Q. Okay. Now, I don't want everyone to get excited
15 that this is the last question, because we're
16 moving into the eighth recommendation, because we
17 are going to talk just briefly about the
18 settlement and some statutory provisions, but
19 eighth and final with respect to the
20 recommendations.

21 What other recommendations does the
22 Coalition have, and what is the reasoning behind
23 it? Is there anything else that you wish to

1 mention before we move along to the settlement?

2 A. (Below) Clifton responding.

3 I think the main one there is that we
4 were supportive of the DOE's time-of-use proposal
5 and -- and that that would be an appropriate
6 thing for the Commission to do in this
7 proceeding.

8 Q. I will touch on the Settlement Agreement. We've
9 already touched on many portions of it, and, you
10 know, it may or may not have affected the
11 Coalition's recommendations.

12 Is it fair to say the Coalition does
13 support maintaining net metering 2.0 as the
14 status quo?

15 A. (Below) Clifton responding.

16 Yes, with the provision that after --
17 some date certain after the order is issued, say
18 January 1 of next year, that those ones that
19 continue on the status quo, particularly over 1
20 megawatt, potentially 100 KW to 1 megawatt, be
21 given an indication that, yes, they can have a
22 20-year legacy period, but within that period,
23 that they may be required to transition to a

1 structure based on either actual or time-of-use
2 credit for avoided transmission costs and a lower
3 compensation rate for their energy default
4 service.

5 Q. And there is a possibility that that could result
6 in better and more accurate compensation?

7 A. (Below) Yes.

8 Q. And more customer choice overall?

9 A. (Below) Yes.

10 Q. Does the Coalition agree with the settlement
11 proposal for application fees?

12 A. (Below) Yes. We support the proposal for
13 application fees, as presented in the Settlement
14 Agreement, and would recommend that be approved,
15 and moves us towards more just and reasonable
16 rates.

17 Q. If the settlement were to be approved, just to
18 state it clearly on the record, would the
19 Coalition like to participate as a stakeholder in
20 the data collection?

21 A. (Below) Yes, and I believe the record would show
22 that myself, at the time on behalf the City of
23 Lebanon, made substantial contributions to the

1 data development and Liberty's development of
2 time-of-use rates, in collaboration with both the
3 utility and the Consumer Advocate's expert
4 witness.

5 Q. And even if -- let's just accept for the purposes
6 of -- this is Amy Manzelli questioning -- for the
7 purpose of this question, accept the assumption
8 that the Commission were to accept and order all
9 of the Coalition's recommendations. You would
10 agree with the testimony of the OCA by Mr. Woolf
11 and Mr. Borden from Synapse, which is marked as
12 Exhibit 4, that establishing a balanced
13 distribution generation compensation mechanism is
14 not a, quote, set-it-and-forget-it endeavor, and
15 that the Commission would, therefore, be
16 reviewing net metering again in, you know, say,
17 two to four years?

18 A. (Below) Yes. As exhausting as this seems to be
19 at times, I do think the legislator -- the
20 legislature has indicated that they want sort of,
21 kind of, a continuous -- more or less continuous,
22 or at least periodic, revisiting of what we're
23 doing, so we make sure we get it as accurate and

1 as fair as possible.

2 Q. Thank you. Amy Manzelli questioning.

3 And do you agree with their testimony
4 that that frequency is at least every three
5 years?

6 A. (Below) More or less. I mean, three years might
7 be a little too frequent, except there's some
8 things that need to be updated on an ongoing
9 basis, like making sure time-of-use rates
10 continue to reflect underlying cost foundations.
11 So something like that needs more frequency --
12 you know, it's already on at least an annual
13 basis to revisit those, so yes.

14 Q. And with that backdrop, the Coalition feels that
15 now is the time for changes to net metering,
16 given that the current status quo has been in
17 place for more or less seven years?

18 A. (Below) Clifton speaking. Yes.

19 Q. Amy Manzelli questioning.

20 In other words, the Commission has the
21 opportunity right now to make incremental
22 advances, based on the information now known, and
23 then make more changes later, upon a routinized

1 regular review?

2 A. (Below) Clifton. Agreed.

3 Q. Okay. Quick look at RSA 362-A:9. You're
4 familiar with that statute?

5 A. (Below) Very, yes.

6 Q. And what is your understanding of the words in
7 Section XVI (a): The Commission, quote, shall
8 continue to develop and periodically review new
9 alternative net metering tariffs?

10 A. (Below) I think -- Clifton speaking.

11 It -- I believe that imposes a
12 mandatory duty to have periodic review.

13 Q. And do you agree that in that same line, the same
14 statute, it also says, quote, "may include other
15 regulatory mechanisms and tariffs for customer
16 generators."

17 And then it goes on to include a whole
18 list of things?

19 A. (Below) Yes.

20 MR. TAYLOR: Commissioners, I'm
21 actually going to object to those questions,
22 because they're calling for legal conclusions,
23 interpretations of a statute.

1 Mr. Below is -- clearly, he's a smart
2 guy. He's not an attorney. And in any event,
3 it's not appropriate for a witness to offer legal
4 conclusions on the stand.

5 CHAIRMAN GOLDNER: Is it possible to
6 be a smart guy and not an attorney?

7 MR. TAYLOR: That's not what they told
8 us at law school.

9 CHAIRMAN GOLDNER: Thank you.

10 So it's sustained. Attorney Manzelli,
11 if you'd like to ask any more questions, you're
12 welcome to, but --

13 MS. MANZELLI: Well, Commissioner, I
14 would like to respond -- an opportunity to
15 respond to the objection.

16 CHAIRMAN GOLDNER: Okay. Please do.

17 MS. MANZELLI: I'm asking Mr. Below,
18 in his capacity as a former Commissioner, to
19 explain how he would interpret this, were he
20 sitting in a Commissioner's chair, understanding
21 what his duties were.

22 MR. TAYLOR: That doesn't change the
23 objection. It's still calling for a legal

1 conclusion. Whether it's in his capacity as a
2 former Commissioner or any other capacity, it's
3 not appropriate.

4 CHAIRMAN GOLDNER: Yeah, I'll -- I'll
5 agree with Attorney Taylor. Let's wrap up,
6 Attorney Manzelli, and I think -- I think then
7 I'll add -- at the conclusion, I'll ask the DOE
8 and the joint parties for an estimate of their
9 questions to efficiently manage this afternoon.
10 But if you could wrap up, Attorney Manzelli, that
11 would be great.

12 MS. MANZELLI: Thank you.

13 BY MS. MANZELLI:

14 Q. Mr. Below, so ordering some or all of the
15 Coalition's recommendations through a phased-in
16 approach, (indiscernible) more compensation, that
17 net metering compensation to be better, smarter,
18 and more accurate in ways that minimize the risk
19 of subsidization and undue cost shifting for
20 non-NEM customers; is that the crux and essence
21 of your testimony here today?

22 A. (Below) Yes, it is.

23 Q. Is there anything else that you wish to add to

1 your testimony today?

2 A. (Below) No. We can conclude here.

3 MS. MANZELLI: Thank you. No further
4 questions. The witness is available.

5 CHAIRMAN GOLDNER: Thank you. So it's
6 12:15, so we'll take lunch here briefly. But
7 first, I'd like to check with the Department in
8 terms of sort of a time estimate of the questions
9 that the Department has.

10 MS. LADWIG: Alexandra Ladwig. I hate
11 to disappoint the Commission, because I know you
12 said you were looking forward to cross from the
13 Department, but at the moment, I don't believe we
14 have anything. If that changes over lunch, I
15 will let you know.

16 CHAIRMAN GOLDNER: Okay. Take as long
17 as you need.

18 So the joint parties, do you
19 anticipate any questions, and if so, how long?

20 MS. CHIAVARA: We do have questions.
21 How long, I imagine, will be dependent in part on
22 the answers, but I have three or four pages of
23 questions.

1 CHAIRMAN GOLDNER: Okay. So would you
2 say -- an hour would you say is --

3 MS. CHIAVARA: I'll read it as fast as
4 I can, but we'll try to get it done in an hour.

5 CHAIRMAN GOLDNER: We're not in any
6 rush after lunch.

7 Okay. So three or four pages of
8 questions, though, seems like it would be --
9 seems like there would be a fair amount.

10 The Commissioners have, I think, a few
11 questions, so that -- that's probably another
12 hour.

13 So let's -- let's take a -- take lunch
14 now. Let's return at 1:00 p.m. and conclude the
15 hearing this afternoon. Off the record.

16 (Luncheon recess taken.)

17 CHAIRMAN GOLDNER: We're back on the
18 record, and begin with DOE cross.

19 Ms. Ladwig?

20 MS. LADWIG: Alexandra Ladwig.

21 Apologies, Mr. Chairman. No cross from DOE.

22 CHAIRMAN GOLDNER: Okay. And we'll
23 move to the joint parties.

1 MS. CHIAVARA: I just wanted to let
2 you know, Liz will be here momentarily.

3 CHAIRMAN GOLDNER: Okay. Yeah. So it
4 won't go as smoothly.

5 MR. TAYLOR: It may go smoother.

6 CHAIRMAN GOLDNER: Okay. While
7 Mr. Below is getting settled in, does -- do the
8 joint utilities plan on presenting a rebuttal
9 panel today?

10 MS. CHIAVARA: We would like to do
11 that, yes, but we're making it as mercifully
12 brief as possible.

13 CHAIRMAN GOLDNER: Okay. We'll judge
14 as we go through the day, but depending on how
15 things go, we may need to the continue the
16 hearing, which, if that's necessary, then we'll
17 do that, but we'll -- we'll just see how things
18 go. So, yeah, please proceed, Attorney Chiavara.

19 MS. CHIAVARA: Thank you.

20 CROSS-EXAMINATION

21 BY MS. CHIAVARA:

22 Q. Jessica Chiavara.

23 Mr. Below, bear with me for a moment.

1 My first question is a little lengthy, because
2 I'm going to read some passages from your
3 testimony, starting with your rebuttal testimony
4 on page 6, lines 16 through 20, and pages 10,
5 lines 16 through 20. And then all of pages 11
6 through 14.

7 Those passages seem a little less like
8 fact-based testimony, and to the extent that you
9 do describe facts, they are short -- done so in
10 the service of legal analysis and legal
11 conclusions, including on page 6, quote, that net
12 metering is a monopoly utility function, and
13 that, quote, discontinuing that function would be
14 consistent with New Hampshire policy and law.

15 And then beginning on page 10 and
16 continuing with your page 14 -- sorry. Am I
17 moving too fast?

18 A. (Below) Yes. Excuse me. Clifton speaking.

19 I'm still on page 6. I'm not sure
20 what lines you're -- oh.

21 Q. I'm just reading some quotes from here.

22 A. (Below) Okay.

23 Q. So beginning on page 10 and continuing through

1 page 14, the testimony alleges that Eversource
2 acted outside the law; quote: Such dual
3 participation in state jurisdictional net
4 metering, while also selling the power into the
5 ISO New England market, should never have been
6 allowed in the first place, end quote.

7 This was a course of action that was
8 approved and directed -- and directed to be
9 continued by the Commission.

10 Testimony then proceeds to state,
11 based on the following quote:

12 "If that power is being sold into the
13 ISO New England market, then FERC-approved
14 tariffs and ISO New England operating procedures
15 prohibit that same generation from being used to
16 offset electricity requirements on the
17 distribution grid, making the definition a legal
18 fiction, requiring New Hampshire suppliers to
19 purchase the entire load of such customers from
20 ISO New England without any offset."

21 And from there, the passage dictates
22 what the Commission's responsibilities and
23 obligations are.

1 I'm sorry. I read the wrong quote:
2 The Commission has the responsibility to approve
3 only those tariffs and terms and conditions
4 for -- for net metering that are consistent with
5 both state and federal law. A net metering or
6 regulation that allows for compensation to
7 generators participating in FERC jurisdictional
8 markets in excess of FERC-approved market rates
9 may be impermissible and preempted by federal
10 law.

11 And then recommends a course of action
12 that, quote: The PUC prohibit net metered
13 generators from also selling their power and
14 capacity into the ISO New England market by
15 refraining from registering as generators with
16 ISO New England or retire after fulfilling or
17 discharging any capacity supply obligations in
18 order to continue participating in net metering.

19 Alternatively, the Commission could
20 simply prohibit any compensation for transmission
21 costs to such generators and require an annual
22 calculation as to how much avoided transmission
23 costs that New Hampshire has forgone as a result

1 of such continued participation in both markets,
2 which would be deducted from their energy
3 compensation.

4 Would you agree as a -- at a high
5 level and as a general matter, that this is legal
6 analysis that attorneys could probably defer as
7 to the conclusion of?

8 A. (Below) Clifton responding. Clifton Below.

9 There's certainly substantive legal
10 issues there, and that's true. I think what you
11 asked is true. I also think law and policy are
12 closely interrelated. And as somebody who has
13 worked in the realm of developing and writing
14 law, including some of the language that's cited
15 here, as a policy matter, that I offer
16 perspective in terms of how to look at the law in
17 terms of New Hampshire law and policy.

18 Q. Thank you for that explanation. And I agree, law
19 and policy are -- sorry -- Jessica Chiavara --
20 law and policy are very closely connected, but --
21 and I'm -- I'm not trying to eliminate this
22 entirely from the record. But taking into
23 consideration that the analysis contains an

1 allegation that Eversource acted contrary to law,
2 which is a course of action that the Commission
3 endorsed, and also makes a legal recommendation
4 to the Commission for a corresponding course of
5 future moving action. I -- I would ask the
6 Commission to either -- to move these issues into
7 legal briefing. Maybe add it to the list of
8 legal briefing.

9 Again, I'm not trying to remove that
10 portion of your testimony from the record
11 entirely, Mr. Below, just that -- that the
12 attorneys representing the parties get an
13 opportunity to also provide their opinions on
14 those issues.

15 CHAIRMAN GOLDNER: All right, Attorney
16 Chiavara, because that was a rather lengthy
17 question. Would you like to -- would you like to
18 put an -- encapsule it now or wait till the end
19 of the hearing to summarize what you would --
20 what you'd like to --

21 MS. CHIAVARA: I can boil it down for
22 you quickly.

23 CHAIRMAN GOLDNER: Okay.

1 MS. CHIAVARA: So, yeah, I -- yes,
2 I'll make a recommendation, because there's some
3 exhibits as well that I would add to that, to be
4 moved to briefs.

5 BY MS. CHIAVARA:

6 Q. So moving on from that, you said during direct
7 exam that that the recommendations of the
8 Settlement Agreement could result in unjust and
9 unreasonable cost shifts.

10 Have you done any analysis to support
11 that assertion?

12 A. (Below) Yes.

13 Q. Is that in the docket?

14 A. Yes.

15 Q. Can you identify where it is in the docket?

16 A. (Below) Give me a few minutes. In part, it's in
17 both Exhibit 13 and 14, and in Exhibit -- as well
18 as in some of the attached exhibits or related
19 exhibits.

20 In my direct testimony, I gave some
21 illustrations of the potential impact of -- of
22 this issue.

23 Q. Sorry, "this issue" being?

1 A. (Below) Well --

2 MS. MANZELLI: Commissioner, I'm going
3 to object at this point. This is attempting to
4 answer the standing question, which is what
5 evidence in his testimony supports his assertion
6 that the settlement would result -- would not
7 result in just and reasonable costs?

8 THE WITNESS: (Below) And --

9 CHAIRMAN GOLDNER: Attorney Chiavara?

10 MS. CHIAVARA: I'm not sure -- I don't
11 understand the nature of the objection. I'm not
12 sure that I -- yeah, I don't understand. Is the
13 objection to the question?

14 MS. MANZELLI: There's a standing
15 question that the witness hasn't had a chance to
16 answer. The questioner is not giving the witness
17 an opportunity to answer the question.

18 CHAIRMAN GOLDNER: Okay. Let's --
19 let's start over again. And maybe frame the --
20 or ask your question again, Attorney Chiavara.

21 MS. CHIAVARA: I -- the question
22 stands. I think he's free to answer the
23 question.

1 CHAIRMAN GOLDNER: Okay.

2 THE WITNESS: (Below) Okay. Clifton
3 speaking here.

4 In Exhibit 13, on page 24, there's a
5 question: Can you illustrate the unreasonable
6 cost shift and how this can result in duplicate
7 compensation for NEM 2.0 customer generators?

8 And there is some factual analysis to
9 support that concern here. It continues on page
10 25 and 26 and 27, to some extent, and further
11 evidence is provided in Exhibit 14 -- I'm sorry,
12 Exhibit 15. Just to be clear, that was a
13 mistake. Exhibit 15, 16, 17 -- 17.

14 BY MS. CHIAVARA:

15 Q. And that's -- when you said "this issue," were
16 you speaking to removal of the RPS compliance
17 costs?

18 A. (Below) Yes.

19 Q. So that -- so, specifically, the analysis was to
20 remove all of the RPS compliance costs; is that
21 correct?

22 A. (Below) Yes.

23 Q. Okay.

1 A. (Below) Yes. And if I may, I'm reminded that
2 that -- that that's where that correction that I
3 mentioned early on in my testimony, is on page 24
4 of Exhibit 13 at Line 15, where there's an
5 illustrative calculation of the cost shift, and
6 it will reference on Line 15 to 3,000 KWH times
7 8 cents, and that should have an eight-tenths of
8 a cent. But the resulting calculation is
9 correct.

10 Q. Thank you. So you recommended, during direct
11 exam, that the Commission create a stakeholder
12 working group to explore how to implement FERC
13 Order 2222. I didn't see FERC Order 2222
14 discussed in your testimony, and I don't recall
15 it being discussed over the course of this
16 docket.

17 So are you making this recommendation
18 for the first time today, without the parties
19 being able to, obviously, weigh in on whether or
20 not this -- such a group is merited and what the
21 scope of that group's charge would be?

22 A. (Below) Well, to clarify -- Clifton speaking --
23 I think what I was saying is more the effect of

1 looking at load settlement in -- and how that
2 could be changed in New Hampshire that would be
3 potentially in alignment with FERC Order 2222 and
4 some of the implications that that presents to --
5 to the future of how load settlement is done.

6 Q. Okay. Do you agree that that was a new
7 recommendation that had not been previously
8 discussed in this docket?

9 A. (Below) Well, the recommendation around changing
10 load settlement was. Just the -- the fact that
11 there's a parallel with FERC Order 2222 is
12 relevant.

13 And perhaps in our follow-up brief, we
14 can make -- request administrative notice of
15 another proceeding, Liberty's distribution rate
16 case, in which case this was specifically
17 discussed in the context of load settlement and
18 opportunities to take advantage of how load
19 settlement software is starting to evolve, in
20 anticipation of FERC Order 2222.

21 So that is a different case, but it's
22 just -- it is a relevant portion that is relevant
23 to the question of --

1 Q. I'm sorry, I -- but this was -- this is a new --
2 it was a new recommendation made today, correct?

3 A. (Below) Well, the main recommendation is to have
4 a stakeholder group to begin to explore or have
5 the Commission direct the utilities to
6 consider -- to start to figure out what the
7 requirements and the cost would be to change load
8 settlement.

9 And that, I think, is consistent with
10 my original testimony on the matter, as well as
11 rebuttal testimony.

12 Q. Okay. Thank you. Also, during direct exam, you
13 mentioned that net meter exports from customer
14 generators are currently not accounted for. But
15 isn't it true that those exports are, in fact,
16 currently accounted for in what is called a load
17 settlement -- the residual calculation, where
18 total exports for utilities -- all the customer
19 exports across the utility service territory are
20 allocated to suppliers according to their share
21 of the total load in that utility service
22 territory?

23 A. (Below) Right. And from what I understand, the

1 residual -- Clifton speaking -- the residual is
2 for unaccounted-for energy. So by definition,
3 the treatment of it as unaccounted for, because
4 there isn't -- it's not accounted for. I mean,
5 literally -- and this is attached as an exhibit
6 in my testimony. I made data requests to just
7 understand what the total exports to the grid
8 were. This is Exhibit 13, pages 71 and 72. And
9 Eversource was not able to account for exports to
10 the grid by NEM 1.0 customers in their large
11 power billing system, and just asserted that that
12 would be too burdensome to try to account for
13 that.

14 So it was literally -- we couldn't
15 even account for it in discovery.

16 Q. Right. But that's slightly different than
17 what -- the question that I asked. I was asking
18 specifically about load settlement. And in load
19 settlement, there is a calculation called the
20 residual, where total exports -- customer exports
21 for utility service territory are calculated and
22 then allocated to suppliers according to their
23 percentage of the total load sharing service

1 territory; is that correct?

2 A. (Below) Clifton speaking.

3 Yes. I understand that to be correct,
4 yes.

5 Q. Thank you. From 2020 to 2023, Eversource
6 received nearly 11 million in ISO New England
7 revenue from registered customer generator
8 facilities that net meter, and that that revenue
9 directly offset approximately 12.5 percent of
10 Eversource's total net metering costs for those
11 years.

12 You are proposing that the Commission
13 prohibit customers from registering with ISO New
14 England and eliminating that revenue stream; is
15 that correct?

16 A. (Below) Clifton speaking.

17 Yes, because that revenue stream --

18 Q. Excuse --

19 A. (Below) I need to qualify it. That revenue
20 stream is less than the value that they would
21 produce as a (indiscernible) reducer.

22 Q. And I think that that is a topic that could be
23 disputed, but yes, thank you.

1 If all the states in New England
2 suspended all ISO registration, as you're
3 recommending is done for New Hampshire, given the
4 current levels of distributed generation sources
5 in each of the New England states, wouldn't New
6 Hampshire transmission costs increase?

7 A. (Below) Potentially, yes, but it depends on how
8 much of it out there is like that. And I -- and
9 I provide it in my testimony.

10 For instance, Vermont, it appears that
11 virtually nothing gets registered in that realm.
12 But apparently, Massachusetts does, and that
13 comes up in one of the discovery questions.

14 And to the extent Massachusetts or New
15 Hampshire, a quick -- quick -- having dual
16 participation in the state jurisdiction net
17 metering and federal jurisdictional wholesale
18 markets, yes, that would -- if there isn't
19 compensating beneficial electrification, then it
20 would shift around the cost allocation of
21 transmission; that's true.

22 Q. Okay. Thank you. Give me just a moment.

23 Okay. So I want -- I'd like to turn

1 to your recommendation regarding transmission
2 credits.

3 Your testimony seems to suggest like a
4 bespoke credit that's designed on an individual
5 customer basis credit; is that correct?

6 A. (Below) Clifton speaking. That's correct.

7 Q. I'm sorry. I have not been introducing myself.
8 I apologize. Jessica Chiavara.

9 In Exhibit 13 on page 30, you state:
10 Individual calculation for actual avoided
11 transmission credit for large customer generators
12 is simple enough and could initially be done
13 manually, if necessary, and perhaps only
14 quarterly or annually until automated, end quote.

15 And then you stated something similar
16 during direct exam, speculating as to how perhaps
17 large projects could somehow pay for manual
18 efforts issuing these credits.

19 Have you inquired with the utilities
20 as to how simple or not manual billing for large
21 customer generators would be?

22 A. (Below) I have not inquired.

23 Q. Okay. Have you inquired within each of the

1 utilities as to different abilities or
2 constraints for offering custom individual
3 credits for large customers?

4 A. (Below) This is a little bit difficult because,
5 on a confidential basis, there has been
6 discussion with one utility about this issue, but
7 I can't really go into it because it's
8 confidential, in a confidential context.

9 Q. But not all three of them?

10 A. (Below) But not all three, correct.

11 Q. And regarding the reference about the credit only
12 being charged annually or changed -- sorry,
13 annual -- Jessica Chiavara, sorry -- annually or
14 quarterly, have you checked with the utilities to
15 see if this frequency is reasonable, given the
16 current rate changes that they already have to
17 make over the course of a year?

18 A. (Below) Clifton speaking. No.

19 Q. Okay. And you also -- the reference to -- you
20 made reference to about, until the process was
21 automated.

22 Do you know if individually calculated
23 transmission credits can be automated?

1 A. (Below) Clifton speaking.

2 I don't know for a fact, but I think
3 most -- with enough effort, almost any data
4 processing could be automated. And I've just
5 observed, this is a pretty darn simple
6 calculation, even on a bespoke basis. It's just
7 looking up, from interval data that's time
8 stamped, what the output was at the hour of
9 coincident peak demand for each month and
10 multiplying that by a well-known, actually
11 published, RNS rate.

12 Q. Yes, and then programming it into the three
13 utilities, all different billing systems, however
14 those three different billing systems may
15 operate?

16 A. (Below) that -- that would be what automation
17 would entail, yes.

18 Q. Sir, have you ascertained the cost for Unitil
19 billing and staff resources for offering this
20 type of crediting?

21 A. (Below) No. That's why the recommendation today
22 in my testimony was that the first step in
23 considering this, moving forward, is to convene a

1 stakeholder group to discuss what would be
2 involved, and then solicit potential proposals or
3 to develop some sense of what it might cost to
4 implement that. And that that -- having an
5 understanding of the cost would be beneficial for
6 the Commission to determine how -- how, and
7 exactly when, to implement such a change.

8 Q. Okay. And assuming that there would be
9 incremental costs, just for the sake of the
10 question -- Jessica Chiavara -- would those
11 incremental costs be passed on to customers,
12 effectively increasing the cost of net metering?

13 A. (Below) Again, it depends, because there's
14 potential significant savings related to that for
15 a customer.

16 Q. But these costs -- assuming that those costs, the
17 incremental costs, would -- how would those
18 costs -- would those costs be passed on to all
19 customers, socialized across all customers?

20 A. (Below) It depends --

21 MS. MANZELLI: Objection. The
22 question's already been answered.

23 MS. CHIAVARA: I -- I think it

1 could --

2 CHAIRMAN GOLDNER: The Commission
3 would appreciate a clarification, so you can go
4 ahead and answer it, Mr. Below.

5 THE WITNESS: (Below) Well, that is
6 to be determined. It is possible that those
7 costs could be recovered in some way from the
8 suppliers or from projects, as opposed to general
9 rate base.

10 But I would simply observe that the
11 regulating distribution utilities are the owner
12 and operators of the distribution system, which
13 is the platform to support retail and state
14 jurisdictional and federal jurisdictional market
15 transactions.

16 And New Hampshire law calls for the
17 utilities and the -- and the Commission, in the
18 regulation of utilities, to move towards
19 market-based solutions as much as possible; and
20 specifically, the purpose statement of RSA 369-A,
21 when it was -- when net metering was first
22 enacted -- and I know this, because I was the
23 prime sponsor -- specifically changed the purpose

1 statement with statute to say that these services
2 should be moved to a competitive market-based
3 paradigm, rather than the traditional method of
4 just having the utility as a monopoly provide net
5 metering services.

6 And I think this is where New
7 Hampshire is unique compared to the other states,
8 because the other states have simply, from my
9 impression, accepted that this is just a monopoly
10 function. New Hampshire law clearly states --
11 and -- and have been reiterated -- that this
12 should be an option for competitive suppliers and
13 community power aggregations to be able to serve
14 their metered customers.

15 And that's why I think we need to move
16 towards more sort of market-based price signals
17 that can allow other parties to serve net
18 metering customers and offer potential value
19 streams that utilities can't, such as, long-term
20 contracts, which could potentially benefit in a
21 lot of ways, because we'd be moving net metered
22 customers off of default service and get rid of
23 some of these cost-shifting issues.

1 BY MS. CHIAVARA:

2 Q. I only have a couple of questions -- two,
3 actually. Jessica Chiavara.

4 But you just mentioned market-based
5 solutions. However, if we are making some of
6 those changes, like the recommendations that you
7 made today, through changes to utility billing
8 systems, the incremental costs of which would be
9 passed on to all ratepayers, isn't that more of a
10 regulatory intervention rather than a market
11 solution?

12 A. (Below) Well, the market can't work without the
13 platform that the distribution owner/operator --
14 distribution system operator operates, like the
15 data systems and the settlement systems. Those
16 are necessary components of supporting customer
17 choice and a competitive market.

18 Q. Thank you. So last question. Jessica Chiavara.

19 On Tuesday, you heard Mr. Rice on the
20 settlement panel discuss the issue of customer
21 confusion with net metering bills, noting that
22 all three of the electric utilities have data
23 that net metering customers struggle to

1 understand their bill and wish their bill was
2 simpler, and -- and that it is a -- not an
3 insignificant problem.

4 During direct exam, you speculated
5 that larger projects are sophisticated customers
6 who would not experience such confusion.

7 Do you have any data to support this
8 or to contradict Mr. Rice's testimony on Tuesday?

9 A. (Below) Well, I think the data is the
10 recognition that larger products -- projects are
11 being developed by entities that are project
12 developers and have to understand a whole lot
13 more complex things than residential customers
14 have.

15 I mean, I just think the evidence
16 is -- is apparent. It's sort of common knowledge
17 that the bulk of customers net metering are
18 small, but a lot of the output and the potential
19 impacts are with very large systems.

20 Q. Sir, so just to clarify the answer, you don't
21 have any data per se?

22 A. (Below) I will say that we -- yes, in a sense,
23 we do have data. I know that the Coalition --

1 our customer service representatives experience a
2 high call volume and email volume related to
3 confusion about net metering, particularly trying
4 to understand why we can't serve net metered
5 customers.

6 And, in contrast, the developers that
7 are coming to us with proposals for 1 to 5
8 megawatts are saying they would have no problem
9 with the kind of more complex solutions that
10 we're suggesting in this proceeding and in
11 legislative initiatives and in the more complex
12 commercial constructs that can deal with more
13 complexity, without having to call customer
14 service representatives to understand billing
15 arrangements and -- I just think it's kind of a
16 self-evident fact.

17 MS. CHIAVARA: Okay. Thank you. That
18 is all the direct -- cross-examine that I have.
19 Jessica Chiavara. Sorry. Thank you.

20 CHAIRMAN GOLDNER: Thank you.
21 Commissioner Goldner. We'll move to Commissioner
22 questions, beginning with Commissioner
23 Chattopadhyay.

1 BY CMSR: CHATTOPADHYAY:

2 Q. Good afternoon. I'm going to go back to
3 something I didn't fully comprehend, perhaps,
4 so --

5 On the issue of grandfathering, did
6 you say that you -- you agree that it should
7 be -- it should be 20 years? You also said that
8 you also agree with the concerns that DOE had
9 Can you revisit that?

10 A. (Below) Yes. Clifton speaking.

11 I think that my point was CLE was
12 advocating for less than 20 years -- just stick
13 with 2040 -- as a way to address the concern
14 about whether this really makes sense for the
15 next 20 years for the out years.

16 And what I would suggesting was that
17 by moving ahead and signaling, as part of your
18 order in this proceeding, that certain changes
19 are in the works, either on a mandatory basis or,
20 potentially, on an opt-in basis, such as, a
21 reduction from full default service to base, and
22 credit for avoided transmission cost, and the
23 ability to incorporate storage; that those would

1 mitigate the concern about providing a 20-year
2 legacy structure, because we know that we're
3 moving to try to minimize the cost shifting in
4 both directions and make it more based on the
5 value of services actually provided.

6 Q. Thank you for that.

7 On the discussion about the ability
8 to manually or, perhaps in the future,
9 automatically calculate the transmission credit
10 for large customers. If there are implementation
11 costs or incremental costs because, however those
12 calculations are done, there will be some process
13 to it, and the utility will bear some costs.
14 Would you agree that there may be a way to also
15 allocate those costs directly to the -- the NEM
16 customer?

17 A. (Below) Clifton speaking. Yes.

18 Q. Okay.

19 A. (Below) And just to add, you know, I think
20 that's a very viable option, because the volume
21 of business that these large projects would be
22 doing would easily support, I believe, whatever
23 additional hours needed to be paid for to do this

1 manually, because it's simply not that many
2 calculations, for instance, if it's just done
3 quarterly or annually.

4 I mean, I constructed extensive
5 spreadsheets based on actual interval data and
6 did this, and it didn't take a huge amount of
7 time, you know, except for the fact that I was
8 dealing with 16,000 lines of data, so I had to
9 make sure everything was right.

10 But when you start working with a lot
11 of interval data, it becomes kind of routine in
12 terms how you verify that you're looking at the
13 right date now for it. It's -- you know, it's
14 just -- fundamentally it's not that complicated,
15 even to do it in big spreadsheets.

16 Q. I am going to have just one more question, and
17 it's sort of conceptual, so I -- I'm not sure I
18 will be able to articulate this as well as I
19 would like to, but if you can capture the
20 essence, it would be great if we can have this
21 conversation.

22 So, then the energy component or, you
23 know, in this case, you can call it the avoided

1 cost for energy that's being used to set the
2 compensation rate for large NEM customers per
3 kilowatt hours, is it set like it's one number
4 set annually right now?

5 A. (Below) Clifton speaking.

6 It's -- it's not one annual -- number
7 set annually. The utilities receive monthly
8 bills in arrears, because you have to wait for
9 the month to close, and ISO New England
10 determined what the hour of coincident peak was,
11 and then they get a bill.

12 When I asked for the RNS rates --

13 Q. To be -- I'm talking about the energy component.

14 A. (Below) Oh, the energy component. That is more
15 complicated. And I did not propose in our
16 testimony that we try to move the energy
17 component, because then that involves data for
18 every hour of the year, and that's, in essence,
19 not what we're offsetting.

20 I should say that, to the extent -- as
21 I described in my testimony, you're compensating
22 the net metering generator at the same rate as,
23 in effect, is being paid for just the default

1 service actual supply, not the RPS compliance
2 cost and such, but the equivalent of what's being
3 purchased from the wholesale market, but at --
4 at retail, because it's grossed up for line
5 losses and such.

6 And, of course, the Commission is
7 moving towards a more market-based component for
8 that rate. You know, it's more based on day
9 ahead in real-time crisis.

10 That's gonna be -- as Mr. Davis
11 testified, that's going to be a good market proxy
12 until the day we can get more individualized
13 valuation, so -- and particularly when you
14 disassociate it from the parts that this -- that
15 aren't the service that's being provided.

16 And I'll just take an example in
17 your -- in Eversource's recent case with the
18 large customer group. You have a large
19 under-collection, that if it was to be covered
20 from the current large customer group, would
21 result in a 5 cent or so -- 5-cent-plus increase
22 in the default service rate.

23 Well, the generator has nothing to do

1 with that value, so it doesn't make sense to
2 credit them at that full default service rate,
3 which could include more than 5 cents of
4 something that had nothing to do with the value
5 of the power they created. They'd just get a
6 windfall, because they're getting this full
7 default service rate, which is not actually
8 following the market.

9 So that's why I think the
10 recommendation would mitigate against the risk,
11 higher stranded costs or cost shifting, if you
12 will, and actually, more closely to the high, the
13 energy component to a market-based pricing.

14 Q. So -- I understand. I think what I'm trying to
15 get at is, currently, when the avoided cost of
16 energy is set, which is what is -- I mean,
17 it's -- it's a default service if it's -- you're
18 a net -- if it's -- and it's the avoided cost if
19 you're a net exporter, correct?

20 A. (Below) Yes.

21 Q. And so in the case of the net exporter, I'm
22 asking, how is the avoided cost of energy set,
23 meaning is it set at the same number for a long

1 period?

2 A. (Below) I see what you're saying. It -- it
3 would be set as frequently as it changes. And
4 most new projects that don't have existing load
5 end up in the small customer group, because it's
6 based on the consumption rather than their
7 capacity to export. So you could, in theory,
8 have a 4 megawatt solar project that is getting
9 the six-month rate in the small customer group,
10 because they just don't have much native load
11 when they're not exporting. So that would be
12 every six months, for as long as you set the
13 default service rate.

14 If it happened to fit in the category
15 of the large customer group -- some do, 'cause
16 they have behind-the-meter load, or they have
17 load that, you know, puts them in that class.
18 Then those rates would change monthly. And to
19 the extent they're linked, either through
20 competitive procurement or market-based prices,
21 that -- that would pass through on a monthly
22 basis.

23 Q. And there could be significant efficiency gain,

1 in the event even more granular, meaning hourly
2 or daily?

3 A. (Below) Yes. The Coalition -- I believe when
4 we've talked with developers about being
5 potential off-takers, we're looking at the
6 value that they could offset.

7 And of course, we're looking to hedge,
8 to some extent, so we're not exposed to such
9 volatility, and probably the developers too. So
10 it's a lot like we do now with physical hedging,
11 which is interim to what's called IBT, internal
12 bilateral transactions, where we're locking into
13 output for a fixed price, and sometimes that's
14 over-market and sometimes that's under-market,
15 but we have some security that it's not -- we're
16 not exposed to a high -- more risk than we can
17 handle, I'll put it that way.

18 CMSR. CHATTOPADHYAY: That's all I
19 have. Thank you. Commissioner Chattopadhyay
20 here.

21 CHAIRMAN GOLDNER: Okay. Commissioner
22 Goldner questioning.

23 BY CHAIRMAN GOLDNER:

1 Q. Mr. Below, could you help us understand why the
2 Commission -- why the Coalition, rather, cares
3 about the net metering rate inside CPCNH? You --
4 I think you can collect or charge any rate that
5 you want, so I'm just trying to understand the
6 Coalition's interest in this particular docket.

7 A. (Below) Well, many of our members have local
8 policy goals that have been approved through
9 their governing or legislative bodies to want to
10 use more local renewable energy.

11 So a lot of our communities want to
12 see projects developed. And I will take the City
13 of Lebanon as an example. You know, we're hoping
14 to bring online in the next few months a
15 1 megawatt landfill gas energy project to produce
16 useful energy instead of just flaring it. We
17 would like to be able to use that to serve
18 Lebanon community power. It's not expected to
19 ever export power to the grid, even with the
20 other PT on the circuit, but there -- at the
21 moment, there's no other option -- way to do that
22 under New Hampshire law than through net
23 metering.

1 So the compensation structure becomes
2 very important, as well as the fact that many,
3 many individuals in our communities have
4 expressed the desire to be served by their local
5 community power aggregation, but -- and although
6 the law says we're free to set our own terms and
7 conditions, we can't afford to pay for power
8 twice, which is the effective result if we don't
9 get credit in load settlement. And that's
10 partially why the issue's provoked. The law
11 says -- you know, expected the Commission to try
12 to settle this by the end of June 2022, if
13 possible, but it -- but it is also related to the
14 law that says, for competitive suppliers, it
15 shall be accounted for in its offset to their
16 obligation, with line loss adjustments as
17 determined by the Commission.

18 So we think that "shall" is an
19 imperative directive, and this needs to change,
20 so that we, and competitive electric power
21 suppliers and other community power aggregations,
22 can become an alternative -- an alternative to
23 the utility default service.

1 And as you heard, there is concern by
2 developers about the uncertainty of what that
3 compensation is going to be in the future, and we
4 at least have the option of potentially doing
5 different forms of long-term contracts that can
6 be innovative and varied.

7 We have large C&I customers who have
8 ambitious climate action goals, and we've been
9 told by numerous ones in our local communities
10 that they would love to be direct off-takers to
11 use power to offset their consumption with
12 locally generated renewables.

13 And we went as far as to get
14 legislation through the House with a unanimous
15 vote of the Science, Technology and Energy
16 Committee on Consent Calendar, House Bill 1600,
17 that would have allowed community power
18 aggregations to do that precisely, essentially as
19 an alternative to municipal hosting, up to 5
20 megawatts, to be able to use that power to
21 directly offset what they otherwise have to
22 purchase from ISO New England, and do that in a
23 way that doesn't involve the difficulty of trying

1 to figure out if the default service rate is the
2 right compensation rate or not.

3 Q. So just using your example, in Lebanon today, of
4 the 1 megawatt facility. So today, under the
5 existing tariff, you would sell into -- I think
6 you are -- are you Eversource?

7 A. (Below) No, Liberty.

8 Q. Liberty, sorry. I'm sorry.

9 So are you -- you're selling into
10 Liberty, and you're selling it at the default
11 service rate for large customers?

12 A. (Below) No. I think we might end up in the
13 small customer group, because the native load
14 is -- puts us in the small customer group.

15 Q. So help me understand that. When you say "the
16 native" -- if it's 1 megawatt, how does -- how do
17 you end up in the small customer group?

18 A. (Below) And I -- and I'm not sure about this in
19 this instance, their existing load for the gas --
20 gas collection system in the flare, and -- but my
21 recollection is -- my recollection is that --
22 that we're in Q3. It might be that we're bumping
23 up to G2, because it's possible -- I think that

1 that threshold is 100 KW -- KVA load, something
2 like that.

3 Q. (Indiscernible.)

4 A. It's possible we'll move into the large customer
5 group. I'm just not sure of that at the moment.

6 I do know that we have at least one
7 large solar array that is over 100 KW that is --
8 that underline accounts in the small customer
9 group, so that's what we're --

10 Q. It seems logical, without going through the --
11 the details, that if you're 1 megawatt -- if
12 you're anything over 100 kilowatts, it seems like
13 that would -- the natural place to be would be in
14 the large customer group. I think the -- my idea
15 of the impression -- or the intention of the law
16 was for the -- the small customer group to be
17 sort of your residential, you know, solar panels,
18 and then everything else would be in the large
19 customer group.

20 So to the extent that there's some
21 mixing of those categories, that would be
22 something to consider, I think.

23 Mr. Below, would you agree?

1 A. (Below) I would agree and -- there was some
2 confusion about this, as we had some of our
3 technical questions. But the bottom line, in
4 terms of looking at the tariff, the rate class
5 you go into is based on your average or maximum
6 consumption, not for transport. The sale price
7 being to some extent.

8 Q. Yeah, I was going to say, does that make sense to
9 you?

10 A. (Below) Personally -- you know, I haven't
11 conferred with others in the Coalition, but
12 personally, I'm not sure it makes sense that --
13 yeah.

14 Q. And is that based on statute, or is that just
15 based on longstanding practice, or how did we get
16 to this place?

17 A. (Below) I think it's one of those things that
18 was never really thought about. And if I could
19 give you one analogy of things that weren't
20 thought about.

21 In the last net metering case, there
22 was -- I don't believe there was any thought on
23 the record, or in any technical sessions or any

1 settlement negotiations that I recall, that there
2 was any realization that we're going to change
3 the RPS compliance obligation by changing the
4 compensation rate.

5 Because under net metering 1.0,
6 original net metering, when you ran the meter
7 backwards, so to speak, such that, if you offset
8 your load exactly, if you produce exactly as much
9 as you consumed over the year, at the end of the
10 year, you would have zero kilowatt hours
11 delivered, so you'd create zero RPS compliance
12 obligation.

13 But when we changed to the monthly
14 compensation, you get -- you cash out. You get
15 your cash credit every month. And if you
16 produced, you know, all of your power in the
17 summer half of the year, and re-consume that in
18 the winter, then the amount of power you consume
19 in the months that you don't produce creates an
20 RPS obligation.

21 And that -- that's sort of the basis
22 of our recommendation that that, at scale,
23 becomes an undue, unnecessary cost shift, to say

1 that if you produce as much as you consume under
2 net metering 2.0, you create an RPS compliance
3 obligation, but you don't contribute any money
4 towards that compliance obligation. But on top
5 of that, you may have made money from selling
6 RECs that is being other -- ratepayers are having
7 to pay to meet your RPS obligation. Because you
8 didn't contribute any money for it. And that
9 scales up at the -- at the larger municipal host
10 scale as well.

11 CHAIRMAN GOLDNER: I'm just going to
12 put a star next to this one, and looking at the
13 utilities, this would be an interesting one to
14 get briefing on, because this idea that customer
15 class is based on incoming and not outgoing
16 seems -- seems irrational, at least from the
17 bench today, based on -- you know, you have
18 these -- you have a 5 megawatt -- it sounds like
19 you have a 5 megawatt producer that's taking some
20 trickle charge to make the solar array, you know,
21 stay in and, you know, keep the -- keep the solar
22 pointed in the right direction. I'm thinking
23 specifically of the Unitil array, and then

1 you're -- you're sort of in a different customer
2 class than I think everyone would imagine you
3 should be in, because you're a 5 megawatt
4 producer.

5 So if we could learn more about that
6 in a briefing, that would be very helpful,
7 because it sounds like you have perhaps have
8 large producers classified as small, because of
9 what they're -- what they're bringing in, not
10 what they're pushing out. So I think we'd like
11 to learn more about how the customers are getting
12 (indiscernible).

13 BY CHAIRMAN GOLDNER:

14 Q. Mr. Below, I'll turn to Exhibit 28, and just give
15 me a moment to get there.

16 A. (Below) I'm there.

17 Q. So I'm looking, again, at this 1 megawatt or
18 greater. There's 47 entities there, with the
19 vast majority, as you pointed out, I think,
20 earlier, of capacity.

21 And are these -- today, are these
22 customers/suppliers -- are they getting a net
23 metering rate today, or are they -- are they a

1 merchant supplier where they're selling it to the
2 market?

3 A. (Below) Clifton speaking.

4 I don't have knowledge of that. My
5 impression is that they're seeking a new
6 interconnection. They're probably proposing new
7 projects. Because I think if an existing hydro
8 converts to net metering, they already have an
9 interconnection, and it's just a question of
10 qualifying for the net metering as a group host
11 or a municipal host.

12 Q. So you believe that those 47 customers are
13 municipal hosts, for the most part? And if
14 they're not today, they'll seek that status
15 shortly?

16 A. (Below) Right now, I think that's the only way
17 they could interconnect. I won't be surprised if
18 some of them are speculating that there will be
19 a broader expansion that would not require the
20 municipal host status, and they want to get in
21 the queue. But I do not know that. I'm just
22 speculating.

23 Q. And if there was one of those, they would just

1 be, as any other merchant supplier -- merchant
2 power supplier would, they would just be selling
3 directly into the market, if they weren't, you
4 suppose?

5 A. (Below) Well, my guess, if they're seeking -- if
6 they're in the interconnection queue, they don't
7 exist yet. They're not selling in the --

8 Q. I see.

9 A. (Below) They're not existing merchant
10 generators. These are proposed in developments.

11 Q. Okay. Okay. Thank you.

12 So just a high-level question relative
13 to the Coalition's proposal, as it relates to
14 rates. Does the Coalition believe that the net
15 meterer today is receiving too much or paying too
16 much?

17 A. (Below) For the small customers under 100 -- or
18 up to 100 KW -- Clifton speaking -- I believe
19 it's -- it's pretty close to about right.

20 I think for over one -- you know, with
21 that, you know, one caveat that could be tweaked
22 on default service going to the base rate. But I
23 think for over 100 KW, they are not. They --

1 they produce more value than they're compensated
2 for. I -- typically, based on the data I have,
3 it is possible that a large system that was
4 shaded to the west and more eastern oriented
5 might be about right, because they don't really
6 produce avoided transmission costs. But again,
7 I'm just speculating. From the data I have,
8 every type of system that I could analyze with
9 actual (indiscernible) data was creating avoided
10 transmission costs that they're not compensated
11 for. And the value -- the VDER study kind of
12 shows -- shows the same thing.

13 Q. Thank you. Commissioner Goldner.

14 Is the goal of the Coalition's
15 proposal to reduce net meterer cost, ratepayer
16 cost, or is there some other goal that the
17 Coalition has in mind for its proposal?

18 A. (Below) Clifton speaking.

19 I think what -- what were the two
20 goals that you asked about? Lower cost --

21 Q. Lower cost for ratepayers or net meterers, or is
22 there -- is it not cost related? What is the
23 goal of the Coalition?

1 A. (Below) I think there's parallel goals. We do
2 want to help our communities and customers save
3 money. And over our first year and four or five
4 months of operation, we have consistently offered
5 a base rate that is lower than the three
6 investor-owned utilities; and, most recently,
7 over the past year, lower than the Co-op as well.

8 So saving money is definitely a goal
9 of the Coalition. At the same time, many of our
10 communities and many individuals want to move
11 towards more renewable energy. For many of our
12 communities, it's about a more sustainable and
13 resilient economic structure for their own
14 long-term prosperity.

15 So we want to be able to procure and see
16 more utilization of community-scale distributed
17 energy resources, but we want to see those
18 projects developed in the most cost-effective,
19 most beneficial way, in much the same way the
20 legislator -- legislature has posited your
21 objective, which is to maximize net benefits,
22 while trying to minimize costs, essentially, or
23 cost shifting -- undue cost shifting, to the

1 extent, you know, it's reasonably possible. And
2 I think that's where "just and reasonable" comes
3 into play.

4 So we -- we -- and in general, we
5 think that the discipline of a market-based
6 procurement of market-based options will sort of
7 function to serve the best interests of our
8 communities. Like, if we screw up, our customers
9 can choose to go somewhere else.

10 But if we're able to find solutions
11 that do both, that both accrue through our
12 resiliency and sustainability and do so at a cost
13 that's reasonable, and -- and just one thing I'll
14 understate. We do offer four levels with
15 enhanced renewable components, and -- and -- and
16 it's not a huge number, but some of our
17 communities are up -- you know, are seeing
18 significant uptake of those options, because they
19 want to support more local renewable generation.

20 Q. So moving back to the topic of this 20 years for
21 grandfathering. It is -- it seems like an
22 unusual concept to me. Like, if somebody in New
23 Hampshire was building an apartment complex, they

1 would -- they would do a market analysis, and
2 they would try to figure out what the rank could
3 be and how much it would cost, and they would
4 work all that out, and they would go to the bank,
5 and they would -- they would borrow money, and
6 they would build the apartment complex. But
7 there's no rent guarantee or -- that would be a
8 market-based -- market-based deal.

9 And yet, here, we -- we have this idea
10 that we need to guarantee what effective rent
11 would be in order to get a loan from the bank,
12 and I'm just having trouble with that.

13 A. (Below) Well, I think it relates to underlying
14 risk factors, which are a little different than
15 what financing entities are used to dealing with,
16 which is specifically a combination of
17 legislative risk and regulatory risk.

18 I think over time, those are
19 mitigated. But certainly, over the past 20
20 years, there's been some controversy in some
21 states around net metering, and so financiers are
22 somewhat concerned that they'll go and finance a
23 project with one set of assumptions, and then --

1 not that the market so much changes, but --
2 because the compensation will change under the
3 current net metering structure, it's not a
4 guaranteed revenue stream by any means.

5 But if you know that you're going to
6 have a structure in which you can sell your
7 power, yes, but I think sometimes that's been
8 uncertain. There's still controversy, as you
9 know, in the jurisdictional docket whether,
10 outside of net metering, a local generator could
11 sell to a local consumer. That seems to be in
12 New Hampshire law, but it actually hadn't been
13 exercised, because there's controversy over the
14 jurisdiction.

15 So it would be next to impossible to
16 try to get a project financed as anything outside
17 of that theory. So then the regulatory -- it
18 becomes a risk, and the -- and the Commission and
19 the legislature can always change. I mean, next
20 year, the legislature could repeal net metering.
21 But at this point, I think finance entities say,
22 well, that's not much of a risk.

23 But there is a risk that some

1 Commission in the future will drastically
2 consent -- change the compensation structure
3 that is not really presenting a market risk.
4 It's a market structure or a regulatory structure
5 risk. So that's why I think the 20-years becomes
6 important.

7 And I will say, you know, our landfill
8 gas to energy project, we -- we didn't have to
9 use that financing, because we were able to
10 use -- we didn't use revenue bonds. We used a
11 general obligation, and essentially self-funding
12 part of it, but with an expected -- our analysis
13 runs out over 20 years.

14 And it's also important because
15 anything -- even at 1 megawatt, we're needing to
16 pay about -- we are in a connection agreement
17 with Liberty, and it involves about a \$600,000
18 contribution for upgrades to their system,
19 which -- which is a significant portion of the
20 total project costs.

21 And just one -- there was a question
22 early about how does that get accounted for. It
23 gets account for as a contribution in aid of

1 construction, so it doesn't -- should not, and I
2 don't think it does, go into rate base. It's on
3 the books, but it's not -- and it does get
4 depreciated, but -- and there may be some tax
5 implications that are passed along to the
6 generator, but -- but -- but it -- it -- it
7 doesn't show up in rates.

8 CHAIRMAN GOLDNER: Thank you.

9 Commissioner Chattopadhyay, did you
10 have any follow-up? All set?

11 Okay. We can move to redirect.

12 MS. MANZELLI: Thank you,
13 Commissioner. Amy Manzelli speaking. Very
14 brief. I'll get this ready.

15 REDIRECT EXAMINATION

16 BY MS. MANZELLI:

17 Q. Mr. Below, Attorney Chiavara was asking you about
18 the FERC 2222 -- excuse me -- 2222 order, and I
19 just wanted to clarify. Did you ever mention
20 that, because Commissioner Chattopadhyay had
21 mentioned that in some of the questions?

22 A. (Below) Clifton speaking. Yes.

23 Q. Okay. And so you weren't making a new

1 recommendation. You were just weaving that into
2 the existing load settlement recommendation; is
3 that correct?

4 A. (Below) Clifton speaking.

5 That's correct. And I also thought
6 about the fact -- and I may have related the two,
7 that this was expressly discussed in Liberty's
8 distribution rate case testimony around the same
9 load settlement issue.

10 Q. Is there anything that you wish to add to your
11 testimony here today?

12 This is Attorney Manzelli questioning.

13 A. (Below) There probably is, but I'll -- but I'll
14 hold it.

15 MS. MANZELLI: Attorney Manzelli.
16 Thank you, Mr. Below. We have no further
17 questions.

18 CHAIRMAN GOLDNER: Okay. Thank you,
19 Mr. Below. The witness is excused. We'll --
20 just a moment.

21 We'll move now to the rebuttal panel.
22 After the testimony, as agreed on Tuesday, we'll
23 see if the other parties would like to provide

1 any surrebuttal testimony as well.

2 Start -- Attorney Chiavara, can you
3 please identify the witnesses you'll be calling
4 and what party they represent, and just confirm
5 that those witnesses were sworn in on Tuesday.

6 MS. CHIAVARA: I don't believe all of
7 them -- not all of them were sworn in on Tuesday.
8 I would ask, before we get to the full panel, if
9 we could take about 10 or 15 minutes to confer
10 with our clients.

11 CHAIRMAN GOLDNER: Sure. Of course.
12 Let's take a break now and return at 2:25. Off
13 the record.

14 (Recess taken.)

15 CHAIRMAN GOLDNER: Okay. Back on the
16 record. Attorney Chiavara.

17 MS. CHIAVARA: Thank you. Jessica
18 Chiavara. We placed the witnesses up in the
19 witness box. It's Brian Rice and Ed Davis, who
20 have both been sworn in. Jeff Pentz, from
21 Unitil, who I believe has not yet. And then Joe
22 Swift and Colleen Bennett from Eversource, who
23 have also not been sworn in yet.

1 CHAIRMAN GOLDNER: All right. For the
2 witnesses that have not been sworn in, if you
3 could first identify yourself one by one.

4 MR. PENTZ: Hi. My name is Jeff
5 Pentz, Supervisor of Energy Supply from Unitil.

6 MR. SWIFT: Hi. Joe Swift, Eversource
7 Supervisor of Load Settlement.

8 MS. BENNETT: Hi. Colleen Bennett,
9 Manager of Settlement Analysis, Eversource.

10 CHAIRMAN GOLDNER: Thank you. Please
11 raise your right hand.

12 (Whereupon, JEFFREY PENTZ,
13 COLLEEN BENNETT, and JOSEPH SWIFT were
14 duly sworn by Chairman Goldner.)

15 CHAIRMAN GOLDNER: Okay. Thank you
16 the witnesses are ready for direct.

17 REBUTTAL DIRECT EXAMINATION

18 BY MS. CHIAVARA:

19 Q. All right. Since -- Jessica Chiavara.

20 Since Mr. Davis and Mr. Rice have
21 already been sworn in and qualified, I'll just
22 say, Mr. Davis, has anything changed on your
23 resumé that you'd like to update today since

1 Tuesday?

2 A. (Davis) No.

3 Q. Mr. Rice, same question for you.

4 A. (Rice) No.

5 Q. Fantastic.

6 Ms. Bennett, can you please state your
7 name and the title of your role at Eversource.

8 A. (Bennett) Yes. Colleen Bennett, Manager of Load
9 Settlement Analysis.

10 Q. And what are the responsibilities of your role at
11 Eversource?

12 Q. (Bennett) I provide load settlement and load
13 research services for the Eversource operating
14 companies, including Public Service of New
15 Hampshire.

16 Q. And have you ever testified before this
17 Commission?

18 A. (Bennett) No, I have not.

19 Q. Regarding the January 30th, 2024, joint utility
20 rebuttal testimony, did you file testimony and
21 supporting attachments that are marked as
22 Exhibit 3?

23 A. (Bennett) Yes.

1 Q. And were the testimony and supporting materials
2 prepared by you or at your direction?

3 A. (Bennett) Yes.

4 Q. And do you have any changes or updates to make?

5 A. (Bennett) No.

6 Q. And so do you adopt the testimony today as it was
7 written and filed?

8 A. (Bennett) Yes.

9 Q. Thank you.

10 Turning to Mr. Swift. Mr. Swift, will
11 you please --

12 CHAIRMAN GOLDNER: I'm sorry, Attorney
13 Chiavara, we wish to renew our awkward process of
14 identifying as we go.

15 MS. CHIAVARA: Yes. I will do that.

16 BY MS. CHIAVARA:

17 Q. Okay. Jessica Chiavara.

18 Mr. Swift, will you please state your
19 name and title of your role at Eversource.

20 A. (Swift) My name is Joe Swift. My title is
21 Supervisor of Load Settlement and Planning and
22 Operations for Eversource Energy.

23 Q. Jessica Chiavara.

1 What are the responsibilities of your
2 role at Eversource?

3 A. (Swift) Joe Swift speaking.

4 I have worked for Eversource for 25
5 years in energy efficiency and load settlement.
6 I currently provide load settlement services to
7 the operating companies of Eversource, including
8 Public Service of New Hampshire.

9 Q. Jessica Chiavara.

10 Have you ever testified before this
11 Commission?

12 A. (Swift) Yes, I testified in Docket
13 No. DE 17-136.

14 Q. Thank you. Jessica Chiavara.

15 Did you file testimony and supporting
16 attachments as part of the filing on January
17 30th, 2024, marked as Exhibit 3?

18 A. (Swift) Yes, I did.

19 Q. Were the testimony and supporting materials
20 prepared by you or at your direction?

21 A. (Swift) Yes, they were.

22 Q. Do you have any changes or updates to make?

23 A. (Swift) No.

1 Q. So do you adopt your testimony today as it was
2 written and filed?

3 A. (Swift) Yes, I do.

4 MS. CHIAVARA: Thank you very much.
5 Jessica Chiavara.

6 REBUTTAL DIRECT EXAMINATION

7 BY MR. TAYLOR:

8 Q. Good afternoon. Patrick Taylor.

9 Mr. Pentz, would you please state your
10 name, employer, the position that you hold with
11 the company and your responsibilities in that
12 position.

13 A. (Pentz) Jeff Pentz speaking.

14 My name is Jeff Pentz, Supervisor of
15 Energy Supply for Unitil. My responsibilities
16 include default service procurement, REC
17 procurement, load settlement, as well as managing
18 our retail supply services group.

19 Q. Patrick Taylor.

20 Have you ever testified before this
21 Commission?

22 A. (Pentz) Yes, on numerous occasions.

23 Q. Patrick Taylor.

1 Did you file testimony and supporting
2 attachments as part of the filing -- the rebuttal
3 filing on January 30th, 2024, marked as Exhibit 3
4 in this docket?

5 A. (Pentz) Yes.

6 Q. Patrick Taylor.

7 Were the testimony and supporting
8 materials prepared by you or at your direction?

9 A. (Pentz) Yes.

10 Q. Patrick Taylor.

11 Are there any changes or updates you'd
12 like to make to your testimony today?

13 A. (Pentz) I do not.

14 Q. Patrick Taylor.

15 Do you adopt your testimony today as
16 it was written and filed?

17 A. (Pentz) Yes, I do.

18 MR. TAYLOR: Thank you.

19 MR. SHEEHAN: If I could chime in and
20 have Mr. Garcia -- although he's not on our
21 panel, he was part of the testimony.

22 Where is he?

23 You need to get near a microphone.

1 REBUTTAL DIRECT EXAMINATION

2 BY MR. SHEEHAN:

3 Q. Mr. Garcia, please state your name and your
4 position with Liberty.

5 A. (Garcia) Good afternoon. Robert Garcia, Manager
6 of Rates and Regulatory Affairs for Liberty.

7 Q. Mike Sheehan.

8 Did you file testimony and supporting
9 attachments as part of what has become Exhibit 3?

10 A. (Garcia) This is Robert Garcia. Yes.

11 Q. Mike Sheehan.

12 Was that part of the testimony you
13 were responsible for prepared by you or under
14 your direction?

15 A. (Garcia) Robert Garcia responding. Yes.

16 Q. Do you have any changes or updates?

17 A. (Garcia) Robert Garcia responding. No.

18 Q. Mike Sheehan.

19 Do you adopt your testimony today as
20 it was written and filed?

21 A. (Garcia) Robert Garcia responding. I do.

22 MR. SHEEHAN: Thank you.

23 CHAIRMAN GOLDNER: We have a new

1 outstanding benchmark. Thank you, Liberty.

2 Thank you. Well done.

3 All right. Anything else before we go
4 to direct?

5 MR. TAYLOR: Yes, Commissioner,
6 Patrick Taylor.

7 On Tuesday, during the cross-
8 examination of the joint witness panel for
9 utilities, there was a discussion of testimony
10 from Docket 22-073, and neither of the witnesses
11 who are on that panel had been involved in that
12 docket or directly involved in that project.

13 Mr. Pentz is one of the witnesses
14 listed on that testimony, and to the extent that
15 it may seem that I was trying to misstate that on
16 Tuesday, that is not the case. It became
17 apparent to me yesterday that Mr. Pentz was,
18 indeed, a witness on that testimony.

19 So I wanted to clarify the record,
20 just so there's no confusion about that.
21 Everything else I said at the time, you know,
22 there were many witnesses on that testimony that
23 are not here today, and I think the question of

1 whether it should be administratively noticed is
2 still an appropriate one. But I wanted to make
3 sure that was clear for the -- the record for the
4 Commissioners.

5 CHAIRMAN GOLDNER: Thank you, Attorney
6 Taylor. That'll be it? Anything else before we
7 move to direct?

8 Okay. Seeing none, let's move to
9 direct.

10 FURTHER REBUTTAL DIRECT EXAMINATION

11 BY MS. CHIAVARA:

12 Q. Thank you. Jessica Chiavara.

13 The first question is for Mr. Rice.
14 Mr. Rice, counsel for the Coalition asked Clean
15 Energy New Hampshire and the OCA witnesses on
16 Tuesday, and then again today asked Mr. Below,
17 about not all kilowatt hours having the same
18 value.

19 So assuming, for purposes of this
20 question, that that -- the truth of that
21 statement, that not all kilowatt hours have the
22 same value, is there any justification for
23 treating all kilowatt hours as having the same

1 value?

2 A. (Rice) Yes, I believe there is. Yeah, that's --
3 the settling parties testified, we believe, that
4 the evidence presented so far demonstrates that
5 the current structure, which provides a
6 consistent kilowatt hour of credit for any excess
7 generation produced by the customer generator
8 remains just and reasonable.

9 You certainly could make changes to --
10 to have more precise pricing during any interval.
11 I actually can talk some more about those, but
12 it's important to recognize that there's
13 limitation (indiscernible) with that. I won't
14 bore you with that anymore.

15 So I think you're in a position of --
16 and there's also potentially adverse effects of
17 differentiating kilowatt hours in a way that's
18 not helpful, which I can also talk about examples
19 of that.

20 So given the risks of any unintended
21 outcomes and differentiation, given the costs of
22 achieving that differentiation, I think those
23 need to be balanced against the potential

1 benefits of having differentiated rates. And --
2 and when we look at all those factors
3 collectively, we think that the current, you
4 know, status quo achieves that appropriate
5 balance. We think it's -- it's a good balance.
6 It's easy for customers to understand. It's
7 commercially viable for the solar generation
8 market. And we don't want the product to be the
9 enemy of the good.

10 Q. Thank you. Jessica Chiavara.

11 Mr. Rice, Mr. Below testified today
12 that the settlement terms, specifically
13 pertaining to the inclusion of RPS compliance in
14 the net metering credit is sufficient to rise to
15 the level of an unjust or unreasonable cost
16 shift.

17 Do you agree, and do you feel the
18 record supports this conclusion?

19 A. (Rice) I do not. In the pre-filed rebuttal
20 testimony, the utilities addressed what we
21 believe were some miscalculations in the -- in
22 the original testimony of Mr. Below. The
23 Commissioners can review that at their pleasure.

1 I'm not getting into that here.

2 The other thing that I want to kind of
3 come back to is on Tuesday, we testified that
4 it's really most important to look at the total
5 compensation rate when making a determination on
6 what is a, you know, just and reasonable net
7 metering structure. Not parsing individual
8 components. And that, you know, the evidence
9 does suggest that the current status quo results
10 in just and reasonable rates.

11 Mr. Below just recently testified that
12 he thought the small customer generator
13 compensation structure was just about right and
14 reasonable and fair. He also testified that he
15 thought the current structure undercompensates
16 large customer generators.

17 If both those things are true, that
18 suggests to us that really, it's not necessary to
19 make adjustments, to take out the RPS credit at
20 this time.

21 I think the other thing that we wanted
22 to make sure the Commission was aware of is
23 there's a large number of small customer

1 generators that aren't bothering to register
2 their resources in the RPS market and take the
3 opportunity to receive -- receive RECs to
4 interest credit in their accounting for those
5 customers, and what they're doing is -- it's a
6 term referred to as sweeping those RECs. And
7 they're counting that generation from renewable
8 customers that aren't bothering to participate in
9 the RPS market, and they were using that to make
10 a downward adjustment to RPS obligations that
11 lowers costs for all customers already.

12 So through that mechanism, there's a
13 value for RPS from many small customer
14 generators, that it's flowing through to all
15 customers.

16 Q. Thank you. Jessica Chiavara.

17 Mr. Rice, today on direct exam,
18 Mr. Below represented that there's a large queue
19 of large products that may come online in coming
20 years. Do you think this is likely?

21 A. (Rice) I mean, I can't predict the future, but I
22 think there's a lot of reasons to be skeptical of
23 that. As I previously indicated at the start of

1 hearings, I manage distribution generation
2 programs in Massachusetts and Connecticut. And
3 just to give the Commission -- Commission some
4 data points, you know, a large customer
5 generator, so a project greater than 1 megawatt
6 right now in Massachusetts, it has access to a
7 total compensation rate of about 12 to 15 cents
8 per kilowatt hour. And, mind you, that's a fixed
9 compensation rate that that project will have for
10 20 years.

11 Similarly, in Connecticut, we have
12 a -- I'd say a competitively paid program for
13 distributed generation projects. The ceiling
14 price for that program -- or, again, for projects
15 1 megawatt or greater, is up to 14 and a half
16 cents per kilowatt hour. And I can tell you most
17 of the bids don't come in far under that.
18 They're very closely -- they come pretty close to
19 that range, so a similar price range that is
20 supporting the market in those states.

21 And I will say, even at those price
22 levels, again, those scenarios that have fixed
23 pricing, 20 years, a lot of projects ultimately

1 can't get across the finish line. And they
2 have -- they have that revenue stream, but they
3 still can't get their project working.

4 Now, compare that with where we
5 currently are under the status quo in New
6 Hampshire, with default service being the credit
7 rate for large customer generators.

8 So, in 2024, Eversource's default
9 service rates were recently updated. We've been
10 at a range of 8 to 10 and a half cents per
11 kilowatt hour, and that's not a fixed price.

12 So you have a lower price that floats,
13 and, as we all know, that may not be an assurance
14 that that price is going to be available -- that
15 price level is going to be available for the full
16 20 years, that projects are able to lock in, in
17 distributed generation programs in other states.

18 So, given that significant difference,
19 I think there's going to be a lot of economic
20 headwinds to the whole queue coming online in the
21 coming years.

22 I don't -- and that's not uncommon.
23 Projects can apply to interconnect at any time

1 for any reason. A large number of those projects
2 don't ultimately get across the finish line and
3 enter service.

4 Q. Thank you very much. Jessica Chiavara.

5 Mr. Rice, CPCNH has proposed that
6 customer generators receive transmission credit
7 based on the calculation of regional network
8 service or RNS charges.

9 What would be the impact of
10 implementing CPCNH's proposal?

11 A. (Rice) I'm not going to get into the
12 administrative requirements. I think we've
13 covered that enough so far.

14 But I think it's important to
15 recognize how the Coalition's proposal could also
16 contribute to outcomes that really aren't optimal
17 or efficient. Ultimately, what the Coalition is
18 asking is for a transmission credit to be
19 provided solely based on the output of a
20 generation facility at one hour in one month,
21 each month.

22 That's how RNS charges are calculated.
23 It's an allocation methodology, where all the

1 wholesale transmission customers in New England
2 are allocated a piece of the -- the cost of
3 operating regional transmission systems based on
4 their coincident peak load.

5 I think it's important to not
6 misconstrue an allocation methodology as a price
7 signal that's efficiently -- and suggesting what
8 the -- the underlying cost of the transmission
9 system is or the incremental cost of the
10 transmission system is.

11 We've talked about a circuit
12 saturation on Tuesday and how, when you have a
13 growing number of large resources that are trying
14 to put more power back out to the grid, it more
15 quickly saturates the substation and creates the
16 need for costly upgrades to allow more resources
17 to come online.

18 We've talked about how kind of the
19 situation that Eversource's operating companies
20 in Massachusetts are dealing with. One of the
21 things that companies -- that a Massachusetts
22 company is increasingly trying to do with
23 distributed generation is it actually provides

1 them incentives to moderate their output. So
2 instead of configuring your system to put as much
3 power out to the grid at any point in time as you
4 can, which is what the Coalition wants to
5 encourage, we're asking resources to do the
6 opposite.

7 We're asking them to moderate their
8 output and spread it out over a longer period of
9 time. Because when you do that, you don't
10 contribute to circuit saturation as much. So we
11 get more benefit out of the investments we're
12 making. We can do more distributed generation
13 with the same investment.

14 So that's a much more efficient
15 pricing up, and we're concerned that the
16 Coalition's proposal was, really, to do the
17 opposite.

18 Q. Thank you very much. Jessica Chiavara.

19 I guess as a point of comparison, can
20 you generally explain how a utility would be
21 compensated for activities, such as, a battery
22 storage pilot or building, owning, and operating
23 a solar project?

1 A. (Rice) Yeah. A utility would collect a
2 regulated cost of service, typically. You know,
3 if approved by its regulator, it would be able to
4 recover critically incurred operation maintenance
5 expense, depreciation on critically incurred
6 capital investments, plus a reasonable return on
7 that capital that was approved by its regulator.

8 Q. Jessica Chiavara asking.

9 Mr. Rice, if a utility program or
10 investment resulted in a reduction in the
11 wholesale transmission charges, would the utility
12 retain the value of that reduction?

13 A. (Rice) No, it would not.

14 Q. Thank you. Jessica Chiavara asking.

15 Mr. Rice, who would benefit from that
16 reduction in transmission charges?

17 A. (Rice) That benefit would flow to all utility
18 customers who support wholesale transmission
19 comps through their retail transmission rates.
20 That would result in a reduction to retail
21 transmission rates paid by all customers.

22 Q. And -- sorry. Jessica Chiavara.

23 Mr. Rice, if the Commission were to

1 approve CPCNH's recommendation for transmission
2 credit and net metered facilities' reduced
3 transmission charges, who would benefit from that
4 reduction?

5 A. (Rice) In that case, the benefit -- that benefit
6 of a reduced wholesale transmission charge would
7 be passed on exclusively to the net metered
8 customer instead of all customers.

9 Q. Thank you very much. Jessica Chiavara.

10 The next question is for Mr. Davis.
11 Mr. Davis, the Coalition also wants battery
12 storage to be eligible for net metering and is
13 recommending the Commission take action and
14 direct the utilities to start developing tariffs
15 allowing such eligibility.

16 Can you briefly identify any issues
17 that should be considered prior to such action
18 being taken?

19 A. (Davis) Sorry. Can you repeat the question,
20 please?

21 Q. Yes. So the Coalition was recommending earlier
22 today that battery storage be eligible for net
23 metering and was recommending that the Commission

1 take action to direct the utilities to start
2 developing tariffs to allow such eligibility for
3 battery storage being eligible for net metering.

4 Can you briefly identify issues that
5 should be considered prior to such action being
6 taken?

7 A. (Davis) Certainly. I'm sorry, in the context of
8 a tariff, right?

9 Q. As far as, before making -- before making battery
10 storage eligible for net metering credits,
11 what -- what considerations should be taken into
12 account?

13 A. (Davis) Well, first, I'll make it clear that,
14 you know, Eversource is currently able to pair
15 energy storage with net metering facilities. We
16 do support further development of battery storage
17 as a valuable energy-resilient resource, and
18 we're not opposed, in principle, to considering
19 making battery storage eligible for net metering
20 credits.

21 However, the subject should be
22 properly and thoroughly considered before such an
23 expansion of net metering would be adopted. And

1 it certainly wasn't noticed in this docket, has
2 not been properly vetted by the parties,
3 potentially put before the Commission for
4 consideration with [sic] the necessary scrutiny
5 that I believe would need to be required.

6 Should we -- the parties here, you
7 know, wish to consider expanding net metering to
8 include battery storage, we would support a party
9 filing such a petition and would welcome
10 participation in that proceeding.

11 I can say that this issue has already
12 played out to varying degrees in neighboring
13 states. It's been demonstrated that this is a
14 matter of some complexity that's definitely worth
15 consideration to see if implementation of such an
16 expansion aligns with state policy and rate
17 design principles, among other considerations
18 before any action is taken.

19 Q. Thank you, Mr. Davis. Jessica Chiavara.

20 Mr. Davis, turning a bit to pragmatic
21 considerations. Earlier today, Mr. Below
22 actually, in testimony, Exhibit 13, pages 19
23 through 22, suggests calculating on an individual

1 customer basis a transmission credit based on
2 what he asserts in testimony are avoided
3 transmission costs.

4 Currently, net metering compensation
5 is calculated using existing rates or a
6 percentage of existing rates, and the combination
7 of those.

8 This would be a newly designed credit
9 rate. Is that an accurate characterization, in
10 your opinion?

11 A. (Davis) That's how I see it, yes.

12 Q. So -- thank you. Jessica Chiavara.

13 Mr. Davis, if this is a new rate, even
14 though it's a credit rate, would it require a
15 finding by the Commission that it's just and
16 reasonable?

17 A. (Davis) Yes, it would.

18 Q. Thank you. Jessica Chiavara.

19 Mr. Davis, Mr. Below suggests, on page
20 30 of Exhibit 13 in his testimony, that the rate
21 could be, quote, adjusted as part of the TCAM
22 filing. Is this an appropriate method of dealing
23 with this?

1 A. Oh, no. No. Mr. Below's proposed calculation
2 for a transmission credit rate has different
3 inputs than those that we use for the TCAM.
4 They're, effectively, two entirely different
5 rates that would require different proceedings
6 with independent findings of the Commission that
7 each rate is just and reasonable.

8 Q. Jessica Chiavara.

9 Mr. Davis, since Mr. Below is
10 suggesting a rate calculated on an individual
11 customer basis, does that seem like it would be
12 more or less efficient, compared to uniform rates
13 across customer classes, for the Commission to
14 find that the rates are just and reasonable?

15 A. (Davis) Well, this is a new idea. I'm not
16 really sure off the top of my head how we would
17 do that.

18 Q. Fair enough. Jessica Chiavara.

19 Mr. Davis, Mr. Below suggested in his
20 testimony that manual -- and I think he
21 reiterated it today -- that manual credit
22 calculations would be relatively simple. Do you
23 agree?

1 A. (Davis) Ed Davis.

2 No. I don't operate the billing
3 system, but I do work closely with the billing
4 group. And at a high level, I think this would
5 be onerous, slow, and disruptive to, probably,
6 our billing operations.

7 Q. Thank you very much. Jessica Chiavara.

8 I'm going to put -- these next
9 questions focus on the load settlement proposal
10 by the Coalition. First question for Mr. Swift.

11 Mr. Below spoke, and testified in his
12 written testimony, about the utilities changing
13 how they settle wholesale energy levels with ISO
14 New England. A primary justification for this is
15 that it would be more accurate, because it would
16 be assigning customer generator exports to the
17 customer's supplier.

18 Would this, in fact, be a more
19 accurate or fairer method of allocation?

20 A. (Swift) It possibly could be in some cases, but
21 only with the implementation of interval meters,
22 which are currently not in place for the vast
23 majority of our customers.

1 Interval meters also require
2 supporting software systems capable of supporting
3 the technology. So all in all, it's a profound
4 investment.

5 Without interval meters, Mr. Below's
6 proposed method is simply a costly and complex
7 replacement of the current method of estimation,
8 which has been tested and works. But this
9 method, which has not been testified or even
10 sufficiently detailed to be able to assess it, it
11 would make New Hampshire the odd man out, with a
12 FERC-regulated process and that is uniformly used
13 throughout the region. New Hampshire would be
14 settling loads differently than all of the other
15 states in ISO New England territory.

16 In addition, this method would also
17 require substantial modifications of what, for
18 all three New Hampshire utilities, are
19 enterprise-wide systems. Without a detailed
20 proposal for how this methodology would be
21 executed, it's hard to say the extent of the
22 effort or cost that this would entail, but I can
23 say that making any modifications to these

1 systems entail a sizable investment and
2 undertaking.

3 Q. Thank you very much. Jessica Chiavara.

4 Still for Mr. Swift.

5 Mr. Below suggested -- oh, sorry --
6 I'm sorry. I lost my place. Give me just a
7 moment.

8 The question is still for Mr. Swift.
9 If Eversource had interview -- interval meters
10 today, which you just said would be required for
11 an accurate -- for this to be done accurately,
12 what would the practical effect be of
13 implementing the Coalition's preferred method of
14 load settlement?

15 A. (Swift) In short, it would cost a lot of money
16 and change very little, I believe.

17 At best, this would create a minimal
18 cost shift, where the supplier with the most
19 customer generator exports would see a nominal
20 reduction in load obligation for the amount of
21 exports that exceeds what other suppliers are
22 exporting, but that reduction would have to be
23 paid for by -- it basically would be offset by

1 other suppliers picking up a larger load
2 obligation.

3 CPCNH's proposal only modifies how
4 exported generation is calculated and allocated,
5 which is a small portion of what's called the
6 residual remote settlement. The residual is a
7 mechanism that balances the wholesale obligation
8 of all suppliers. The actual system loads is
9 essentially an assortment of miscellaneous
10 calculations, such as, line loss, differences in
11 profile assumptions, as well as export -- excess
12 exported energy from net metered customers.

13 To continue, the part of residual
14 associated with exported generation from net
15 metered customers is estimated to be a relatively
16 small percent based on -- based on data that I
17 analyzed from 2023 actual settlement data. This
18 means that, even if we were to do what Mr. Below
19 is suggesting, that dumps suppliers' customers'
20 exports from their load obligation, the majority
21 of residual still needs to be allocated. Plus if
22 you deduct exports from one particular supplier,
23 they would -- they would need to be allocated

1 among the rest of the suppliers. This means that
2 the supplier's load will not be reduced by the
3 full export amount.

4 The result of Mr. Below's suggestion
5 is just a minor adjustment to what portion of the
6 residual is allocated to each supplier by using
7 the relative difference in customer exports from
8 one supplier to another.

9 Simply put, although this is the
10 preferred method for allocating customer exports
11 load settlement, it's just a cost shift among
12 suppliers, and a relatively minor one at that.
13 It does not justify the cost and resources that
14 it would take to disrupt the currently working
15 process that is uniform and formerly used across
16 New England.

17 Just to give you an example. If I --
18 I look at solar data, you know, the excess
19 generation from, you know, rooftop solar is on
20 the order of about a half a percent. But to kind
21 of give you, kind of like, a dummed-down
22 example, if I just consider the rooftop solar --
23 just the excess portion, because that's the only

1 part that gets allocated. Suppose we had two
2 suppliers and their load obligation was 100 hours
3 each, so my total load obligation of 200 hours.

4 Now, when I apply the residual
5 adjustment of about a half a percent, that would
6 bring each supplier load down to \$99.50, because
7 of the half percent credit net metering.

8 Based on Mr. Below's proposed
9 methodology, if one supplier had a higher --
10 higher excess generation versus another, for
11 supplier B's excess generation, say to the
12 two-to-one ratio, or the 60/40 ratio, essentially
13 what that would do is take those two suppliers
14 that are -- now have a load obligation of \$99.50.
15 The one with more generation would end up with a
16 load obligation of \$99.40, and the second
17 supplier would have to make up the difference,
18 and his load obligation would be \$99.60.

19 So it's important to realize two
20 things. Number one, there's no net savings.
21 Total load obligation, you know, when you sum
22 them up between the two suppliers, would be the
23 same. So the benefit/cost ratio of making that

1 type of investment and making that type of change
2 would be zero.

3 And the second thing is it really --
4 it would be a shift. It would be a shift towards
5 non-participants, which would -- it would shift
6 some cost to non-participants, and it would be a
7 huge and expensive undertaking to make those
8 modifications.

9 Q. Thank you very much. Jessica Chiavara.
10 Still for Mr. Swift.

11 Do you know of any alternative means
12 to accomplish the ends of this preferred
13 methodology suggested by the Coalition?

14 A. (Swift) Well, because -- you know, based on that
15 last example, CPCNH already receives the
16 socialized share of the residual. That's a
17 given. So it would seem logical that if CPCNH
18 wanted to raise additional revenue to increase
19 the compensation to their customers, they could
20 simply do that by adding a small -- and I believe
21 it would be a very small -- charge to their
22 customers to pay for whatever type of increased
23 incentive that they wanted to offer their

1 customers.

2 Q. Thank you. Jessica Chiavara.

3 Turning back to Mr. Rice. CPCNH is
4 saying that their preferred methodology for
5 allocating the wholesale load obligation costs is
6 essential for the Coalition to serve net metered
7 customers. Is this true?

8 A. (Rice) I don't believe so, at least in the -- or
9 the way Mr. Swift just described, you know, an
10 example of how it could be accomplished, and
11 that's supported by Eversource with 3,000 net
12 metered customers today -- actually, more than
13 3,000 -- that are served by a competitive
14 supplier. So their competitive supplier is going
15 to figure this out for at least 3,000 customers.

16 And then, I mean, the other thing is,
17 if the Coalition, you know, concludes that the --
18 that the process that Mr. Swift described, you
19 know, really is prejudicing their ability to
20 serve a net metered customer, or the margin net
21 metered customer, I mean, they do have the option
22 to register the asset. You know, if the asset
23 was registered, then 100 percent of the output

1 would be settled, and then it would be available
2 to the wholesale supplier.

3 So, yeah, I don't know what kind of
4 the difference is between 100 percent and --
5 but -- well, I'll just leave it at that.

6 There is an option that exists today
7 for 100 percent of the energy value to be
8 retained by wholesale supplier for a net metered
9 use.

10 So, I mean, I recognize there are
11 probably reasons that the Coalition would prefer
12 the changes to be made. I'm -- you know, we're
13 just not convinced that it rises to the level of
14 necessity that seems to have been represented.

15 MS. CHIAVARA: Thank you very much.
16 Jessica Chiavara. That's all the direct I have
17 of this panel.

18 CHAIRMAN GOLDNER: Thank you. We can
19 move now to cross beginning with CPCNH.

20 MS. MANZELLI: Thank you.

21 REBUTTAL CROSS-EXAMINATION

22 BY MS. MANZELLI:

23 Q. Thank you. This is Amy Manzelli questioning.

1 Let's see, a couple of questions for Mr. Rice.

2 Let me start with reference to Exhibit
3 28, who have -- do you guys have the exhibits up
4 there or --

5 A. (Rice) I have some of them.

6 Q. Okay. I have one copy. Exhibit 28 is the -- let
7 me -- Exhibit 28 is Eversource's response about
8 the number of projects in the queue right now and
9 then response to a record request.

10 A. (Rice) I don't have it in front of me, but I --
11 I'm familiar with the response. If I need to see
12 it.

13 Q. Okay. I'm not even asking about the numbers.

14 A. (Rice) Okay.

15 Q. Amy Manzelli speaking.

16 So you made reference to Mr. Below's
17 testimony earlier, and you characterized his
18 testimony as being that he testified that there
19 was going to be a large number of large projects
20 coming online. But isn't it true that he was
21 simply referencing Exhibit 28 to describe the
22 projects coming online?

23 A. (Rice) The way -- the way I took Mr. Below's

1 testimony is he pointed out the queue and then
2 said it was large. And I took that as intended
3 to convey a sense of urgency to change the net
4 metering structure before this large wave of
5 projects comes online and participates in the
6 status quo.

7 And I -- I guess I'm just skeptical of
8 that level of urgency and the likelihood that all
9 of those projects will, indeed, come online
10 before the Commission has an opportunity to
11 consider rate changes in the future.

12 Again, given that the current
13 compensation rate available to those projects
14 through default service is not fixed and --

15 Q. Mr. Rice, I understand your position, and your
16 skepticism is noted. You explained it before.

17 Amy Manzelli questioning.

18 But my question is, you've said that
19 Mr. Below said that the projects that were coming
20 on would be large and -- by which I think you
21 mean, you know, in the 1 to 5 megawatt category.
22 But he didn't characterize the size of the
23 projects, right? He characterized the quantity

1 of the projects; is that correct?

2 A. (Rice) I think he characterized both sizes and
3 the quantity, in terms of what the potential
4 impact could be if those projects were to come
5 online and participate under the current net
6 metering structure.

7 Q. Amy Manzelli questioning.

8 Can we agree that he characterized the
9 potential of projects coming online with
10 reference to the information contained in Exhibit
11 28?

12 A. (Rice) Sure.

13 Q. And the facts are really that -- the truth is
14 neither you, nor Mr. Below, nor any of us, can
15 predict the future of how many projects are
16 coming online, what their size is or any of that?

17 A. (Rice) I agree. None of us can predict the
18 future.

19 CHAIRMAN GOLDNER: Mr. Rice, if you
20 could just remember to identify yourself before
21 answering.

22 THE WITNESS: (Rice) Thank you,
23 Chairman.

1 BY MS. MANZELLI:

2 Q. Amy Manzelli questioning.

3 But we do have some facts that we do
4 know. For example, we have Exhibit 28, which is
5 the actual factual around projects in the
6 Eversource queue at the time that answer was
7 provided, right?

8 A. (Rice) The information in the Eversource
9 response is actual.

10 Q. Yeah. And can you explain to us what happened
11 with the number of DER applications with respect
12 to the Eversource in 2022?

13 A. (Rice) Not off the top of my head.

14 CHAIRMAN GOLDNER: Mr. Rice, please
15 don't forget to identify yourself.

16 WITNESS: (Rice) Thank you.

17 Brian Rice, Eversource Energy.

18 CHAIRMAN GOLDNER: Thank you.

19 THE WITNESS: (Rice) Not off the top
20 of my head.

21 BY MS. MANZELLI:

22 Q. Is there anyone on the panel that can answer that
23 question, what happened with the amount of DER

1 applications for Eversource in 2022 or
2 thereabouts?

3 Amy Manzelli questioning.

4 A. (Davis) Ed Davis. I cannot.

5 Q. Okay. I think this is for Mr. Rice.

6 Do you have Mr. Woolf's and Mr. Borden's
7 testimony in front of you?

8 A. (Rice) I do not.

9 Q. Are you familiar with Exhibit 4, which is their
10 testimony, Figure 1? We looked at it earlier.
11 It describes the four stages: Stage 1, Stage 2,
12 Stage 3, Stage 4, and when it might be prudent to
13 move away from -- or move into avoided costs and
14 other types of compensation mechanisms.

15 A. (Rice) I don't have it in front of me.

16 Q. Okay.

17 MS. MANZELLI: Commission, permission
18 to approach the witness to provide a copy?

19 CHAIRMAN GOLDNER: Please do.

20 MS. MANZELLI: Thank you. That is Amy
21 Manzelli.

22 BY MS. MANZELLI:

23 Q. So I'll give you a second there just to look at

1 what (indiscernible) copy of Mr. Woolf's and
2 Mr. Borden's testimony at Exhibit 4, but I would
3 like you to bring your attention to Figure 1 on
4 Bates page 19.

5 You testified earlier that there is
6 no -- that there -- about justification for
7 treating all kilowatt hours as having the same
8 value.

9 Wouldn't you agree that Mr. Woolf's
10 and Mr. Borden's testimony regarding Figure 1
11 suggests that when the net metering -- that when
12 the distributed energy resources become developed
13 to a certain extent, that maintaining net
14 metering 2.0 status quo no longer becomes just
15 and reasonable?

16 A. (Rice) I don't think I can answer that question,
17 because I don't know what you mean by "certain
18 extent." If you could clarify that.

19 Q. Well, I believe -- I did just hand you my only
20 copy, but I believe if you look on the third
21 square, which I believe they call Stage 3, It'll
22 say something like: Greater than 10 percent
23 market saturation -- market saturation. So

1 that's how I would define a "certain extent."

2 A. (Rice) Okay. That's very helpful. Thank you.

3 Q. Yeah.

4 A. (Rice) So based on that definition of "certain
5 extent," subject to check -- and I'd be happy to
6 explore this -- Eversource in New Hampshire would
7 most certainly be in Stage 2, expanded adoption.

8 Like I said, there are -- Eversource
9 has 500,000 customers. Unless anybody -- I mean,
10 other witnesses can correct me. And subject to
11 check, I'm reasonably confident we don't have
12 50,000-plus customers there.

13 Q. But wouldn't that be a justification from -- away
14 from the status pro -- status quo -- this is Amy
15 Manzelli. I'll start that over.

16 Wouldn't it be, or couldn't it be, a
17 justification for moving away from the status quo
18 that New Hampshire would be approaching or
19 surpassing 10 percent in the future?

20 A. (Rice) Well, at this point, this isn't -- yeah,
21 this isn't my testimony. This is the testimony
22 of the OCA's witness. It's who ultimately
23 recommended approval of the settlement.

1 And, again, it's -- like I said,
2 subject to check, I'm reasonably confident
3 Eversource is in Stage 2. I don't know when
4 we'll approach Stage 3, because as we talked
5 about previously, no one can predict the future.

6 Q. Uh-huh.

7 A. (Rice) So based on that and based on the, you
8 know, assessments supported by the Dunskey
9 analysis and the analysis submitted by Mr. Tom
10 Beach for Clean Energy New Hampshire, I think
11 that I'm going to kind of double-down on the
12 settling parties' recommendation that at this
13 stage, given the -- the evidence in the
14 proceeding, that continuing the status quo under
15 the terms of the settlement is a reasonable
16 course forward.

17 Q. And I'm asking these questions because you
18 testified at the beginning of this panel about
19 justification for treating all kilowatt hours as
20 having the same value.

21 So I'm just trying to get at, couldn't
22 there be some circumstances where there would be
23 justification for not treating all kilowatt hours

1 as having the same value? That's why I was
2 asking those questions, Mr. Rice, but I'll move
3 on.

4 You also testified earlier about the
5 unintended consequences of differentiation. What
6 do you mean by that?

7 Amy Manzelli asking.

8 A. (Rice) I think I described this scenario with
9 respect to the proposal for -- of being the
10 Coalition --

11 CHAIRMAN GOLDNER: Mr. Rice, I'm sorry
12 for interrupting again.

13 THE WITNESS: (Rice) Thank you.

14 CHAIRMAN GOLDNER: Please don't
15 forget.

16 THE WITNESS: (Rice) Brian Rice,
17 Eversource Energy. I do apologize for having
18 to --

19 MS. MANZELLI: It's really hard.

20 THE WITNESS: (Rice) Thank you.
21 Again, I think the most clear example before us
22 now in this proceeding is the proposal for
23 transmission crediting.

1 Again, to -- we're really concerned
2 with the suggestion that we should be encouraging
3 resources to maximize their output to the grid
4 within a single hour, particularly when you
5 add -- when you add storage, you're really
6 expanding the capacity of the resource to do
7 that. And I think we explained, because of
8 what's required from the electric power system to
9 accommodate that maximized out -- output, it
10 doesn't seem to be encouraging efficient use of
11 the electric power system at all.

12 BY MS. MANZELLI:

13 Q. And what is your evidence of that sole unintended
14 consequence that you just discussed?

15 Amy Manzelli asking.

16 A. (Rice) Brian Rice, Eversource Energy.

17 My evidence is what we've discussed in
18 the course of these hearings.

19 Q. Now, I'm -- I'm a little bit -- Amy Manzelli
20 asking.

21 Can you help me understand,
22 admittedly, the -- I'm going to say everybody in
23 the room, to this docket and these issues, your

1 testimony about, if I'm understanding it
2 correctly, adding storage encourages maximizing
3 energy production to one hour.

4 Can you -- can you elaborate on that a
5 little bit?

6 A. (Rice) Yeah. The suggested service -- just
7 pointing out that if an intermittent distributed
8 generation resource, such as solar, was paired
9 with storage, it's possible -- it may even be
10 intended -- that that storage resource could be
11 used to store solar output over multiple hours
12 and then discharge that output in a much shorter
13 period of time, in order to maximize output to
14 the grid in a narrower period of time, to try to
15 maximize the credit that the Coalition wants to
16 be provided.

17 Q. And isn't it also possible and -- Amy Manzelli
18 questioning -- and, in fact, preferable that
19 storage would be charged during, you know,
20 something like solar noon on a solar sunny day,
21 and then discharged at, you know, 8:00 p.m. when
22 there might be more need for that energy? Isn't
23 that an alternative scenario?

1 A. (Rice) That's an alternative scenario. I don't
2 know if it's -- it would necessarily be
3 preferable. I think it's going to vary on
4 certain conditions.

5 But it's often not the scenario that
6 the Coalition proposed. The Coalition has just
7 proposed to discharge during the one hour of
8 regional system peak and maximize a credit based
9 on RNS charges, and that may or may not be the
10 most beneficial time for a local circuit to -- to
11 have that maximum amount of discharge onto it.

12 Q. Okay. Amy Manzelli questioning.

13 It is, in fact, though, what
14 Eversource is proposing in its Eversource New
15 Hampshire Clean Energy Fund, the purpose of which
16 is to reduce strain on the electric grid during
17 times of peak electricity demand, the hottest
18 days of the year, and having participants agree
19 to allow the program to remotely discharge their
20 battery during demand response events, correct?

21 A. (Rice) I'm not -- I don't have the document that
22 you're reading from in front of me. I didn't
23 produce it.

1 But that's a reasonable description,
2 and then it doesn't say that Eversource is going
3 to dispatch those resources solely to try to
4 coincide with the regional system peak to only
5 reduce RNS charges. So I'm trying to, you know,
6 pick one hour.

7 And even in the event it did, the
8 benefits associated with reducing transmission
9 charges wouldn't -- as explained previously,
10 wouldn't be retained by Eversource. They would
11 accrue to -- to all customers that pay the cost
12 of regional transmission costs through their
13 retail rates, all New Hampshire customers or
14 Eversource customers.

15 Q. Aim Manzelli questioning.

16 But just transitioning to the concept
17 of battery paired with solar, that's got to be
18 aligned with state policy if this is something
19 that Eversource is already doing in New
20 Hampshire, right?

21 MS. CHIAVARA: I'm sorry. Excuse me.
22 Jessica Chiavara. I don't know the program to
23 which Attorney Manzelli is referring. I think

1 we -- I think she's referring to the -- some
2 program outside of this docket for -- and I'm
3 not -- it doesn't sound familiar to me.

4 MS. MANZELLI: If I may respond.

5 The witness has already acknowledged
6 that the -- the description of the program
7 sounded accurate. And if we -- if the Commission
8 wishes us to enter this document that I'm holding
9 as an exhibit, we can. This is a document that
10 became available to us and was published, I
11 believe, only yesterday.

12 MS. CHIAVARA: I was just asking that
13 she identify what program she's speaking of, so
14 we can confirm whether or not that is an
15 Eversource program and whether the description
16 is, in fact, accurate.

17 MS. MANZELLI: I'm happy to do that.

18 The top of the document says, Enphase,
19 and then the next description says, Enphase
20 Growth Services Installer Training, Eversource
21 New Hampshire Clean Energy Fund. The remainder
22 of the first slide says: Partnering with Enphase
23 for customer success in Eversource New Hampshire

1 Territory, and it's dated August 21st, 2024. And
2 this is Amy Manzelli speaking.

3 MS. CHIAVARA: So the Eversource Clean
4 Energy Fund was created with shareholder dollars.
5 I believe the Chair is familiar with that. So
6 that was funded with shareholder dollars. We are
7 not talking about ratepayer money. I think these
8 are wholly un-analogous examples, and I don't see
9 how that is relevant to this inquiry.

10 CHAIRMAN GOLDNER: Attorney Manzelli,
11 I think it's 20 -- is it 23-004?

12 MS. MANZELLI: Correct.

13 CHAIRMAN GOLDNER: Yeah. So that was
14 a -- that was a separate funding element, so that
15 may not be relevant here.

16 MS. MANZELLI: Well -- excuse me,
17 Commissioner.

18 The issue here is that the purpose of
19 adding these batteries is to reduce strain on the
20 electric grid, and I'm reading from the document
21 here, quote: Reduce strain on the electric grid
22 during times of peak electricity demand, which
23 is -- end of quote.

1 Which is one of the benefits that the
2 Coalition is pointing out, and to our
3 understanding, one of the benefits that either
4 the joint utilities or Eversource -- they can
5 certainly clarify -- is either denying at large
6 or is denying as being beneficial enough to
7 justify the Coalition's recommendations.

8 MS. CHIAVARA: I believe the issue
9 here is how to set compensation levels for net
10 metering credit and the CEF battery storage
11 program. We're not -- nobody said -- I don't
12 think is disputing the benefit of batteries
13 dispatching energy to the grid. But we are not
14 talking about setting compensation levels with
15 the Clean Energy Fund. I think that's what we're
16 talking about in this docket.

17 MS. MANZELLI: One last point,
18 Commissioner, is that either the joint utilities
19 or Eversource is also questioning whether pairing
20 storage -- storage with distributed energy
21 resources is aligned with state policy, which,
22 again, this program demonstrates that it is, in
23 Eversource's perspective.

1 MS. CHIAVARA: Again, I think we're
2 missing the -- the nexus of the reason for the
3 battery storage deployment in the Clean Energy
4 Funding and what's being discussed here, which is
5 setting compensation levels and setting credit
6 levels and the basis and the soundness for
7 setting those compensation levels, versus the
8 Clean Energy Fund, which is simply trying to
9 reduce load on the system.

10 MR. TAYLOR: And, sorry, I just
11 also -- sorry. Pat Taylor.

12 I also just want to -- I want to take
13 issue with some of the statements that Attorney
14 Manzelli said, characterizing, you know, the
15 responses of Mr. Rice on behalf of all utilities
16 as somehow being inconsistent with state policy.

17 I think that there's a pretty long
18 record, over multiple dockets, where utilities
19 have -- have worked to advance state policies.

20 Nothing that Mr. Rice said -- as
21 Attorney Chiavara argued, no one suggests that
22 there's -- that the utilities oppose the idea
23 that battery storage, stored at one time,

1 discharged at another time for the benefit of the
2 system, is not what we're talking about here.
3 That's not what Mr. Rice said.

4 And so I think -- I just don't want to
5 let those statements go unchallenged, because
6 that's not what the witness said.

7 CHAIRMAN GOLDNER: Attorney Manzelli,
8 let's -- let's figure out how to move forward
9 here.

10 What -- what's your line of
11 questioning? What are you trying to show? And
12 maybe we can figure out how to move forward here.

13 MS. MANZELLI: I think I have gotten
14 in the testimony that I need on this issue, and I
15 can move onto my next question.

16 CHAIRMAN GOLDNER: Thank you.

17 MS. MANZELLI: Thank you.

18 BY MS. MANZELLI:

19 Q. All right. I think this is for Mr. Swift
20 regarding load settlement. You had testified
21 about interval meters. So my understanding is,
22 aren't projects over 1 megawatt going to have
23 interval meters anyway?

1 A. (Swift) Generally speaking, that's my belief,
2 yes.

3 Q. Thank you. I apologize for not saying that that
4 was Amy Manzelli asking the last question.

5 A. (Swift) And I apologize for that.

6 Q. All right. Mutual apologies accepted by Amy
7 Manzelli. Next question by Amy Manzelli. I
8 think, again, this is for Mr. Swift.

9 You emphasized the residual, and I did
10 want to get your right phrase, but it was
11 something like it was a hodgepodge of formulas.

12 Now, is the residual published and
13 available to customer generators?

14 A. (Swift) I believe we do have that on our
15 website, but it's certainly something that we can
16 make readily available, and we do make readily
17 available to suppliers on request.

18 Q. And -- Amy Manzelli questioning.

19 Are you using the term "suppliers" as
20 distinct from "customer generators" on purpose or
21 not?

22 CHAIRMAN GOLDNER: Mr. Swift, don't
23 forget to identify yourself. Thank you.

1 A. (Swift) Joe Swift responding.

2 I'm using the term "suppliers" to
3 represent energy suppliers, not -- not
4 generators.

5 Q. Okay. Thank you. Amy Manzelli here.

6 And, again, with regard to your
7 testimony on load settlement, I'm not going to
8 have captured your exact testimony correctly, but
9 generally, we talked about the Coalition's
10 position representing a huge shift. Again, I'm
11 not getting it exactly correct here, but
12 generally, you said that it would add more cost
13 to the non-net-metered customers, and you made a
14 couple more opinions.

15 What evidence do you have to support
16 your opinions on the Coalition's position on load
17 settlement?

18 A. (Swift) Joe Swift responding.

19 In a nutshell, load settlement is a
20 zero-sum game. So if you reduce one supplier's
21 load obligation, somebody has to pick up the
22 difference.

23 Q. Thank you. Amy Manzelli questioning.

1 Let me rephrase my question.

2 Aside from your testimony here today,
3 what evidence do you have to support your
4 opinions?

5 A. (Swift) Joe Swift responding.

6 I guess the answer is I'm familiar
7 with the intricacies of how load is settled.
8 Currently, the residual is allocated to the
9 supplier based on a shared profile load.

10 What's being proposed is a little bit
11 of a different -- has a little bit of a different
12 twist. Part of the residual associated with
13 excess generation would be broken out of the rest
14 of the residual, and that would be allocated to
15 suppliers based on their share of excess
16 generation.

17 That's my understanding of, you know,
18 the conversations we've had over the course of
19 the last year in technical sessions and so on.

20 Q. Thank you. Just a moment, please. Okay.

21 Question for Mr. Rice.

22 You testified about some of the
23 programs and systems in Massachusetts. Does

1 Massachusetts have an incentive set up to --
2 yeah.

3 Okay. Thank you. Forgive me. Amy
4 Manzelli questioning.

5 So in Massachusetts, is there anything
6 there to incentivize spreading out the production
7 over the course of the day? How is that
8 accomplished? You testified about some of that
9 during your testimony earlier.

10 A. (Rice) So the question is, yes, there are
11 incentives that -- that that encourage generators
12 to spread their output out.

13 Q. And if you could -- Amy Manzelli questioning.

14 Can you just briefly highlight, what
15 are those incentives?

16 A. (Rice) So right now, I talked a little bit about
17 the changes to interconnection cost allocation in
18 Massachusetts. One of the features of that is
19 that generators are assessed interconnection
20 costs based on the maximum amount they propose to
21 export to the grid.

22 So if a generator takes the
23 opportunity to manage and moderate its output to

1 the grid, its cost responsibility for
2 interconnection could be lower, and that's a
3 beneficial incentive, because if more generators
4 do that, then it creates -- it basically allows
5 for more total generation in terms of -- and
6 total output over time, to be hosted by the same
7 level of system upgrade.

8 Q. Thank you. Amy Manzelli questioning.

9 And, generally speaking, how does a
10 generator manage or moderate output? For anyone
11 on the panel.

12 A. (Rice) But on the technology? I think the --
13 the fine example that we talked about is
14 utilizing energy storage, pairing that with a
15 limited resource, and using it to moderate and
16 flatten the combined output of both of them.
17 Again, over many hours, so as to minimize output
18 to the grid during any one single hour.

19 MS. MANZELLI: All right. My thanks
20 to the panel. Amy Manzelli speaking. Thank you.

21 Oh, I'm sorry. I did skip over
22 something. Let me just get back to that real
23 quick.

1 BY MS. MANZELLI:

2 Q. I do have a couple of questions for Mr. Pentz,
3 so let me get my notes here.

4 Mr. Pentz, you're familiar with the
5 Unitil Kingston solar project, Docket 22-073.

6 A. (Pentz) Jeff Pentz answering. Yes.

7 Q. Okay. I have a couple of questions for you, just
8 to go over some the attributes from that project.

9 I do have excerpts from your
10 testimony if you need to be refreshed on that. I
11 understand it was a little bit ago.

12 Just big picture, it is your
13 understanding that this project may be the
14 largest, if not the only one of its type in New
15 England?

16 A. (Pentz) Jeff Pentz answering.

17 Yes, that is my understanding.

18 Q. Okay. And that being that it's a single-access
19 project?

20 A. (Pentz) Jeff Pentz answering. Yes.

21 Q. Yeah, okay. And I'm looking at your testimony,
22 which is dated -- it is not dated. It was
23 Exhibit FDGP-1, page 17.

1 Did you testify in that document that
2 in year one, the company estimates customers will
3 realize direct benefits of approximately 1.5
4 million?

5 A. (Pentz) The -- Jeff Pentz answering.

6 The -- the financial analysis model of
7 that project was primarily spearheaded by another
8 person at Unitil. But, yes, I would generally
9 agree with that. It's in the document.

10 Q. I believe that --

11 MR. TAYLOR: I would ask that
12 Mr. Pentz be asked to -- if his recollection is
13 to be refreshed, and particularly if he's going
14 to be directed to a number or something like
15 that, that the document be brought up.

16 MS. MANZELLI: Yeah, we can -- Amy
17 Manzelli speaking.

18 We can definitely do that. Just a
19 moment, please.

20 Attorney Taylor, is it your preference
21 that everybody get a copy?

22 MR. TAYLOR: I think as long as
23 Mr. Pentz can understand what you're looking at.

1 MS. MANZELLI: Okay. Perfect.

2 It is available, of course, in the
3 virtual file room.

4 And permission to approach the
5 witness? Thank you.

6 CHAIRMAN GOLDNER: Please do.

7 BY MS. MANZELLI:

8 Q. All right. So I was just going to -- Amy
9 Manzelli speaking -- I was just going to comment,
10 Mr. Pentz, that question that sometimes lawyers
11 ask at the beginning, you know, was this
12 testimony prepared by you or at your direction?
13 And so I think your answer related to this was
14 prepared at your direction. You might have had
15 someone helping you with the financial
16 calculations?

17 MR. TAYLOR: That is -- I object.
18 That is most certainly not what Mr. Pentz said.
19 Perhaps Amy -- Attorney Manzelli wants to reframe
20 the question.

21 CHAIRMAN GOLDNER: Can you -- can you
22 either rephrase or ask the question in a more
23 general way?

1 MS. MANZELLI: Sure.

2 BY MS. MANZELLI:

3 Q. Was this testimony prepared by you or at your
4 direction?

5 A. (Pentz) Jeff Pentz answering.

6 As part of a group with three other
7 individuals who contributed a significant amount
8 of material to the financial analysis, yes.

9 Q. Amy Manzelli speaking. Thank you. All right.

10 And, Mr. Pentz, I'm continuing on at
11 Bates stamp page 19, when you testified that some
12 of the benefits of the single-access --
13 single-access tracker project were avoided
14 capacity costs, local transmission benefits, and
15 regional transmission benefits, among some
16 others.

17 A. (Pentz) Jeff Pentz answering. Yes, that is
18 correct.

19 Q. And turning to page 191, and you'll figure when
20 you flip the page here, what I have passed to you
21 is excerpts from your testimony there, so it does
22 go from page 19 to page 191.

23 You also testified -- or this

1 testimony includes that the Kingston solar
2 project will operate as a load reducer, right?

3 A. (Pentz) Yes, that is correct.

4 Q. Thank you. This explained otherwise -- that the
5 electricity output will offset energy that
6 otherwise would be received by utility on the
7 transmission system.

8 A. (Pentz) Jeff Pentz answering. Yes, that is
9 correct.

10 Q. Couple more. Amy Manzelli asking.

11 Also, as a load reducer, the Kingston
12 solar project will reduce capacity from the
13 perspective of the ISO New England market, right?

14 A. (Pentz) Jeff Pentz answering. Yes, that is
15 correct.

16 Q. And on page 193: The company estimated that the
17 Kingston solar project's generation output during
18 the monthly peak hour to be approximately 600
19 kilowatts.

20 Do you see that there?

21 A. (Pentz) Jeff Pentz answering.

22 Yes, I see that. That's correct.

23 Q. Amy Manzelli asking. And that was approximately

1 12 percent of the nameplate -- nameplate
2 capacity?

3 A. (Pentz) Jeff Pentz answering. Yes, that's
4 correct.

5 Q. And I'm not going to get -- Amy Manzelli asking.

6 I'm not going to get into the full
7 detail here, because we can brief it. But the
8 testimony includes a sentence explaining the
9 calculation of the Year 1 local transmission
10 benefits, correct?

11 A. (Pentz) Yes. The exhibits do have a financial
12 model that indicate what the Year 1 savings would
13 be. Cost avoidance, I'm sorry.

14 Q. And on page 124, they also talk -- the testimony
15 also talks about the Year 1 regional
16 transmission benefit and describes that as a
17 formula with words, a narrative description of
18 the formula, correct?

19 A. (Pentz) Jeff Pentz answering.

20 Yes, that is my recollection.

21 MS. MANZELLI: Okay. Thank you. I
22 apologize for -- Amy Manzelli speaking.

23 I apologize for almost forgetting a

1 line of questioning. With that, thank you again
2 to the panel. We have no further questions on
3 this.

4 CHAIRMAN GOLDNER: Okay. We'll just
5 do a quick check-in before we take the shortest
6 of breaks.

7 First checking with the Department to
8 see if there's any cross for the witnesses.

9 MS. LADWIG: Alexandra Ladwig. Just
10 two questions.

11 CHAIRMAN GOLDNER: Okay. And then --
12 perhaps it's premature, but I'm going to try
13 nevertheless. Does either the DOE or CPCNH plan
14 to present a surrebuttal panel?

15 MS. CHIAVARA: Yes, but I do believe
16 that we can do it in five minutes or so.

17 CHAIRMAN GOLDNER: All right. I'll
18 hold you to that. Department?

19 MS. LADWIG: Alexandra Ladwig. No,
20 the Department doesn't plan to.

21 CHAIRMAN GOLDNER: Okay. All right.
22 We have enough information to take a break.
23 Let's return at twenty of. Off the record.

1 (Recess taken.)

2 CHAIRMAN GOLDNER: Go back on the
3 record and pick up with cross from the Department
4 of Energy.

5 REBUTTAL CROSS-EXAMINATION

6 BY MS. LADWIG:

7 Q. Thank you. Alexandra Ladwig.

8 Mr. Rice, you testified -- I believe
9 you said there were 3,000 Eversource customers on
10 competitive supply, and I couldn't tell if you
11 said customers in general or net metering
12 customers.

13 A. (Rice) Brian Rice, Eversource Energy.

14 Yeah, it was 3,000 net metering
15 customers that actually provide (indiscernible).

16 Q. Alexandra Ladwig questioning.

17 And is that customers in New Hampshire
18 or across multiple states?

19 A. (Rice) Customers in New Hampshire.

20 Q. Alexandra Ladwig questioning. Thank you.

21 And then one more question for the
22 utilities generally about storage.

23 Are the utilities currently able to

1 confirm or monitor -- monitor that batteries are
2 charged only from fuel sources eligible for net
3 metering?

4 A. (Davis) I cannot confirm directly today. I'll
5 be glad to follow up and just give you a general
6 idea of what types of configurations we have.

7 But for net metering, they're not --
8 we're not pairing batteries with net metering
9 facilities for net metering purposes.

10 However, there might be batteries
11 charging from the grid. I don't think there are
12 any that are participating in net metering.

13 MS. LADWIG: Alexandra Ladwig
14 questioning. Thank you. That's all I had.

15 CHAIRMAN GOLDNER: Thank you. We'll
16 move now to Commissioner questions, beginning
17 with Commissioner Chattopadhyay.

18 CMSR: CHATTOPADHYAY: Luckily, I don't
19 have any questions.

20 BY CHAIRMAN GOLDNER:

21 Q. Thank you. Just one today.

22 I want to access Mr. Rice's mind on
23 Massachusetts and -- in Massachusetts, is there

1 any kind of fixed fee, monthly fixed fee, if a
2 customer is solar -- there's a solar or any other
3 kind of distributed energy resource, is there any
4 kind of a monthly fee that -- that -- that's
5 charged in Mass.?

6 A. (Rice) Brian Rice speaking.

7 I'll answer. Actually, Mr. Davis is
8 probably the best one to ask on this.

9 But to my knowledge, no, we don't have
10 a fixed monthly fee that is specific to a -- a
11 net metered customer in Massachusetts.

12 A. (Davis) Ed Davis.

13 Aside from any up-front costs, which I
14 assume are not part of the question, any fixed
15 monthly fees are typically whatever the
16 appropriate rate schedule is. Typically, like,
17 the customer incurs that fee.

18 Q. Okay. So it wouldn't be any different for a
19 solar customer or a regular customer if two
20 neighbors -- if there's a guy with no solar on
21 his house and the neighbor has solar on his
22 house, their monthly fixed fee would be the same,
23 only their volume -- their monthly fixed fees

1 would be the same?

2 A. (Davis) Generally, yes. The reason I say
3 "generally" is we have different metering and
4 billing systems, and we have actually physical
5 net meters in eastern Mass. and separately
6 channeled -- as in PSNH, separate meter channels
7 and the netting processes are a little different.
8 But, effectively, the answer is yes.

9 Q. Thank you.

10 CHAIRMAN GOLDNER: Okay. That's all I
11 had.

12 We can move to a redirect with the
13 panel.

14 MS. CHIAVARA: Thank you. Jessica
15 Chiavara. I have two very brief questions.

16 REBUTTAL REDIRECT EXAMINATION

17 BY MS. CHIAVARA:

18 Q. These are for Mr. Swift, and perhaps Mr. Pentz as
19 well.

20 Attorney Manzelli had asked for your
21 evidence supporting, I believe, your estimates
22 or -- or analysis of both the costs of the
23 preferred methodology of the load settlement that

1 CPCNH has suggested in testimony, or also the --
2 the results or the implications of doing that
3 alternative methodology.

4 I want to first ask, have you seen a
5 detailed proposal from the Coalition yet?

6 A. (Swift) Joe Swift responding. No, I have not.

7 A. (Pentz) Jeff Pentz answering for Unitil.

8 No, I have not.

9 Q. Thank you. Jessica Chiavara asking.

10 Mr. Swift -- and, actually, Mr. Pentz
11 can answer this, too. But first starting with
12 Mr. Swift.

13 Would it be accurate to say that
14 your -- any analysis and estimates that you've
15 conducted and put together so far, based on --
16 about the impacts or the costs of the CPCNH
17 preferred methodology for load settlement is
18 based on your firsthand knowledge and experience
19 with the current systems and processes involved
20 with load settlement in your current role as
21 Supervisor of Load Settlement?

22 A. (Swift) Joe Swift responding. Yes, it is.

23 Q. Thank you.

1 Mr. Pentz, I have a similar question,
2 I guess.

3 A. (Pentz) Yes. Yes. And I would just kind of --
4 sorry, Jeff Pentz answering for Unitil.

5 Just a general observation, when it
6 comes to, you know, the discussion about
7 offsetting load obligation with exports, the load
8 settlement is -- is a zero-sum game. If you
9 shift a supplier load asset based on exports, you
10 have to allocate it to other load assets on the
11 system. That's just how it works. Otherwise,
12 you end up what's called -- you end up with
13 un-metered load, which is assigned to the utility
14 that's -- that generally never happens. It's not
15 a good practice to do that.

16 The question really that, you know, I
17 have trouble wrapping my head around is -- you
18 know, if you're reducing -- you know, let's just
19 say for example, a load asset that has net
20 metered customers. You have to allocate that
21 over which suppliers, you know -- if you allocate
22 that to the residual and if the residual needs to
23 be allocated over all suppliers, what's -- you

1 know, how do you fairly allocate that residual
2 load over all the suppliers?

3 I mean, inevitably, there will be
4 suppliers that would have a negative impact,
5 meaning that you would subtract load from the
6 load asset containing net metered customers,
7 perhaps the Coalition's, and then you would end
8 up having to add the load to other load assets on
9 the system that may not have as many net metered
10 customers.

11 I have trouble wrapping my head around
12 how that would work, from a mechanic -- from a
13 load settlement mechanics perspective.

14 Q. Fair enough. Jessica Chiavara asking.

15 So just to circle back to my question
16 about Attorney Manzelli's previous question about
17 the evidence.

18 So the evidence that you two are
19 relying upon is your firsthand knowledge and
20 experience at -- being the fact that you do this
21 for a living, correct?

22 A. (Pentz) Yes, that's correct. I have been doing
23 this for almost nine years.

1 Q. Thank you.

2 MR. TAYLOR: Thank you. Patrick
3 Taylor. I have just a very brief question for
4 Mr. Pentz.

5 REBUTTAL REDIRECT EXAMINATION

6 BY MR. TAYLOR:

7 Q. Mr. Pentz, earlier you were provided with
8 excerpts of testimony from 22-073.

9 Do you still have that with you?

10 A. Jeff Pentz answering. Yes, I do.

11 Q. Could you please go to Bates page 190. And if
12 you'd go down to lines 12 through 14.

13 So earlier, Attorney Manzelli asked
14 you some questions about direct benefits
15 described in this testimony, correct?

16 A. (Pentz) That's correct. Jeff Pentz answering.

17 Q. Patrick Taylor.

18 And among those were included avoided
19 capacity costs, local transmission benefits, and
20 regional transmission benefits, correct?

21 A. (Pentz) Jeff Pentz answering. Yes, that's
22 correct.

23 Q. Patrick Taylor.

1 Those direct benefits will accrue to
2 customers, correct?

3 A. (Pentz) Jeff Pentz answering. Yes, that is
4 correct.

5 MR. TAYLOR: I have no other
6 questions.

7 CHAIRMAN GOLDNER: Thank you. Okay.

8 So thank you to the witnesses. The
9 witnesses are now excused and can return to their
10 seats.

11 We'll move to CPCNH's short
12 surrebuttal, and invite Mr. Below back to the
13 stand.

14 Okay. Thank you. Just for the
15 record, Mr. Below has already been sworn in as a
16 witness, so the witness is ready for direct.

17 (Whereupon, Clifton Below continued
18 testifying as follows.)

19 SURREBUTTAL DIRECT EXAMINATION

20 BY MS. MANZELLI:

21 Q. Thank you. Amy Manzelli questioning.

22 Good afternoon, Mr. Below. You heard
23 Mr. Rice testify earlier, generally speaking,

1 that the Coalition's proposal was something
2 like -- and again, I didn't get it down
3 verbatim -- but it was something like that the
4 transmission credit would be just for one hour
5 per month.

6 Is that what the Coalition is
7 proposing?

8 A. (Below) Transmission costs are charged as a rate
9 based on share of monthly coincident peak demand.

10 So, yes, the benefit, as is described
11 in the Unitil single-access tracker project, as
12 well as Liberty's battery project, as well as
13 what was described in Eversource's Westmoreland
14 battery proposal. In all those cases, the -- the
15 benefit -- as well as the VDER study. The
16 benefit that derives from avoiding transmission
17 costs occurs based on a single hour of coincident
18 peak demand. It's like a demand charge, and it's
19 a good rate design as a demand charge, because
20 the entire system -- and this is about
21 transmission, but the whole system has to be
22 built as a capacity -- with enough capacity,
23 meaning coincident peak demand, on each section

1 of the system, plus the safety margin.

2 Q. Thank you, Mr. Below. Is it a good price signal,
3 and are there jurisdictions that recognize it as
4 a price signal?

5 A. (Below) Yes. The Massachusetts DPU -- and I
6 would reference -- and the Commission may want to
7 take administrative notice of this. In the
8 Coalition's initial brief on jurisdiction in
9 DE 23-026, at page 21, we quoted from the
10 Massachusetts DPU when they were looking at
11 expansion of coincident peak transmission
12 billing, and they said, quote: This allocation
13 method sends a more accurate price signal to
14 customers regarding the true cost of transmission
15 service, and is consistent with how FERC designs
16 transmission rates on which NSTAR Electric
17 receives transmission service.

18 Q. And, Mr. Below, I promised a five-minute
19 surrebuttal panel, and we'll sort of move right
20 along, and we can brief that more in our brief.

21 We'll change topics here on you. So,
22 Mr. Rice also testified about who gets the
23 benefit of a project, and there was just some

1 questioning that touched on that issue, too.

2 So I believe -- again, not
3 transcribing anything verbatim, but I think the
4 testimony was to the two of them -- this is Amy
5 Manzelli speaking, sorry -- if the utility does
6 the distributed energy resource project, the full
7 value of that project, the benefit of that
8 project goes to the ratepayers, to the customers.

9 What is your reaction to that?

10 A. (Below) I think it's extremely misleading.

11 Think the Unitil single-access tracker
12 project, they're saying the whole benefit goes to
13 ratepayers, as if the ratepayers experience all
14 of the reduction in transmission costs or
15 capacity costs.

16 In reality, what they're saying is,
17 allow us -- and this is the thing in Liberty's
18 battery project, as it was in Eversource's
19 Westmoreland battery proposal that never went
20 forward. But what they're saying is, in those
21 cases, allow us to raise our distribution rate by
22 investing capital in distributed generation or
23 distributed storage.

1 And we believe, based on our forecast,
2 that this increase in our distribution rate will
3 be offset by a reduction in these other costs,
4 and there will be some margin there that creates
5 net benefit, but it's not the whole value,
6 because most of the value stack of the avoided
7 transmission, the avoided capacity, the REC
8 production, et cetera, is actually being
9 transferred to the utility as compensation for
10 their investment in making that happen.

11 It's sort of cost causation/cost
12 benefit. You know, you're creating a benefit;
13 you get credit for that benefit. And,
14 ultimately, there's a portion of this benefit
15 that flows more broadly.

16 And the point is, if you go to a
17 competitive market structure, which is the policy
18 in New Hampshire, including with regard to
19 distributed generation net metering, then you've
20 got lots of parties responding to price signals
21 which mirror some of the same price signals that
22 you see in the competitive generation -- in the
23 bulk wholesale market that's under FERC

1 jurisdiction.

2 It's just uniquely true that, under
3 the FERC tariffs, if you're under 5 megawatts,
4 you don't have to participate in those markets,
5 and you can function as a load reducer. And it's
6 logical because, if you're supplying the power
7 locally, you're not using the transmission,
8 particularly if you're reducing the load at
9 coincident peak.

10 And the effect of all that is, the
11 more entities that are helping shave and clip
12 that peak demand, it's often meaning they're
13 shifting power to other powers, and the effect of
14 that is we're spreading the fixed cost of all
15 that capacity over more kilowatt hours instead of
16 less kilowatt hours.

17 Q. Thank you, Mr. Below. Is there anything else
18 that you wish to testify on in surrebuttal in
19 response to the rebuttal panel?

20 Amy Manzelli questioning.

21 A. (Below) Clifton responding.

22 And just kind of the point of justice
23 and fairness.

1 The other thing the Mass. DPU said --
2 and it's just part of a sentence. They said:
3 Pricing transmission service based on a
4 customer's consumption at the time of system
5 peak, rather than their own peak, which may not
6 coincide with the system peak, provides a more
7 equitable assignment of cost responsibility.

8 Which is, I think, why they said it's
9 a more accurate price signal.

10 Q. Thank you, Mr. Below. Amy Manzelli speaking.

11 Thank you, Mr. Below. I appreciate that.

12 MS. MANZELLI: With that, I have no
13 further questions, and the witness is available

14 CHAIRMAN GOLDNER: Thank you. Going to
15 cross-examination, beginning with a joint party.

16 SURREBUTTAL CROSS-EXAMINATION

17 BY MR. TAYLOR:

18 Q. Mr. Below, you just quoted from -- well, can you
19 actually -- can you please tell me what you just
20 quoted from?

21 A. (Below) Yes. It's -- it's New Hampshire PUC
22 Docket DE 23-026, CPCNH initial brief on
23 jurisdiction, and it's on page 21, Bates page 21.

1 Q. Oh, I see. So you were quoting from your own
2 brief?

3 A. (Below) Yes --

4 Q. So you were not --

5 A. (Below) Well, no, I'm quoting from the -- it's
6 footnoted Massachusetts Department of Public
7 Utilities, the docket, the date, and a link
8 directly to the order is provided. I was quoting
9 from the Mass. DPU.

10 Q. Can you please provide what -- the site?

11 A. (Below) Yes. It's Massachusetts Department of
12 Public Utilities, Docket No. 72-05, Order No.
13 DPU 17-05-B, January 5, 2018, at page 211.

14 Q. Thanks.

15 SURREBUTTAL CROSS-EXAMINATION

16 BY MS. CHIAVARA:

17 Q. Jessica Chiavara asking.

18 Mr. Below, has the Mass. state DPU
19 directed that net metering customers receive the
20 transmission credit that CPCNH raised in its
21 testimony?

22 A. (Below) Not that I know of.

23 MS. CHIAVARA: Thank you. That's all

1 I have.

2 CHAIRMAN GOLDNER: Thank you. We'll
3 now move to DOE cross.

4 MS. LADWIG: Alexandra Ladwig. No
5 cross from the Department.

6 CHAIRMAN GOLDNER: Okay. We'll move
7 to the Commissioner questions. And Commissioner
8 Chattopadhyay.

9 BY CMSR: CHATTOPADHYAY:

10 Q. It's late in the day. Let me try and figure out
11 what I can ask you.

12 I recall when you were discussing the
13 fact that, when you look at a customer, what size
14 it is -- what I understood was it's based on what
15 they take from the utility; is that correct?

16 A. (Below) That is my understanding, and I have
17 looked at the tariffs, and that appears to be
18 what they say.

19 Q. So, again, trying to understand this. If you go
20 to Exhibit 28.

21 A. (Below) Okay. I don't have that with me. It's
22 in the notebook, the blue notebook there.

23 MS. MANZELLI: Permission to approach?

1 CHAIRMAN GOLDNER: Please do.

2 THE WITNESS: (Below) Okay.

3 BY CMSR: CHATTOPADHYAY:

4 Q. You -- for example, it says 0200 kilowatt, one of
5 these -- 24 -- 2407. But that is a category
6 that's all based on what those customers get from
7 the utility.

8 A. (Below) No, I think there's a little confusion
9 here. There's two different small customer
10 groups that we're referring to here. One is
11 small customer generators, which are less than or
12 equal to 100 KW.

13 And then, in default service rates,
14 they're just a small customer group, which, a
15 small generator could be in either the small or
16 large customer group. It -- it only has to do
17 with the point of interconnection, what their
18 load is, consumption load is, and which rate
19 class they fit into. Because it -- it doesn't
20 really pertain to the size of their generation.

21 Q. This is about size of the generator?

22 A. (Below) Right. This Exhibit 28, right.

23 Q. Okay. As you can tell, my meter is running back,

1 right?

2 CMSR: CHATTOPADHYAY: Thank you.

3 That's all.

4 BY CHAIRMAN GOLDNER:

5 Q. So I just have one question, Mr. Below. I'm just
6 trying to understand your argument as it relates
7 to the utilities' argument relative to
8 transmission.

9 I think what you're saying is that
10 New Hampshire ratepayer costs can be reduced by
11 making adjustments to the monthly peak, and I
12 think what the utilities are saying is that, that
13 may or may not actually help out their circuit at
14 the circuit level.

15 Is that -- am I grasping the
16 difference in your arguments?

17 A. (Below) Somewhat, yes. I would further say,
18 though -- it is true that a particular reduction
19 in a particular month may not result in a
20 particular avoided transmission investment, but
21 as a general dynamic, there's only so much
22 capacity to transmit power at the coincident
23 peak, and a lot of investments are driven by the

1 need to increase that capacity. And sometimes
2 they're characterized as reliability investments.

3 Often, they're called "reliability"
4 because the system is under stress at periods of
5 high demand. So you want to relieve that stress
6 so you have plenty of safety margin for unusual
7 events.

8 And -- and it just goes to the point
9 that the whole system has to be sized to meet
10 coincident peak demand. And so FERC figured out
11 that that's a very appropriate price signal, for
12 people to either contribute based on their cost,
13 causing their coincident demand to share the
14 total capacity of the system. And if you can
15 help avoid it, then that's a cost that you could
16 avoid, if you're helping reduce that peak.

17 Q. So you're -- I'm going to see if I can repeat
18 back. I'm not sure I can.

19 You're suggesting a path forward on
20 reducing the allocation, and I think we just got
21 the filing from Eversource that has something
22 like a 25 percent transmission increase relative
23 to last year, and I think that's a 20-something

1 increase from the year before. So transmission
2 costs are going through the roof.

3 And you're suggesting this would be a
4 methodology to reduce that allocation and, thus,
5 save New Hampshire ratepayers money?

6 A. (Below) Yes. And I believe other states are
7 trying to -- in various ways to incentivize a
8 similar result.

9 Q. Yeah.

10 A. (Below) And some of it is by incentivizing
11 addition of storage, so that systems can shift,
12 and utility-run programs, like Liberty's battery
13 pilot or Eversource's connected solutions, that
14 dispatches at numerous times to try to get that
15 peak.

16 But the notion that -- in order to --
17 in order to actually reduce on that peak, or
18 avoid that peak if you're consuming, the more
19 people are trying to respond to that price
20 signal, the more that peak's gonna flatten out,
21 and the more hours you're going to need to
22 respond to, to catch it.

23 So you're incentivizing, in general, a

1 whole lot of peak clipping, which in turn,
2 creates capacity, without having to build new
3 capacity, which is always more expensive than
4 existing capacity. You -- you create capacity
5 without having to invest more for beneficial
6 electrification.

7 Some of which is well underway.

8 There's a steady increase of electric vehicles,
9 and if we don't figure out a structure that says
10 it's -- it's -- it recognizes the time value of
11 kilowatt hours, we could have a situation, in a
12 matter of a few years, with more EVs, with more
13 electric heat pumps, that were driving demand up,
14 and we'll see even greater increases in
15 transmission costs, because we'd risk having to
16 pay for more capacity with fewer kilowatt hours,
17 unless we start to improve our asset utilization
18 rate by shifting load for peak periods to periods
19 when there's plenty of capacity.

20 Q. Thank you. That makes sense.

21 CHAIRMAN GOLDNER: Okay. Let's see
22 here. Do we have anything else? And then we can
23 go to redirect, if any.

1 MS. MANZELLI: Amy Manzelli speaking.

2 No redirect.

3 CHAIRMAN GOLDNER: Okay. The witness
4 is excused.

5 THE WITNESS: (Below) Thank you.

6 CHAIRMAN GOLDNER: Thank you,
7 Mr. Below.

8 Okay. Before moving on to anything
9 else, is everyone okay with moving Exhibits 1
10 through 32 onto the record?

11 MS. CHIAVARA: Jessica Chiavara.
12 Going back to the -- I think it was cross-exam of
13 Mr. Below, when I was going to ask to remove
14 certain exhibits and move -- and give the parties
15 an opportunity to brief them instead. I closed
16 out of that document, so bear with me for just a
17 moment, I'm sorry.

18 So that would be Exhibits 20, 22, 23
19 and 24, and then certain passages in rebuttal
20 testimony, and I don't know that they need to be
21 removed from testimony, but if the Commission
22 would just note that those are legal arguments
23 and more appropriate for legal briefs.

1 CHAIRMAN GOLDNER: Okay. Would you be
2 okay moving all 1-32 onto the record with that
3 note or --

4 MS. CHIAVARA: Yes, that's good.

5 CHAIRMAN GOLDNER: Okay. Okay. Any
6 objections to that approach?

7 MS. MANZELLI: Amy Manzelli speaking.
8 I just want to clarify. Was it 20, 21, 22 --
9 perhaps Attorney Chiavara could just repeat the
10 list one more time, and then I do have a comment.

11 MS. CHIAVARA: 20, 22, 23, and 24.
12 And the passages of rebuttal as well, sorry. And
13 in the rebuttal testimony, page 6, line 16
14 through 20; page 10, line 16 through 20; and the
15 entirety of pages 11 through 14.

16 MS. MANZELLI: Thank you for repeating
17 the list of the exhibit numbers and elaborating
18 on the testimony and pages in the rebuttal.

19 With respect to Exhibits 20, 21, 23
20 and 24, I just want to note on the record, it's a
21 little awkward, because these were record
22 requests from Eversource itself. So it called
23 for the testimony, that was then provided. So

1 it's -- it's awkward.

2 Also, the parties, you know, the
3 law -- the applicable law allows parties to
4 represent themselves pro se in this docket, which
5 the Coalition did until the end of last week.
6 Obviously, this is a legal proceeding. So when a
7 party is representing itself pro se, they are
8 necessarily going to address legal issues. So
9 there's no alternative but for to do that.

10 Having said that, I -- I just wanted
11 to put those concerns on the record. I think
12 it's a moot issue. Coalition is now represented
13 by counsel, and we absolutely will incorporate
14 these issues into our post-hearing brief,
15 provided that, as alluded to earlier today, the
16 post-hearing brief is going to be on all issues
17 noticed in this docket. Thank you.

18 MS. CHIAVARA: Jessica Chiavara. I'm
19 aware that Eversource issued those questions.

20 My issue is that fact -- fact
21 witnesses are -- it's not appropriate for fact
22 witnesses to engage in legal argument. Attorneys
23 don't file testimony, and so there's no way to

1 respond to a fact witness, because they could
2 object to a question because we'd be asking for
3 legal analysis, which shouldn't be provided in
4 the first place.

5 So I'm not saying that the information
6 can't get into the record. I'm saying it's more
7 appropriate for legal briefs where attorneys can
8 respond to those issues.

9 CHAIRMAN GOLDNER: Okay. Just a
10 moment. Let me confer with Attorney Martin.

11 (Brief pause.)

12 CHAIRMAN GOLDNER: Yeah, I think we --
13 I don't think we're disputing anything. We can
14 move the -- I think we can move everything onto
15 the record, understanding that 20, 22, 23, 24 and
16 the rebuttal sections, Attorney Chiavara, that
17 you highlighted will be addressed in the briefing
18 from CPCNH.

19 Is everybody okay with that approach?
20 Okay. All right. All right. Thank you.

21 (Exhibits 1-32 admitted.)

22 CHAIRMAN GOLDNER: Moving along. So
23 as far as the briefing is concerned, we'll issue

1 a procedural order in the next day or two to
2 highlight parts of the briefing where the
3 Commission requests briefing, but will allow
4 briefing on any topic that the utilities or any
5 of the parties would like to present.

6 We'll offer both briefing and reply
7 brief, and we'll offer a timeline for that, that
8 we can also talk about in a second.

9 And the thought here is to offer 20
10 pages for the entirety of the briefing, and if
11 that's insufficient, please highlight here, and
12 we can -- we can discuss while everyone's in the
13 room.

14 And then follow-up would be with the
15 joint parties filing a single brief, or would
16 they prefer another approach?

17 MS. MANZELLI: If I may, Commissioner.
18 Over here, we haven't analyzed the question,
19 please, Commissioner Goldner.

20 Twenty pages, meaning spread over the
21 two parties for a briefing, if you could just
22 confirm that, and is that inclusive or exclusive
23 of any attachments?

1 CHAIRMAN GOLDNER: So the first answer
2 would be, the concept would be 20 pages for each,
3 although I think the reply would typically be
4 shorter. But I would offer -- to offer 20 pages
5 for the -- for both briefings, so 20 pages each.

6 MS. CHIAVARA: And then, if one were
7 to add an attachment, you know, referring to -- I
8 can't think of an example right now. Would that
9 be counted towards the 20 pages, please?

10 CHAIRMAN GOLDNER: We can make that
11 supplemental, maybe offer five pages of
12 attachments, if that's helpful, yeah. So 20 plus
13 five.

14 MS. CHIAVARA: Thank you.

15 CHAIRMAN GOLDNER: All right. And
16 then the question on the joint parties, Attorney
17 Krakoff?

18 MR. KRAKOFF: CLF prefers to do its
19 own brief, not joined to the utilities' brief,
20 but I guess the other non-utility parties.

21 CHAIRMAN GOLDNER: Okay. Any -- any
22 other non-utilities -- utility parties that want
23 to offer an separate brief?

1 MR. EVANS-BROWN: I think -- Clean
2 Energy speaking.

3 I think we would like to reserve the
4 right to do our own brief, but would like to
5 chance to confer with the other parties and
6 consult prior to making that call.

7 CHAIRMAN GOLDNER: Okay. Thank you,
8 Mr. Sam Evans-Brown.

9 MR. KREIS: Hi, Mr. Chairman. It is
10 Attorney Kreis. The OCA would definitely like to
11 reserve the right to file its own brief. I think
12 we think that it's necessary or helpful.

13 CHAIRMAN GOLDNER: All right. So why
14 don't we do this. So the joint parties have
15 preserved the right, all of them, to offer their
16 own brief and reply brief, and I think that's
17 acceptable.

18 I'll just offer our encouragement
19 would be to combine as many of the briefs as
20 possible, because 20 times 10 is a big number,
21 so -- that will be a lot of reading for all of
22 it. But -- okay. So anything else on the
23 briefs? Is that clear? Attorney Taylor?

1 MR. TAYLOR: And maybe you're going to
2 get to this with respect to the timing. My
3 question was going to be, given that we don't
4 have the usual stenographer, if the Commission
5 has any sense for how long it will take to
6 generate transcripts, because those would be
7 incorporated, very likely, into the briefs. So
8 there would need to be some spacing between the
9 issuance of the transcripts and the time that the
10 briefs are obtained.

11 So I know you may not have an answer
12 to that question, but it's something to consider
13 in the scheduling.

14 CHAIRMAN GOLDNER: Yes. So thank you
15 for bringing that up. That is a challenge that
16 we -- we believe that we have a path forward to
17 get a transcript via the process, actually,
18 that -- the traditional branch that the state
19 uses, but that -- that contract is going through
20 real-time, so we actually don't know exactly when
21 the transcript will be available. So I don't
22 know how to answer that question, other than, I
23 think, Mr. Patnaude was targeting, by contract,

1 14 days off, and it was a little bit longer than
2 that.

3 But I think in this case, maybe
4 planning on 30 days might be prudent, just so we
5 can get the contract through and get -- get
6 the -- get the transcript in, so -- yeah, once
7 you have the transcript, how much would you --
8 how much time would you want from there? Two
9 weeks enough time, or do you need three or four
10 weeks?

11 MR. TAYLOR: I mean, speaking for
12 myself, I think two weeks would be sufficient.

13 CHAIRMAN GOLDNER: Any of the other
14 parties? I'm looking in the back. Two weeks
15 sufficient, once the transcript is available,.

16 MR. EVANS-BROWN: Yeah, that should be
17 plenty of time.

18 CHAIRMAN GOLDNER: Okay. And then
19 another -- one week or two weeks for a reply
20 brief?

21 MULTIPLE SPEAKERS: Two.

22 CHAIRMAN GOLDNER: Two? Two plus two.
23 Okay. So let's do this. I'll just -- I'll

1 just -- we'll put this in the calendar, just so
2 everybody has the same numbers.

3 So we'll pencil in -- we'll pencil in
4 the transcript by September 20th, which would put
5 the brief on October 4th and the reply brief on
6 October 18th.

7 And if the transcript is late, then
8 we'll update the dates so that you can have more
9 time.

10 MR. TAYLOR: And I think this is
11 probably obvious, but just to clarify, if the
12 transcript comes earlier, that's not going to
13 change the brief, correct?

14 CHAIRMAN GOLDNER: Sadly, no.

15 And I'll just ask if -- I hope I've
16 covered everything here with the page numbers and
17 the timing and so forth. But if there's any big
18 issues that anyone wants to highlight here before
19 we adjourn, that they want to highlight to rest
20 of the parties, that would be -- that would be
21 fine. I want to just afford an opportunity to --
22 to comment on this brief in any way that any
23 party would like to comment. Attorney Chiavara?

1 MS. CHIAVARA: Not a comment on the
2 briefs. Actually, I was just gonna -- small
3 procedural thing. Can we also do written
4 closings since we're doing briefs?

5 CHAIRMAN GOLDNER: Yes. Thank you for
6 highlighting that.

7 I was just looking at my notes here,
8 and the idea would be to do a written closing
9 inside the brief if -- if, again, that's
10 acceptable to all the parties.

11 I think a restatement of position,
12 given the quantity of the issues here,
13 particularly with the CPCNH position, would be
14 very helpful to the Commission. So a restatement
15 of position.

16 Attorney Dexter? Oh, sorry, I thought
17 you were --

18 MR. DEXTER: I just want to be sure I
19 heard the last part. So closing arguments would
20 be part of the brief?

21 CHAIRMAN GOLDNER: Yes, sir.

22 MR. DEXTER: Thanks.

23 CHAIRMAN GOLDNER: Just a moment.

1 Okay. Anything else on the briefs? Have we
2 covered everything? Everyone's clear?

3 Okay. Anything else that we need to
4 cover today?

5 Okay. Seeing none, I'll thank
6 everyone for the excellent testimony and the time
7 in this proceeding.

8 We'll issue the procedural order
9 shortly in the next couple of days, and we'll
10 target getting that out.

11 And that is it. Thank you, everyone,
12 for your time.

13 (Hearing concluded at 4:18 p.m.)

14 * * *

15

16

17

18

19

20

21

22

23

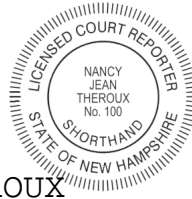
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

C E R T I F I C A T E

I, Nancy J. Theroux, do hereby certify that the foregoing transcript is a true and accurate transcription of the within proceedings, to the best of my knowledge, skill, ability and belief.

THE FOREGOING CERTIFICATION OF THIS TRANSCRIPT DOES NOT APPLY TO ANY REPRODUCTION OF THE SAME BY ANY MEANS UNLESS UNDER THE DIRECT CONTROL AND/OR DIRECTION OF THE CERTIFYING REPORTER.

Nancy J. Theroux



NANCY J. THEROUX
Licensed Court Reporter
NH LCR No. 100

<hr/> \$ <hr/>					
\$60 50:9 52:1	13 39:17,23 40:1,3,10 97:21 98:3 99:9 100:2,4,8 102:21 103:7 113:9 129:19 160:17 162:4 163:4 166:8 169:9 227:22 228:20	20-something 288:23	27 162:10		240:21 282:3 284:13
\$600,000 202:17	14 97:21 98:14,23 99:5,11 100:2,5 127:9 155:6,16 156:1 160:17 162:11 219:15 276:12 292:15 299:1	20-year 30:21 55:13 56:7 68:18 115:19 116:6 126:15 145:22 179:1	28 116:15,22 134:15 194:14 239:3,6,7,21 241:11 242:4 285:20 286:22		5-cent-plus 182:21
\$99.40 235:16	15 99:6 103:16,17 127:9 134:17 135:1 137:5 162:12,13 163:4,6 205:9 219:7	20-years 202:5	29 31:12 123:16		5-minute 20:17
\$99.50 235:6,14	16 101:10 113:10 134:15 137:5 138:21 155:4,5 162:13 292:13,14	200 235:3	296 117:8		50,000-plus 245:12
\$99.60 235:18	16,000 180:8	2015 101:17	2:25 205:12		500,000 245:9
<hr/> (<hr/>	16-576 19:22 106:19	2016 103:15 106:20	2B 31:13		52 104:22
(a) 149:7	16-year 61:9	2017 61:3			53-A 97:14
<hr/> 0 <hr/>	1600 188:16	2018 284:13	<hr/> 3 <hr/>		54 129:22
0.897 52:19	17 51:18 134:16 137:5 138:22 162:13 262:23	2019 24:18 63:6	3 124:20 129:12 207:22 209:17 211:3 212:9 243:12 244:21 246:4		58 97:1 98:7
008 99:15	17-05-B 284:13	2020 29:10 63:17 135:6 167:5	3,000 163:6 237:11, 13,15 269:9,14		<hr/> 6 <hr/>
0200 286:4	17-136 209:13	2021 130:7 131:13	3,0 30:12 32:13 126:14 137:19		6 155:4,11,19 292:13
06-061 20:13	17-189 46:2 48:6	2022 46:8 130:7 131:13 187:12 242:12 243:1	3,000 163:6 237:11, 13,15 269:9,14		60/40 235:12
08 99:14	18 51:18 101:10 122:16 123:4	2023 23:8 167:5 233:17	30 98:10 124:1 169:9 228:20 299:4		600 266:18
<hr/> 1 <hr/>	1800s 97:12	2024 27:14 29:2 61:8, 16 77:7 207:19 209:17 211:3 220:8 253:1	30-minute 92:7		61 129:22
1 24:21 27:14,21 37:17,20 41:17 46:17,18 50:1 55:11 56:15,17,19 57:2 69:12,18 70:2,6,13, 20 71:17 72:7 73:14, 18,19,23 74:8 75:15 77:3,5 101:13 105:4 117:6,7,9,13 124:14, 15 125:5,21 126:3, 10,17 127:7,8,15,22 128:20 132:1,23 140:9 145:18,19,20 177:7 186:15 189:4, 16 190:11 194:17 202:15 219:5,15 240:21 243:10,11 244:3,10 256:22 267:9,12,15 291:9	18th 24:18 300:6	2025 77:7 135:8	30 98:10 124:1 169:9 228:20 299:4		6th 23:8
1-001 99:6	19 40:11 128:19 227:22 244:4 265:11,22	2040 29:2,5,11,22 30:17 31:4,5,13 32:2,10 33:12 42:18 61:14,15 62:2 64:18 66:17,20 77:9 103:18 135:6 178:13	30th 207:19 209:17 211:3		<hr/> 7 <hr/>
1-003E 99:7	190 276:11	2046 77:13	31 134:15		7 23:12 27:23 39:8,17 40:1 141:2
1-32 292:2 294:21	191 265:19,22	20th 300:4	32 106:6,14 113:10 114:13 127:6,9 291:10		7.1 124:4
1.0 166:10 192:5	193 266:16	21 279:9 283:23 292:8,19	33 50:9 52:1		70 52:16
1.5 263:3	1:00 153:14	211 284:13	332 117:8		71 166:8
10 20:18 49:20 129:12 136:7 155:4, 15,23 205:9 220:10 244:22 245:19 292:14 297:20	1A 31:12	21st 63:6 253:1	36 98:12,16		716.18 19:22
100 35:20,21 66:2 101:13 117:5 127:8 133:17 135:18 137:17,22 141:15 145:20 190:1,7,12 196:17,18,23 235:2 237:23 238:4,7 286:12	1st 27:14	22 27:6 48:16 49:5,9 227:23 291:18 292:8,11 294:15	362-A:1 60:2		72 166:8
11 155:5 167:6 292:15	<hr/> 2 <hr/>	22-001 83:20	362-A:9 120:13 131:19 149:3		72-05 284:12
12 128:2 219:7 267:1 276:12	2 9:8 24:21 27:21 56:16 69:20 73:18 124:19 135:1 243:11 245:7 246:3	22-073 43:12 213:10 262:5 276:8	362-F 132:3		75 46:20 50:5
12.5 167:9	2.0 35:18 38:4,6 106:23 129:2 145:13 162:7 193:2 244:14	2222 90:21 121:20 122:10 163:13 164:3,11,20 203:18	369-A 173:20		79 46:20 50:2
124 267:14	2.1 49:22 126:13	23 60:23 61:4 291:18 292:11,19 294:15	374-H:2 140:22		<hr/> 8 <hr/>
12:15 152:6	2.3 51:20	23-004 253:11	391 83:17 90:4		8 40:4 99:6 163:7 220:10
	20 30:17 56:10 78:7 83:20 110:11 116:2 135:19 155:4,5 178:7,12,15 199:20 200:19 202:13 219:10,23 220:16 253:11 291:18 292:8,11,14,19 294:15 295:9 296:2, 4,5,9,12 297:20	23-026 279:9 283:22	<hr/> 4 <hr/>		80 35:23 52:15
		24 61:4 162:4 163:3 286:5 291:19 292:11,20 294:15	4 47:19,20 98:5 128:19 147:12 184:8 243:9,12 244:2		80,000 98:13,14
		2400 117:6	42 98:17		81 50:3
		2407 286:5	47 117:6 194:18 195:12		8:00 249:21
		25 35:21 67:4 135:8 162:10 209:4 288:22	48 98:6 103:8		<hr/> 9 <hr/>
		26 123:5 162:10	49 103:2,6		9 49:20
		26,029 25:3 56:20 69:19	4:18 302:13		900 88:11,22 89:3,8, 15,21 90:5,8
		26,221 63:6	4th 300:5		<hr/> A <hr/>
		26,316 24:17 58:4	<hr/> 5 <hr/>		A-9 124:22
		26029 60:21	5 26:6 37:17,20 55:11 56:15,19 57:2 69:12, 18 70:2,6,13,20 71:17 72:7 73:20,23 74:8 75:15 98:3 106:14 110:2 118:6 140:9 177:7 182:21 183:3 188:19 193:18,19 194:3		Aalto 19:8,14,17,20

297:17 301:10	addition 73:12 231:16 289:11	afford 187:7 300:21	259:8,14 274:23	Andrea 27:17
accepted 174:9 257:6	additional 8:23 18:17,19 29:17 30:7, 14 33:7 56:10 62:9 64:8 82:12 84:20 87:6 102:17 103:22 104:4,22 134:18 179:23 236:18	afternoon 109:11 140:17 151:9 153:15 178:2 210:8 212:5 277:22	allocating 19:23 234:10 237:5	annotated 103:9,10
accepts 116:7	address 8:8,13 18:9 19:6 56:15 57:7 62:21 74:20 105:11 106:12 178:13 293:8	agencies 97:16	allocation 168:20 221:23 222:6 230:19 260:17 279:12 288:20 289:4	annual 30:5 34:8 50:3 148:12 157:21 170:13 181:6
access 44:23 219:6 270:22	addressed 27:5 28:7 29:14 71:3 89:13 106:3 127:5 216:20 294:17	agency 97:7 98:6	allowed 18:16 20:22 119:10 156:6 188:17	annually 169:14 170:12,13 180:3 181:4,7
accommodate 248:9	addressing 12:14 71:5	aggregated 121:22	allowing 108:12 225:15	answering 120:22 241:21 262:6,16,20 263:5 265:5,17 266:8,14,21 267:3, 19 273:7 274:4 276:10,16,21 277:3
accomplish 236:12	adds 30:7	aggregation 187:5	alluded 293:15	answers 67:14,21 68:1 78:19 106:7 152:22
accomplished 237:10 260:8	adequate 28:18 29:21	aggregations 97:9 98:16 174:13 187:21 188:18	alphabet 96:9	anticipate 152:19
account 108:17 121:6,17 125:19 166:9,12,15 202:23 226:12	adjudge 300:19	agree 28:4 44:2 62:11 74:15 75:5 79:1 133:17 146:10 147:10 148:3 149:13 151:5 158:4,18 164:6 178:6,8 179:14 190:23 191:1 216:17 229:23 241:8,17 244:9 250:18 263:9	alternative 38:4 98:19 104:1,2 106:22 149:9 187:22 188:19 236:11 249:23 250:1 273:3 293:9	anticipating 139:7
accounted 87:17 120:16 121:7,10 165:14,16 166:4 187:15 202:22	adjudicated 139:22	agreed 8:18,21 11:8, 22 149:2 204:22	Alternately 157:19	anticipation 164:20
accounted-for 124:5	adjudicative 105:15	agreement 24:20 27:13,20,21 28:8,13 29:20 31:12 32:22 34:5,10 36:9,11,16, 20 40:19,21 41:3,17 42:7,10 45:8 63:23 75:16 97:3 111:13 115:6,13 119:13 120:20 125:11 132:9 140:4 142:18,19 145:8 146:14 160:8 202:16	ambitious 188:8	anymore 215:14
accounting 218:4	adjusted 86:1,4 228:21	ahead 10:12 125:14, 15 132:20 140:3 142:6 173:4 178:17 182:9	America 7:21 17:18	apartment 199:23 200:6
accounts 190:8	adjusting 137:23	aid 202:23	AMI 142:3	apologies 12:4,12 29:2 51:17 153:21 257:6
accrue 199:11 251:11 277:1	adjustment 88:9 218:10 234:5 235:5	agrees 78:22 81:15	amount 11:14 13:23 106:16 117:1,7 120:9 153:9 180:6 192:18 232:20 234:3 242:23 250:11 260:20 265:7	apologize 10:12 31:7 44:19 49:17 99:1,18 169:8 247:17 257:3, 5 267:22,23
accurate 52:21 107:4,6 146:6 147:23 151:18 228:9 230:15,19 232:11 252:7,16 273:13 279:13 283:9	adjustments 187:16 217:19 287:11	ahead 10:12 125:14, 15 132:20 140:3 142:6 173:4 178:17 182:9	Amy 7:12 39:3 40:9 41:1 43:18 44:19 45:14 46:6 47:2,14 48:4 50:19 53:4 96:7 99:1,20 100:23 102:20 105:16 106:4 107:13 111:3 116:14 118:11 123:9 124:17 125:14 132:7 134:18 138:19 140:19 142:15 147:6 148:2, 19 203:13 238:23 239:15 240:17 241:7 242:2 243:3,20 245:14 247:7 248:15,19 249:17 250:12 253:2 257:4, 6,7,18 258:5,23 260:3,13 261:8,20 263:16 264:8,19 265:9 266:10,23 267:5,22 277:21 280:4 282:20 283:10 291:1 292:7	apparent 176:16 213:17
accurately 232:11	administrative 11:10 13:19 29:18 88:17 164:14 221:12 279:7	aim 251:15	AMI 142:3	apparently 92:22 168:12
achieve 105:12	administratively 214:1	Airport 110:3	amount 11:14 13:23 106:16 117:1,7 120:9 153:9 180:6 192:18 232:20 234:3 242:23 250:11 260:20 265:7	appearances 6:5
achieves 216:4	Administrator 23:4	air 202:23	amount 11:14 13:23 106:16 117:1,7 120:9 153:9 180:6 192:18 232:20 234:3 242:23 250:11 260:20 265:7	appearing 6:21 8:4
achieving 215:22	admitted 294:21	Aim 251:15	amount 11:14 13:23 106:16 117:1,7 120:9 153:9 180:6 192:18 232:20 234:3 242:23 250:11 260:20 265:7	appears 69:20 168:10 285:17
acknowledged 136:18 252:5	admittedly 248:22	Airport 110:3	amount 11:14 13:23 106:16 117:1,7 120:9 153:9 180:6 192:18 232:20 234:3 242:23 250:11 260:20 265:7	appliances 21:1
Acknowledging 16:12 72:18	adopt 9:10,14,21 23:23 37:11 98:21 100:4 123:13 137:8 208:6 210:1 211:15 212:19	Alexandra 6:7 12:3, 22 22:22 23:6,10,14, 22 24:6,19 25:18 27:11,18 28:10,22 29:7 30:18 32:14 33:8,17,22 34:7,14 35:10 36:7,19 37:9, 19 38:2,9,18 47:22 68:2 72:16 74:17 75:4 92:17 95:6 152:10 153:20 268:9,19 269:7,16, 20 270:13 285:4	amount 11:14 13:23 106:16 117:1,7 120:9 153:9 180:6 192:18 232:20 234:3 242:23 250:11 260:20 265:7	applicant 82:9 85:5, 7,11
act 101:10	adopted 226:23	align 12:8,19	amount 11:14 13:23 106:16 117:1,7 120:9 153:9 180:6 192:18 232:20 234:3 242:23 250:11 260:20 265:7	application 23:19 27:5 33:19,20 34:9, 18 84:4 87:8 91:7 128:3 146:11,13
acted 156:2 159:1	adopting 9:17	aligned 251:18 254:21	amount 11:14 13:23 106:16 117:1,7 120:9 153:9 180:6 192:18 232:20 234:3 242:23 250:11 260:20 265:7	applications 87:12 116:17 242:11 243:1
action 156:7 157:11 159:2,5 188:8 225:13,17 226:1,5 227:18	adoption 129:8,12 245:7	alignment 14:22 164:3	amount 11:14 13:23 106:16 117:1,7 120:9 153:9 180:6 192:18 232:20 234:3 242:23 250:11 260:20 265:7	applied 21:8 35:18
actions 18:7	adopts 38:5	aligns 227:16	amount 11:14 13:23 106:16 117:1,7 120:9 153:9 180:6 192:18 232:20 234:3 242:23 250:11 260:20 265:7	applies 53:23 71:7
actively 52:6	advance 255:19	allegation 159:1	amount 11:14 13:23 106:16 117:1,7 120:9 153:9 180:6 192:18 232:20 234:3 242:23 250:11 260:20 265:7	apply 35:20 55:4 56:18 69:17 125:2 131:22 141:21 220:23 235:4
activities 223:21	advances 148:22	alleges 156:1	amount 11:14 13:23 106:16 117:1,7 120:9 153:9 180:6 192:18 232:20 234:3 242:23 250:11 260:20 265:7	approved 86:21
actual 32:8 126:1,18 127:2 130:6,21 131:8,14 142:9 146:1 169:10 180:5 182:1 197:9 233:8, 17 242:5,9	advantage 164:18	allocated 165:20 166:22 222:2 233:4, 21,23 234:6 235:1	amount 11:14 13:23 106:16 117:1,7 120:9 153:9 180:6 192:18 232:20 234:3 242:23 250:11 260:20 265:7	approach 14:12 47:6 151:16 243:18 246:4 264:4 285:23 292:6 294:19 295:16
add 14:21 15:11,15 17:22 21:22 30:14 33:1 36:2 65:6 66:6 87:6 94:14 102:16 109:16 113:20 151:7,23 159:7 160:3 179:19 204:10 248:5 258:12 275:8 296:7	adverse 215:16	aligns 227:16	amount 11:14 13:23 106:16 117:1,7 120:9 153:9 180:6 192:18 232:20 234:3 242:23 250:11 260:20 265:7	approached 110:15
added 103:15,22 104:3 124:5	Advocate 7:1,4 15:17 117:1	alleges 156:1	amount 11:14 13:23 106:16 117:1,7 120:9 153:9 180:6 192:18 232:20 234:3 242:23 250:11 260:20 265:7	approaching 245:18
adder 20:6	Advocate's 147:3	allocation 14:22 164:3	amount 11:14 13:23 106:16 117:1,7 120:9 153:9 180:6 192:18 232:20 234:3 242:23 250:11 260:20 265:7	appropriately 35:3
adding 55:21 86:5 113:22 236:20 249:2 253:19	advocated 102:8	allegations 159:1	amount 11:14 13:23 106:16 117:1,7 120:9 153:9 180:6 192:18 232:20 234:3 242:23 250:11 260:20 265:7	approval 27:23 41:9 45:9 59:20 65:8 245:23

approve 88:8,20 157:2 225:1	attached 160:18 166:5	B	140:7 143:17 223:21 225:11,22 226:3,9, 16,19 227:8 250:20 251:17 254:10 255:3,23 278:12,14 280:18,19 289:12	177:14 230:2,3,6 272:4 279:12
approved 25:9 41:4 42:7,9 56:20 58:17 60:21 69:19 89:6 107:1 146:14,17 156:8 186:8 224:3,7	attachment 130:1 296:7	B's 235:11	Beach 246:10	bills 50:8 51:23 175:21 181:8
approves 41:19	attachments 102:23 103:6 130:2 207:21 209:16 211:2 212:9 295:23 296:12	back 14:22 20:14,20 31:9 54:17 74:4 75:10 83:2 85:4,7, 10,21 86:3 92:12 129:19 134:2 153:17 178:2 199:20 205:15 217:3 222:14 237:3 261:22 269:2 275:15 277:12 286:23 288:18 291:12 299:14	bear 154:23 179:13 291:16	bit 50:16 52:11 55:15 60:19 85:15 106:15 128:10,12 170:4 227:20 248:19 249:5 259:10,11 260:16 262:11 299:1
approving 59:1,17 63:8	attempting 161:3	back-and-forth 138:4	begin 6:4 56:3 57:18 69:6 121:13 122:7 141:10 153:18 165:4	blue 285:22
approximately 116:18 167:9 263:3 266:18,23	attention 49:19 51:19 56:16 102:21 103:2 106:5 127:5 128:17 129:22 134:9 244:3	backdrop 148:14	beginning 6:5 34:21 155:15,23 177:22 238:19 246:18 264:11 270:16 283:15	board 96:6
area 86:7	attorney 7:3 11:4 12:17 17:15 50:14 51:1 57:17,22 68:5, 13,16 72:13 73:9 74:14 75:2 89:22 92:18 112:5,12,13 118:22 136:19,23 137:3,12 150:2,6,10 151:5,6,10 154:18 159:15 161:9,20 203:17 204:12,15 205:2,16 208:12 214:5 251:23 253:10 255:13,21 256:7 263:20 264:19 272:20 275:16 276:13 292:9 294:10,16 296:16 297:10,23 300:23 301:16	background 96:15 98:4 101:1 127:12	begins 29:3 103:8	boards 97:4
areas 82:17	attorneys 158:6 159:12 293:22 294:7	backwards 192:7	behalf 6:12,22 7:17 8:4 78:14 83:10 97:20 105:10 108:20 146:22 255:15	bodies 186:9
arguably 107:22 109:8	attributes 262:8	balance 216:5	behind-the-meter 184:16	boil 115:9 159:21
argued 255:21	attributing 79:2	balanced 147:12 215:23	belief 257:1	boiling 114:17
argument 18:16 30:20 31:3 133:12 138:12 287:6,7 293:22	August 27:13 253:1	balances 233:7	believed 45:4	bonds 202:10
arguments 138:4 139:8 287:16 291:22 301:19	authorities 96:23	balancing 104:6	believes 55:1	booked 85:19,20
arise 14:18	authority 11:17 14:5 97:10,13 139:11	bank 200:4,11	Below's 229:1 231:5 234:4 235:8 239:16, 23	books 85:21 203:3
arrangements 177:15	automated 169:14 170:21,23 171:4	base 68:21 84:9 133:4,5 136:3 138:1 173:9 178:21 196:22 198:5 203:2	bench 193:17	Borden 147:11
array 190:7 193:20, 23	automatically 179:9	based 20:23 26:2 39:11 44:11,15,21 60:1 67:16,23 80:12 110:9 136:20 142:9 144:2 146:1 148:22 156:11 179:4 180:5 182:8 184:6 191:5, 14,15 193:15,17 197:2 221:7,19 222:3 228:1 233:16 235:8 236:14 245:4 246:7 250:8 259:9, 15 260:20 273:15,18 274:9 278:9,17 281:1 283:3 285:14 286:6 288:12	benchmark 213:1	Borden's 128:18 243:6 244:2,10
arrays 85:4	avenues 31:17	baseline 141:5	beneficial 40:14 65:14 109:21 168:19 172:5 198:19 250:10 254:6 261:3 290:5	bore 215:14
arrears 181:8	average 46:19 50:1,8 51:23 191:5	basic 94:9	benefit 52:18 81:20 114:17 121:8 130:17 174:20 223:11 224:15,17 225:3,5 254:12 256:1 267:16 278:10,15,16 279:23 280:7,12 281:5,12, 13,14	borrow 200:5
articulate 180:18	avoid 96:8 288:15,16 289:18	basically 16:22 79:2 232:23 261:4	benefit/cost 235:23	bothering 218:1,8
ascertained 171:18	avoidance 267:13	basis 20:7 30:4,5 44:2 64:19 98:19 144:12,13 148:9,13 169:5 170:5 171:6 178:19,20 184:22 192:21 228:1 229:11 255:6	benefits 39:14 40:13 44:12 104:8,16 198:21 216:1 251:8 254:1,3 263:3 265:12,14,15 267:10 276:14,19,20 277:1	bottom 56:16 73:18 191:3
asks 105:8	avoided 40:6 45:10 116:11 125:7,19 126:2,18 127:2,23 129:10,21 132:22 133:19 146:2 157:22 169:10 178:22 180:23 183:15,18,22 197:6,9 228:2 243:13 265:13 276:18 281:6,7 287:20	baseline 141:5	Bennett 205:22 206:8,13 207:6,8,12, 18,23 208:3,5,8	box 95:11 205:19
aspect 91:21	avoiding 278:16	basic 94:9	bespoke 169:4 171:6	Bradley 101:18
asserted 166:11	aware 46:5,11 54:5,7, 11 67:2,7,10 92:2 217:22 293:19	basically 16:22 79:2 232:23 261:4	bids 219:17	branch 298:18
assertion 160:11 161:5	awkward 60:12 208:13 292:21 293:1	basically 16:22 79:2 232:23 261:4	big 80:16 133:13,16 180:15 262:12 297:20 300:17	break 14:15 48:12 88:6 90:17 92:7 205:12 268:22
asserts 228:2		basis 20:7 30:4,5 44:2 64:19 98:19 144:12,13 148:9,13 169:5 170:5 171:6 178:19,20 184:22 192:21 228:1 229:11 255:6	big-picture 107:14	breaks 268:6
assess 231:10		Bates 24:21 27:20, 21,23 31:10,12 49:20 51:18 69:20 99:5 103:2,6,8 104:22 128:19 244:4 265:11 276:11 283:23	bigger 10:7	Brian 108:19 205:19 242:17 247:16 248:16 269:13 271:6
assessed 260:19		batteries 40:12 93:13 94:19,20 95:3 253:19 254:12 270:1,8,10	benefit/cost 235:23	briefing 11:6 14:19 16:7,13 18:5,10,14, 15 19:3 72:5 159:7,8 193:14 194:6 294:17,23 295:2,3,4, 6,10,21
assessments 246:8		battery 46:1 52:15 92:20 93:3 94:15 110:22 139:12,16	benefits 39:14 40:13 44:12 104:8,16 198:21 216:1 251:8 254:1,3 263:3 265:12,14,15 267:10 276:14,19,20 277:1	briefings 296:5
asset 85:20 237:22 274:9,19 275:6 290:17			Bennett 205:22 206:8,13 207:6,8,12, 18,23 208:3,5,8	briefly 25:21 96:13 107:17 115:16 121:3 122:17 129:20 132:18 144:17 152:6 225:16 226:4 260:14
assets 274:10 275:8			bespoke 169:4 171:6	briefs 16:9 160:4 291:23 294:7 297:19,23 298:7,10 301:2,4 302:1
assigned 274:13			big 80:16 133:13,16 180:15 262:12 297:20 300:17	bring 93:20 102:3 134:2 186:14 235:6 244:3
assigning 230:16			big-picture 107:14	bringing 194:9 298:15
assignment 283:7			bilateral 185:12	broader 17:2,8 195:19
Association 7:20			bill 11:14 13:23 26:15 44:16 51:20 59:8 141:20 176:1 181:11 188:16	broadly 281:15
assortment 233:9			billing 166:11 169:20 171:13,14,19 175:7	broken 20:4 259:13
assume 76:14 91:12 124:3 271:14				brought 24:11 102:18 263:15
assuming 32:12 93:21 172:8,16 214:19				
assumption 52:16 82:11 147:7				
assumptions 45:4 52:23 67:16,23 94:9 200:23 233:11				
assurance 220:13				

bubble 114:8
build 109:13 110:20,
 23 200:6 290:2
build-out 108:23
building 199:23
 223:22
built 117:18 278:22
bulk 176:17 281:23
bumping 189:22
burdensome 166:12
buried 114:1
business 6:14 7:4
 14:10 179:21
businesses 144:6
button 19:20
buy 20:12 124:14

C

C&i 188:7
calculate 11:13
 13:23 127:23 179:9
calculated 166:21
 170:22 221:22 228:5
 229:10 233:4
calculating 14:9
 227:23
calculation 20:18
 99:13,16 126:4
 157:22 163:5,8
 165:17 166:19
 169:10 171:6 221:7
 229:1 267:9
calculations 128:7
 179:12 180:2 229:22
 233:10 264:16
calendar 63:16
 188:16 300:1
call 49:19 56:16 96:9
 127:5 177:2,13
 180:23 244:21 297:6
called 165:16 166:19
 185:11 233:5 274:12
 288:3 292:22
calling 102:21 103:1
 149:22 150:23 205:3
calls 173:16
capability 81:3 93:9
capable 231:2
capacities 29:23
capacity 26:22
 109:14 117:1,7
 125:4,8,20 132:1
 138:2 150:18 151:1,
 2 157:14,17 184:7
 194:20 248:6 265:14
 266:12 267:2 276:19
 278:22 280:15 281:7
 282:15 287:22
 288:1,14 290:2,3,4,
 16,19
capital 67:16,23
 82:7,12 84:20 85:2,
 10 224:6,7 280:22
capture 180:19
captured 258:8

cares 186:2
case 16:22 17:10
 44:6 85:1,8,12,17
 86:16 87:4 89:16
 93:23 100:5 107:2,4
 109:6 124:4 130:22
 135:19 137:9 143:16
 144:1 164:16,21
 180:23 182:17
 183:21 191:21 204:8
 213:16 225:5 299:3
cases 84:15 86:20
 112:2 130:23 230:20
 278:14 280:21
cash 192:14,15
catch 289:22
categories 30:14
 190:21
category 37:17
 184:14 240:21 286:5
causation 110:10
causation/cost
 281:11
causing 288:13
caveat 196:21
CEF 254:10
ceiling 219:13
cent 163:8 182:21
central 20:20
cents 163:7 183:3
 219:7,16 220:10
certainty 42:20 61:22
 115:19
cetera 281:8
chair 96:5 101:19
 150:20 253:5
Chairman 6:9,15,19,
 23 7:3,5,9,14,19 8:1,
 5 11:3 12:6,16 13:3,
 13 14:20 15:8,13,16,
 22 16:2,16 17:15,20,
 23 19:14,18 21:23
 22:7,12,13 38:22
 47:8 48:8,14,17,22
 49:6,13 50:14,22
 51:14 53:7 57:15
 62:17 68:7 69:3
 71:20 74:3,13,18
 75:2,6 79:10 90:11
 92:6,12 95:8,13,18,
 21,22 112:11 113:7,
 11 114:12,19 118:21
 119:15 136:18,23
 150:5,9,16 151:4
 152:5,16 153:1,5,17,
 21,22 154:3,6,13
 159:15,23 161:9,18
 162:1 173:2 177:20
 185:21,23 193:11
 194:13 203:8 204:18
 205:11,15 206:1,10,
 14,15 208:12 212:23
 214:5 238:18
 241:19,23 242:14,18
 243:19 247:11,14
 253:10,13 256:7,16
 257:22 264:6,21
 268:4,11,17,21
 269:2 270:15,20
 272:10 277:7 283:14
 285:2,6 286:1 287:4

290:21 291:3,6
 292:1,5 294:9,12,22
 296:1,10,15,21
 297:7,9,13 298:14
 299:13,18,22 300:14
 301:5,21,23
challenge 298:15
chance 10:23 11:20
 74:5 91:3 161:15
 297:5
change 37:13 41:14
 42:21 55:11 62:2
 88:12 115:6,13
 120:20 122:8 125:11
 132:9 135:15,16
 139:14 140:20
 150:22 165:7 172:7
 184:18 187:19 192:2
 201:2,19 202:2
 232:16 236:1 240:3
 279:21 300:13
changed 52:18
 139:19 164:2 170:12
 173:23 192:13
 206:22
changing 42:16 43:9
 52:15 164:9 192:3
 230:12
channeled 272:6
channels 272:6
chapter 104:22
characterization
 228:9
characterize 240:22
characterized 239:17
 240:23 241:2,8
 288:2
characterizing
 255:14
charge 44:15 93:13
 94:19,20 163:21
 186:4 193:20 225:6
 236:21 278:18,19
charged 85:4,7,10
 95:4 170:12 249:19
 270:2 271:5 278:8
charges 82:13
 130:18 221:8,22
 224:11,16 225:3
 250:9 251:5,9
charging 143:21
 270:11
chartered 97:12
Chattopadhyay
 49:11,12 69:8,9,10
 71:21 74:5 75:8,11,
 12 90:16,18,19 91:5
 177:23 178:1
 185:18,19 203:9,20
 270:17,18 285:8,9
 286:3 287:2
check 13:4 18:19
 45:12 71:18 152:7
 245:5,11 246:2
check-in 268:5
checked 170:14
checking 268:7
Chiavara 6:11,12
 13:9 14:7 15:7
 53:11,12 56:5 57:11

72:13 73:8 74:12,23
 152:20 153:3 154:1,
 10,18,19,21,22
 158:19 159:16,21
 160:1,5 161:9,10,20,
 21 162:14 169:8
 170:13 172:10,23
 175:1,3,18 177:17,
 19 203:17 205:2,6,
 16,17,18 206:18,19
 208:13,15,16,17,23
 209:9,14 210:4,5
 214:11,12 216:10
 218:16 221:4 223:18
 224:8,14,22 225:9
 227:19 228:12,18
 229:8,18 230:7
 232:3 236:9 237:2
 238:15,16 251:21,22
 252:12 253:3 254:8
 255:1,21 268:15
 272:14,15,17 273:9
 275:14 284:16,17,23
 291:11 292:4,9,11
 293:18 294:16
 296:6,14 300:23
 301:1
chime 211:19
choice 146:8 175:17
choose 199:9
chose 21:1
circle 14:22 275:15
circuit 186:20 222:11
 223:10 250:10
 287:13,14
circumstances
 246:22
cited 158:14
city 109:23 146:22
 186:12
clarification 24:8
 69:12 76:11 173:3
clarifications 22:18
 112:17
clarify 16:6 24:13,22
 39:7 54:3,4 97:10
 112:20 163:22
 176:20 203:19
 213:19 244:18 254:5
 292:8 300:11
clarifying 12:12,18
 16:5 53:13 56:13
 58:3 84:2 114:22
clarity 15:2
class 184:17 191:4
 193:15 194:2 286:19
classes 11:15 14:2,
 10 229:13
classified 194:8
CLE 178:11
Clean 7:5,8 15:22
 214:14 246:10
 250:15 252:21 253:3
 254:15 255:3,8
 297:1
cleanup 56:12
clear 18:6 28:23
 41:23 76:7 138:20
 143:21 162:12 214:3
 226:13 247:21
 297:23 302:2

clearer 72:10
CLF 11:6 24:11
 296:18
clients 205:10
Clifton 95:16,20
 96:17 98:2 99:4
 100:6,22 101:8
 106:13 115:16
 119:18 120:22
 122:19 123:15
 125:17 127:10
 128:21 129:6 132:15
 139:5 145:2,15
 148:18 149:2,10
 155:18 158:8 162:2
 163:22 166:1 167:2,
 16 169:6 170:18
 171:1 178:10 179:17
 181:5 195:3 196:18
 197:18 203:22 204:4
 277:17 282:21
climate 188:8
clip 282:11
clipping 290:1
close 72:14 74:5
 181:9 196:19 219:18
closed 291:15
closely 158:12,20
 183:12 219:18 230:3
closing 301:8,19
closings 301:4
CMSR 49:12 69:9
 75:11 90:18 178:1
 185:18 270:18 285:9
 286:3 287:2
co-counsel 6:8
Co-op 198:7
Coalition 7:10,13
 16:3 39:4 96:4,5,10,
 16,18 97:11,20 98:4,
 6 105:10 110:14
 111:5 112:15
 113:14,19 121:1
 123:11 137:6,12
 142:15,17,20 144:22
 145:12 146:10,19
 148:14 176:23 185:3
 186:2 191:11 196:14
 197:17,23 198:9
 214:14 221:17 223:4
 225:11,21 230:10
 236:13 237:6,17
 238:11 247:10
 249:15 250:6 254:2
 273:5 278:6 293:5,
 12
Coalition's 106:7
 107:15,18,19
 111:10,14,15,19
 112:21 115:6,14
 120:21 121:3 123:6,
 21 125:11 132:10,18
 134:13 137:15
 139:1,2 141:2
 145:11 147:9 151:15
 186:6 196:13 197:14
 221:15 223:16
 232:13 254:7 258:9,
 16 275:7 278:1
 279:8
codified 140:22

coincide 251:4 283:6	295:3 298:4 301:14	157:6,20 158:3	concluded 302:13	14:2,10
coincident 46:19	Commission's 16:15	162:7 181:2 187:1	concludes 237:17	constraints 170:2
49:22 50:2,3 108:10	47:6 48:18 106:16	188:3 189:2 192:4,	conclusion 151:1,7	construct 118:7
131:5,10 171:9	112:9 120:4 156:22	14 201:2 202:2	158:7 216:18	constructed 125:3
181:10 222:4 278:9,	Commissioner 16:5	217:5,13 219:7,9	conclusions 149:22	131:23 180:4
17,23 279:11 282:9	49:10 51:2 69:5,7,10	228:4 236:19 240:13	150:4 155:11	construction 203:1
287:22 288:10,13	71:21 74:4 75:7,8,12	243:14 254:9,14	condition 140:4	constructs 177:12
collaborate 90:12	88:2,6 90:16,19 91:5	255:5,7 281:9	conditions 20:10	consult 297:6
collaboration 147:2	112:22 114:15	competitive 142:12	45:19 157:3 187:7	consultant 25:15
colleagues 14:14	150:13,18 151:2	174:2,12 175:17	237:13,14 269:10	consume 192:18
collect 130:6 186:4	161:2 177:21,22	184:20 187:14,20	281:17,22	193:1
224:1	185:19,21 197:13	237:13,14 269:10	conduct 25:11 59:6	consumed 192:9
collection 32:21	203:9,13,20 213:5	competitively 121:15	conducted 273:15	consumer 7:1,4
36:12,14,22 37:4	253:17 254:18	219:12	confer 14:14 205:9	15:17 116:23 147:3
106:6 146:20 189:20	270:16,17 285:7	complete 25:15	294:10 297:5	201:11
collections 136:4,5	295:17,19	136:12	conference 72:1	consuming 289:18
collectively 216:3	Commissioner's	completed 8:9,11,13	conferred 191:11	consumption 184:6
collects 53:22	150:20	63:16 105:7	confident 30:16 43:1	188:11 191:6 283:4
Colleen 205:22	Commissioners	completely 84:23	63:21 116:5 245:11	286:18
206:8,13 207:8	6:12,21 7:8,12,17	119:6	246:2	contained 122:12
combination 200:16	47:9 48:20 92:13	completing 142:2	confidential 170:5,8	241:10
228:6	149:20 153:10 214:4	complex 176:13	configurations 270:6	content 63:5
combine 297:19	216:23	177:9,11 199:23	configuring 223:2	context 106:15
combined 261:16	commitments	200:6 231:6	confirm 87:2 205:4	164:17 170:8 226:7
comfortable 13:16	135:18	complexity 29:17	252:14 270:1,4	contextualize 40:20
33:10 116:4	Committee 101:19	30:7 80:17 177:13	295:22	continually 62:11
comment 6:2 17:19	188:16	227:14	confirmation 75:13,	continuation 77:10
31:23 52:14 79:11	common 176:16	compliance 99:15	19 79:1	continue 26:5 35:7
85:18 93:6 94:2	communicate 93:9	132:2,11 134:5	confused 72:2,3,15	56:18 64:22 69:17
120:9 264:9 292:10	communication	135:7 162:16,20	confusing 72:18	75:16 77:8 99:2
300:22,23 301:1	20:19 21:9,13	182:1 192:3,11	confusion 24:11	103:23 107:5,11
commenting 52:3	communities 97:4	193:2,4 216:13	141:13,20 175:21	126:5 135:9 137:21
comments 16:1	98:14,16 186:11	complicated 180:14	176:6 177:3 191:2	141:6 145:19 148:10
18:20 19:22 27:9	187:3 188:9 198:2,	181:15	213:20 286:8	149:8 154:15 157:18
94:6	10,12 199:8,17	complied 91:13	connect 82:20	233:13
commercial 11:15	community 7:9 16:2	component 124:8	connected 62:4	continued 25:14,16
14:2 177:12	96:9 174:13 186:18	180:22 181:13,14,17	158:20 289:13	102:16 156:9 158:1
commercially 216:7	187:5,21 188:17	182:7 183:13	Connecticut 219:2,	277:17
Commission 9:15,18	community-scale	components 82:1	11	continues 93:21
10:3 11:10,17 13:19	198:16	141:11 175:16	connecting 101:11	162:9
14:4,23 18:7 19:1	companies 207:14	199:15 217:8	connection 202:16	continuing 155:16,
25:3,8,9,10 28:1	209:7 222:19,21	comprehend 178:3	connects 62:3	23 246:14 265:10
37:10 38:5 48:12	company 6:13 9:9	comprehensive	consent 188:16	continuous 147:21
58:12,17,22 60:5,15,	85:2,9 93:16 210:11	100:14	202:2	contract 25:12
22 72:2 73:13 74:19	222:22 263:2 266:16	comprise 98:9	consequence 248:14	298:19,23 299:5
85:13 86:14 88:8,20	company's 45:17	comprised 97:1	consequences 247:5	contracts 31:21
90:12 92:9 101:7,23	compare 220:4	compromise 127:14	Conservation 7:15,	174:20 188:5
102:9,11,17 103:23	compared 117:6	comps 224:19	18 16:17,19 57:22	contradict 176:8
104:5,15,20,23	133:21 174:7 229:12	concentrated 81:19	58:11	contrary 159:1
105:1,7,8,11,13,14,	comparison 223:19	concept 20:4 199:22	conservative 44:8	contrast 177:6
19 106:10 107:1,5	compensate 71:14	251:16 296:2	consideration 9:22	contribute 82:20
109:19 112:8 113:23	compensated 35:3	concepts 141:17	101:4 105:12 117:3	193:3,8 221:16
114:14,22 116:1,7	115:21 125:7 130:18	conceptual 180:17	125:2 131:21 158:23	223:10 288:12
119:16 121:13 122:5	197:1,10 223:21	concern 55:16 94:19	227:4,15	contributed 9:6
125:1 127:11 131:20	compensates 135:23	101:14 107:20 111:4	considerations	265:7
132:18 136:19	compensating	115:22,23 117:23	106:3 226:11	contribution 82:21
139:11,15,21 140:3	138:15 168:19	162:9 178:13 179:1	227:17,21	202:18,23
141:22 144:7 145:6	181:21	188:1	considered 73:17	contributions 146:23
147:8,15 148:20	compensation 26:4	concerned 76:13	107:9 117:23 225:17	control 20:23
149:7 152:11 156:9	29:21 30:14 31:13	119:20 200:22	226:5,22	controversy 200:20
157:2,19 159:2,4,6	32:8,17 33:4,7 35:19	223:15 248:1 294:23	consistent 122:9	201:8,13
163:11 165:5 167:12	37:21 39:11 42:2,4	concerns 19:23	126:7 155:14 157:4	convene 122:6
172:6 173:2,17	53:18 66:17 71:14,	34:17,21 93:7 97:14	165:9 215:6 279:15	171:23
182:6 186:2 187:11,	15 73:1 75:22 80:11	107:18 178:8 293:11	consistently 198:4	conversation 85:16
17 201:18 202:1	81:6 82:2 94:22	concisely 96:13	constitutes 11:16	
207:17 209:11	101:6,15 108:22	conclude 152:2		
210:21 217:22 219:3	125:6 129:9 133:3,	153:14		
224:23 225:13,23	19 136:2 137:21			
227:3 228:15 229:6,	141:17 146:3,6			
13 240:10 243:17	147:13 151:16,17			
252:7 279:6 291:21				

180:21	cost-shifting 174:23	11 170:11 178:22	15 189:13,14,17	day 59:11,13 91:2
conversations 15:11	cost/benefit 59:7	179:9 183:2 187:9	190:4,8,14,16,19	93:20 124:14 140:15
110:17 259:18	costly 222:16 231:6	192:15 215:6 216:14	193:14 194:1 215:7	154:14 182:8,12
converts 131:13	costs 11:12 13:21	217:19 218:4 220:6	217:12,16,23 218:13	249:20 260:7 285:10
195:8	20:1 26:13 45:11	221:6,18 225:2	219:4 220:7 221:6	295:1
convey 240:3	53:23 56:23 84:2	228:1,8,14 229:2,21	225:8 228:1 229:11,	days 250:18 299:1,4
convinced 31:3	87:10,17,20 88:17	235:7 249:15 250:8	13 230:16 232:19	302:9
238:13	110:8,19 116:12	254:10 255:5 278:4	234:7,10 237:20,21	DE 19:22 20:13
cop 68:13	125:8,20 126:2,18	281:13 284:20	252:23 257:13,20	106:19 209:13 279:9
copies 47:17,20	134:5 146:2 157:21,	crediting 171:20	271:2,11,17,19	283:22
copy 43:23 46:13	23 161:7 162:17,20	247:23	285:13 286:9,11,14,	deal 30:1 100:20
47:7,10,15 48:20,21	167:10 168:6 172:9,	credits 74:2 169:2,18	16	133:13 140:11
49:20 239:6 243:18	11,16,17,18 173:7	170:3,23 226:10,20	customer's 20:23	177:12 200:8
244:1,20 263:21	175:8 179:11,13,15	crisis 182:9	230:17 283:4	dealing 180:8 200:15
Corp 6:18	183:11 197:6,10	critically 224:4,5	customers 26:17	222:20 228:22
correct 24:12 39:10,	198:22 202:20	cross 69:4 92:18	33:6 35:13 36:3,6	deals 90:5
16,21 40:2,8,17	215:21 218:11 228:3	95:16 113:15 152:12	53:16 77:16 79:19	Deandra 22:5,10
44:18 45:13,20 56:9,	237:5 243:13 251:12	153:18,21 238:19	80:20 93:21 94:17	23:4 24:5,16 25:1
11 58:7,14,15,20	260:20 265:14	268:8 269:3 285:3,5	97:8 98:14,15	58:7,10,15,19 59:3,
59:2,9,17 60:17,23	271:13 272:22	cross- 107:11 213:7	104:10 118:18 119:2	10,18 60:4,16 61:1,
61:1,5,6,10 68:15	273:16 276:19	cross-exam 291:12	124:7 126:9 142:4	6,10,19 62:6,14
73:10 74:12 76:16,	278:8,17 280:14,15	cross-examination	143:6,14 151:20	63:10,18 64:11 70:5,
23 77:1 81:23 87:22	281:3 287:10 289:2	8:10,14,17 38:21,23	156:19 166:10	23 84:1 88:13 89:9
99:17 105:21 112:20	290:15	39:1 53:9,10 57:20	167:13 170:3	decade 101:9
122:14,15 123:11,12	counsel 214:14	63:1 112:4 154:20	172:11,19 174:14,	December 23:8
134:16 137:6,7	293:13	238:21 269:5	18,22 175:23 176:5,	24:18
142:23 143:1 162:21	counted 296:9	283:15,16 284:15	13,17 177:5 179:10	decide 82:20
163:9 165:2 167:1,3,	counting 34:18 45:10	cross-examine	181:2 188:7 189:11	decided 60:6
15 169:5,6 170:10	218:7	177:18	194:11 195:12	decision 109:7
183:19 204:3,5	country 64:23	cross-reference	196:17 198:2 199:8	decrease 53:23
241:1 245:10 250:20	county 96:22 97:2	72:23	216:6 218:5,8,11,15	decreasing 62:12
253:12 258:11	98:8	cross-references	222:1 224:18,21	deduct 233:22
265:18 266:3,9,15,	couple 16:5 24:7	72:19	225:8 230:23	deducted 158:2
22 267:4,10,18	28:21 32:5,20 50:15	cross-referencing	233:12,15 236:19,22	deep 100:15
275:21,22 276:15,	53:13,14 54:18	73:3	237:1,7,12,15 245:9,	default 79:18,19
16,20,22 277:2,4	62:19 88:19 92:19	cross-subsidization	12 251:11,13,14	116:2 120:15,19
285:15 300:13	129:17 175:2 239:1	106:17 107:9	258:13 263:2 269:9,	133:3,4,5,20 134:6
correction 99:9,21	258:14 262:2,7	crux 151:20	11,12,15,17,19	136:3,6,8 137:23
163:2	266:10 302:9	cue 123:2	274:20 275:6,10	141:18 146:3 174:22
corrections 22:18	coupled 108:13	cumulative 20:18	277:2 279:14 280:8	178:21 181:23
23:15,18 97:19 98:1	140:7,12 143:22	curious 70:1	284:19 286:6	182:22 183:2,7,17
99:22 100:3 112:17	cover 16:10 37:17	current 26:1,4 29:1,	customers' 233:19	184:13 187:23
correctly 78:16 81:21	47:18 87:20 302:4	5,20 31:14,15 33:11	customers/suppliers	189:1,10 196:22
143:5 249:2 258:8	covered 132:17	35:18 57:6 70:6	194:22	210:16 220:6,8
cost 14:8 26:16	182:19 221:13	81:13 89:18,21 98:9	cutoff 127:13	240:14 286:13
38:16 40:6 44:12	300:16 302:2	101:5 108:4,5	<hr/>	defaults 98:19
52:19 69:23 82:13	covers 57:1 124:19	117:15 141:6 148:16	D	defer 158:6
104:9,17 107:8	CPCNH 8:18,20	168:4 170:16 182:20	daily 185:2	define 245:1
109:2 110:10 128:1,	38:23 89:6 95:10,14	201:3 215:5 216:3	dais 114:3	definition 72:23
8 129:10,21 131:7	99:6,7 186:3 221:5	217:9,15 231:7	darn 171:5	156:17 166:2 245:4
132:2 133:14,18,20	236:15,17 237:3	240:12 241:5	data 36:11,14,22	definitively 43:6
135:7,20 136:5	238:19 268:13	273:19,20	37:4 46:23 66:18	degradation 52:15
138:7,18 148:10	273:1,16 283:22	curve 140:16	102:12,14 130:6,8,	degree 143:9
151:19 160:9 162:6	284:20 294:18	custom 170:2	21,22 131:2,11	degrees 227:12
163:5 165:7 168:20	301:13	customer 20:6,8,16	142:3 143:15 146:20	delegated 101:22
171:18 172:3,5,12	CPCNH's 221:10	26:19 27:1 37:22	147:1 166:6 171:3,7	delivered 192:11
178:22 179:3 181:1	225:1 233:3 277:11	54:11,12 56:19 65:7,	175:15,22 176:7,9,	demand 49:22
182:2 183:11,15,18,	create 163:11 192:11	12,20 66:10 69:17	21,23 180:5,8,11	108:10 171:9
22 192:23 197:15,	193:2 232:17 290:4	71:5,13,15 75:22	181:17 197:2,7,9	250:17,20 253:22
16,20,21,22 198:23	created 25:13 54:23	81:19,21 82:11,13,	219:4 233:16,17	278:9,18,19,23
199:12 200:3 216:15	183:5 253:4	20 83:3,5 84:7,21	234:18	282:12 288:5,10,13
222:2,8,9 224:2	creates 62:12 192:19	94:15 101:6 104:6,9,	date 29:1,22 56:9	290:13
231:22 232:15,18	222:15 261:4 281:4	11 120:15 125:3	145:17 180:13 284:7	dated 253:1 262:22
234:11,13 236:6	290:2	131:23 133:1 135:21	dates 30:2,6 300:8	Davis 182:10 205:19
251:11 258:12	creating 197:9	141:12,15 146:8	206:20,22 207:2	205:20,22 207:2
260:17 261:1 267:13	281:12	149:15 162:7	225:10,11,19 226:7,	228:11,13,17,19
279:14 281:11	credit 45:10 110:19	165:13,18 166:20	13 227:19,20	229:9,15,19 230:1
282:14 283:7	116:11 125:5 126:1,	167:7 169:5,11,21	228:11,13,17,19	243:4 270:4 271:7,
288:12,15	18 130:14,16 132:5,	172:15 175:16,20	229:9,15,19 230:1	12 272:2
cost-causation	12,22 134:6 136:1	177:1,13 179:16	customers' 233:19	demonstrates 215:4
144:2	142:9 146:2 169:4,5,	182:18,20 184:5,9,	customers/suppliers	254:22
cost-effective 198:18			194:22	

- denying** 254:5,6
- department** 6:6 8:17
12:2 23:1 24:23
25:13,14 29:9 31:2
33:10 35:7 36:23
37:1,3 38:11,19
45:4,8 52:6,7 68:17
74:14,15 81:15
86:19 88:10 89:14,
17 90:2,9,13,14
112:14 116:8 143:3
152:7,9,13 268:7,18,
20 269:3 284:6,11
285:5
- Department's** 28:12,
15 36:14 37:11
79:16,21 115:22
126:8
- dependent** 152:21
- depending** 52:22
80:9 84:6 85:18 89:2
141:8 154:14
- depends** 168:7
172:13,20
- deployment** 255:3
- depreciated** 203:4
- depreciation** 224:5
- DER** 91:7 242:11,23
- derives** 278:16
- describe** 25:21 155:9
239:21
- describes** 243:11
267:16
- description** 103:10
251:1 252:6,15,19
267:17
- deserves** 119:17
136:20
- design** 67:8 108:9
227:17 278:19
- designed** 109:1
169:4 228:8
- designs** 279:15
- desire** 142:11 187:4
- detail** 28:20 83:18,23
128:12 267:7
- detailed** 25:20
231:10,19 273:5
- details** 100:13
190:11
- determination** 217:5
- determine** 38:16
62:23 172:6
- determined** 38:15
106:21 108:21 173:6
181:10 187:17
- develop** 51:9 78:16,
20,23 103:23 110:1
140:6 149:8 172:3
- developed** 24:10,14
25:7 26:8 34:4 58:6
106:20 115:20
126:12 142:12
176:11 186:12
198:18 244:12
- developers** 110:16
176:12 177:6 185:4,
9 188:2
- developing** 36:12
158:13 225:14 226:2
- development** 21:9
23:20 27:4 30:22
34:22 40:21 41:18
60:14 106:22 117:12
147:1 226:16
- developments**
196:10
- Dexter** 6:8 301:16,18,
22
- DG** 40:12
- dictates** 156:21
- difference** 79:17
136:2 138:15 220:18
234:7 235:17 238:4
258:22 287:16
- differences** 233:10
- differentiated** 216:1
- differentiating**
215:17
- differentiation**
215:21,22 247:5
- differently** 127:8,16
231:14
- differs** 142:15,17
- difficult** 64:9 114:3
170:4
- difficulty** 188:23
- dime** 21:2
- direct** 8:9,14,16 9:7
10:17,20 20:22
22:14,17,20 38:20
39:7 45:18 51:12
53:21 59:20 95:23
96:1 102:22 112:2
121:13 122:6 132:17
160:6,20 163:10
165:5,12 169:16
176:4 177:18 188:10
206:16,17 210:6
212:1 213:4 214:7,9,
10 218:17 225:14
226:1 238:16 263:3
276:14 277:1,16,19
- directed** 25:2 45:22
156:8 263:14 284:19
- directing** 103:23
- direction** 75:1 104:18
193:22 208:2 209:20
211:8 212:14
264:12,14 265:4
- directions** 104:14
179:4
- directive** 105:23
187:19
- directly** 167:9 179:15
188:21 196:3 213:12
270:4 284:8
- Director** 23:2
- directors** 96:6
- dis-incentivized**
30:23
- disagreement** 29:20
- disallowed** 86:12
- disappears** 121:9
- disappoint** 152:11
- disassociate** 182:14
- discharge** 249:12
250:7,11,19
- discharged** 249:21
256:1
- discharging** 157:17
- discipline** 199:5
- discontinuing**
155:13
- discovery** 130:8
138:10 166:15
168:13
- discrete** 55:3,8
- discretion** 16:15
- discuss** 21:17 172:1
175:20 295:12
- discussed** 18:12
26:11 31:17,21 32:8
69:16 128:10
163:14,15 164:8,17
204:7 248:14,17
255:4
- discussing** 285:12
- discussion** 17:22
18:22 27:10 83:14
170:6 179:7 213:9
274:6
- discussions** 69:13
91:15
- dispatch** 251:3
- dispatches** 289:14
- dispatching** 254:13
- disputed** 167:23
- disputing** 254:12
294:13
- disrupt** 234:14
- disruptive** 230:5
- distinct** 135:14
257:20
- distributed** 8:11 26:5
81:18 105:6 109:16
121:23 128:15 129:4
130:19 140:8 168:4
198:16 219:13
220:17 222:23
223:12 244:12 249:7
254:20 271:3 280:6,
22,23 281:19
- distribution** 20:1
39:14 79:21 125:8
143:23 147:13
156:17 164:15
173:11,12 175:13,14
204:8 219:1 280:21
281:2
- doable** 51:10
- docket** 11:11 16:11
19:21 23:8 27:13
41:13 43:12,13,20
44:1 46:1 48:1,6,16
63:7 65:11,15 66:9,
10 82:23 86:15 93:1
97:21 101:4 103:21
105:7,19 106:19
113:23 115:8 139:14
142:22 160:13,15
163:16 164:8 186:6
201:9 209:12 211:4
213:10,12 227:1
- 248:23 252:2 254:16
262:5 283:22 284:7,
12 293:4,17
- dockets** 19:11 65:10
76:5 114:2 255:18
- document** 9:19 49:19
69:15 100:9 250:21
252:8,9,18 253:20
263:1,9,15 291:16
- documented** 121:2
- DOE** 8:19 22:2 24:21
55:1 75:14 76:3,7
91:20 92:2 95:9
113:16 151:7
153:18,21 178:8
268:13 285:3
- DOE's** 76:21 145:4
- dollar** 11:14 13:23
- dollars** 253:4,6
- Donald** 7:3
- double** 34:18
- double-down** 246:11
- doubt** 52:8,12 65:3
- downward** 218:10
- dozen** 110:15
- DPU** 279:5,10 283:1
284:9,13,18
- drafted** 101:18
- drastically** 202:1
- draw** 106:5
- drawing** 30:2 51:19
- driven** 287:23
- driver** 135:4
- driving** 107:19
290:13
- dual** 156:2 168:15
- dual-access** 110:4,6
- duck** 140:15
- due** 119:11
- dueling** 102:2
- duly** 22:11 95:20
206:14
- dummied-down**
234:21
- dumps** 233:19
- Dunsky** 8:10 24:9
25:10 59:14 108:7
246:8
- duplicate** 162:6
- duties** 150:21
- duty** 149:12
- dynamic** 287:21
-
- E**
-
- earlier** 33:14 34:2
61:17 65:7 70:16
83:20 94:6 128:11
140:21 143:2,7
194:20 225:21
227:21 239:17
243:10 244:5 247:4
260:9 276:7,13
277:23 293:15
- 300:12
- early** 163:3 202:22
- easiest** 141:12
- easily** 179:22
- eastern** 197:4 272:5
- easy** 216:6
- economic** 198:13
220:19
- Ed** 205:19 230:1
243:4 271:12
- edge** 52:22
- effect** 61:3 139:20
163:23 181:23
232:12 282:10,13
- effective** 187:8
200:10
- effectively** 172:12
229:4 272:8
- effects** 215:16
- efficacy** 54:22
- efficiency** 184:23
209:5
- efficiently** 51:11
221:17 223:14
229:12 248:10
- effort** 32:21 36:12,15,
22 37:4 171:3
231:22
- efforts** 28:20 29:18
34:23 169:18
- eight-tenths** 163:7
- eighth** 107:15
144:16,19
- elaborate** 75:20 80:5
116:19 134:21 249:4
- elaborating** 292:17
- elaboration** 53:2
- election** 118:4
- electric** 6:18 23:2
56:17 69:16 91:9
104:7 132:3 175:22
187:20 248:8,11
250:16 253:20,21
279:16 290:8,13
- electricity** 156:16
250:17 253:22 266:5
- electrification**
168:19 290:6
- element** 253:14
- eligibility** 225:15
226:2
- eligible** 26:22 32:16
70:8 225:12,22
226:3,10,19 270:2
- eliminate** 158:21
- eliminating** 167:14
- Elizabeth** 22:4,10
23:2 32:23
- email** 177:2
- embedded** 67:17,23
- emphasized** 102:23
257:9

- emphasizing** 113:22
employer 210:10
enable 139:15 140:6
enables 133:8
enacted 173:22
enactment 103:16
encapsule 159:18
encourage 39:13
 115:9 223:5 260:11
encouragement
 297:18
encourages 249:2
encouraging 248:2,
 10
end 18:23 29:22
 30:1,6 31:5,13,14,
 15,17 32:2,10 33:9
 64:17 69:21 114:4
 156:6 159:18 169:14
 184:5 187:12
 189:12,17 192:9
 235:15 253:23
 274:12 275:7 293:5
endeavor 147:14
ended 102:4,5
ending 31:5 32:9
endorsed 159:3
ends 33:12 236:12
enemy 216:9
energy 6:6,14,22 7:6,
 8 8:11,17 12:2 15:23
 26:12,14 35:21
 36:23 44:3,4,16
 75:23 79:14,19
 93:13 94:11 96:15
 100:10,15,17 101:19
 105:6 112:14 121:8,
 23 124:6,16 128:15
 129:3,4 135:3 138:2
 139:3 141:19 143:3
 146:3 158:2 166:2
 180:22 181:1,13,14,
 16 183:13,16,22
 186:10,15,16 188:15
 198:11,17 202:8
 206:5 208:22 209:5
 210:15 214:15
 226:15 230:13
 233:12 238:7 242:17
 244:12 246:10
 247:17 248:16
 249:3,22 250:15
 252:21 253:4
 254:13,15,20 255:3,
 8 258:3 261:14
 266:5 269:4,13
 271:3 280:6 297:2
energy-resilient
 226:17
engage 114:11
 293:22
England 31:20 44:3
 53:18 66:20 67:8
 124:15 135:2,5
 156:5,13,14,20
 157:14,16 167:6,14
 168:1,5 181:9
 188:22 222:1 230:14
 231:15 234:16
 262:15 266:13
England's 67:3
enhanced 199:15
Enphase 252:18,19,
 22
ensure 35:2 77:14
 93:12 130:16
entail 171:17 231:22
 232:1
enter 221:3 252:8
enterprise-wide
 231:19
entertain 8:22
entire 94:11 156:19
 278:20
entirety 88:21 89:7
 292:15 295:10
entities 176:11
 194:18 200:15
 201:21 282:11
entity 120:18
environmental
 59:14,20,23
equal 26:14 108:6
 286:12
equitable 283:7
equivalent 50:9
 133:6 138:1 182:2
essence 78:12 79:7
 82:4 115:10 125:22
 151:20 180:20
 181:18
essential 237:6
essentially 77:14
 81:23 85:18 103:11
 105:4 108:5,21
 141:5 188:18 198:22
 202:11 233:9 235:12
established 27:6
establishing 147:12
estimate 151:8 152:8
estimated 233:15
 266:16
estimates 44:7 263:2
 272:21 273:14
estimation 231:7
EV 143:20
evaluation 55:15
Evans-brown 7:7,8
 16:1 62:17,19,20
 63:2,4,13,20 64:6,13
 65:17 66:14 67:1,6,
 12 68:5,7,9 69:1
 297:1,8 299:16
evening 140:18
event 150:2 185:1
 251:7
events 250:20 288:7
Eversource 6:10,14
 13:8 44:16 53:20,22
 54:7 70:10 84:14,18
 85:16 108:20 116:23
 133:6 138:11 156:1
 159:1 166:9 167:5
 189:6 205:22 206:6,
 9 207:7,11,13
 208:19,22 209:2,4,7
 226:14 232:9 237:11
 242:6,8,12,17 243:1
 245:6,8 246:3
 247:17 248:16
 250:14 251:2,10,14,
 19 252:15,20,23
 253:3 254:4,19
 269:9,13 288:21
 292:22 293:19
Eversource's 124:4
 167:10 182:17 220:8
 222:19 239:7 254:23
 278:13 280:18
 289:13
everyone's 49:19
 295:12 302:2
evidence 9:15,23
 10:1 12:21 18:8,17
 56:22 69:22 111:19
 120:3,5,9 161:5
 162:11 176:15 215:4
 217:8 246:13
 248:13,17 258:15
 259:3 272:21
 275:17,18
evolve 164:19
EVS 290:12
exact 15:1,2 258:8
exam 160:7 163:11
 165:12 169:16 176:4
 218:17
examination 22:20
 49:18 92:15 96:1
 203:15 206:17 210:6
 212:1 213:8 214:10
 272:16 276:5 277:19
examples 215:18
 253:8
exceeded 46:20 50:4
exceeds 232:21
excellent 13:13,14
 302:6
exception 8:12
exceptions 85:6
excerpts 47:17 262:9
 265:21 276:8
excess 101:15 157:8
 215:6 233:11
 234:18,23 235:10,11
 259:13,15
excessive 138:7
excited 144:14
excluded 132:5,11
 134:6
exclusive 295:22
exclusively 109:1
 225:7
excuse 31:6,11 35:21
 44:23 48:4 123:19
 155:18 167:18
 203:18 251:21
 253:16
excused 95:10
 204:19 277:9 291:4
executed 97:5
 231:21
exercise 97:15
exercised 201:13
exercising 96:22
exhausting 147:18
exhibit 9:8,20 23:12
 24:21 27:14 39:8
 41:17 49:5 56:17
 73:18 98:3,23 99:5,
 9,11 100:4,8 102:21
 103:7 106:6,14
 113:8,9 116:15,22
 122:16 123:16 124:1
 127:6,9 128:18
 129:19 134:17 135:1
 147:12 160:17
 162:4,11,12,13
 163:4 166:5,8 169:9
 194:14 207:22
 209:17 211:3 212:9
 227:22 228:20
 239:2,6,7,21 241:10
 242:4 243:9 244:2
 252:9 262:23 285:20
 286:22 292:17
exhibits 31:10 49:7,8
 97:21 100:2 113:10
 114:6,13 122:12
 123:4 134:15 137:4
 138:9,21 160:3,18,
 19 239:3 267:11
 291:9,14,18 292:19
 294:21
exist 51:10 81:3
 196:7
existence 67:4
existing 32:16 35:17
 36:3,6 56:9 65:14
 137:21 184:4 189:5,
 19 195:7 196:9
 204:2 228:5,6 290:4
exists 37:22 121:9
 238:6
expand 115:16
expanded 245:7
expanding 227:7
 248:6
expansion 54:23
 55:2,3 73:14 195:19
 226:23 227:16
 279:11
expansions 101:12
expect 126:19
expected 135:6
 186:18 187:11
 202:12
expense 224:5
expensive 109:15
 110:7 236:7 290:3
experience 65:19
 94:3 100:9,15,21
 101:1 176:6 177:1
 273:18 275:20
 280:13
expert 86:6 147:3
explain 28:15 29:8
 79:13 92:21 101:3
 103:4 107:17 111:14
 118:16 122:17
 125:15 127:6 129:1,
 20 137:14 139:2
 150:19 223:20
 242:10
explained 34:11
 37:12 240:16 248:7
 251:9 266:4
explaining 91:9
 267:8
explains 127:14
explanation 84:23
 158:18
explicitly 71:3
explore 33:16 126:5
 163:12 165:4 245:6
explored 28:19 32:20
export 131:15 184:7
 186:19 233:11 234:3
 260:21
exported 128:2 131:4
 233:4,12,14
exporter 183:19,21
exporting 184:11
 232:22
exports 120:14,19
 121:6,17 124:6
 132:5 165:13,15,18,
 19 166:7,9,20
 230:16 232:19,21
 233:20,22 234:7,10
 274:7,9
exposed 185:8,16
expressed 115:23
 187:4
expressly 204:7
extend 77:12
extending 29:10
extension 56:8 96:21
extensive 90:5 100:9
 125:18 180:4
extent 9:20 54:16
 55:1 111:18 112:5
 115:15 120:2 127:4
 135:11 140:7 142:5
 155:8 162:10 168:14
 181:20 184:19 185:8
 190:20 191:7 199:1
 213:14 231:21
 244:13,18 245:1,5
externalities 59:14,
 21 60:1,7
extra 78:6 128:6
extrapolate 94:11
extremely 280:10
-
- F**
-
- facilitate** 25:14 91:8
facilitated 25:8,11
facilities 32:16 167:8
 226:15 270:9
facilities' 225:2
facility 20:20 189:4
 221:20
facing 109:3
fact 9:13 42:19 67:2
 102:1 105:11 118:1
 124:4 127:21 129:7
 164:10 165:15 171:2
 177:16 180:7 187:2

204:6 230:18 249:18 250:13 252:16 275:20 285:13 293:20,21 294:1	264:3 293:23 297:11	forecast 281:1	futures 44:4	270:5 291:14
fact-based 155:8	filed 9:8 10:20 23:8 27:13 102:6 132:17 208:7 210:2 211:16 212:20	foreseeable 117:12		giving 130:14,16 161:16
factors 200:14 216:2	filling 209:16 211:2,3 227:9 228:22 288:21 295:15	forget 242:15 247:15 257:23	G	glad 21:17 270:5
facts 155:9 241:13 242:3	filings 45:18 114:13 133:6	forgetting 267:23	G2 189:23	goal 80:22 197:14, 16,23 198:8
factual 162:8 242:5	final 92:8 144:19	forgive 31:8 260:3	gain 184:23	goals 186:8 188:8 197:20 198:1
failed 112:15	finally 25:9 38:10 45:15	forgone 157:23	game 258:20 274:8	Goldner 6:9,15,19,23 7:5,9,14,19 8:1,5 11:3 12:6,16 13:3,13 14:20 15:8,13,16,22 16:2,16 17:15,20,23 19:14,18 21:23 22:7, 12,13 38:22 47:8 48:8,17,22 49:6,13 50:14,22 51:2,14 53:7 57:15 62:17 68:7 69:3 71:20,22 74:3,13,18 75:2,6,7 79:10 88:2 90:11 92:6,12 95:8,13,18, 21,22 112:11,23 113:7,11 114:12,19 118:21 119:15 136:18,23 150:5,9, 16 151:4 152:5,16 153:1,5,17,22 154:3, 6,13 159:15,23 161:9,18 162:1 173:2 177:20,21 185:21,22,23 193:11 194:13 197:13 203:8 204:18 205:11,15 206:1,10,14,15 208:12 212:23 214:5 238:18 241:19 242:14,18 243:19 247:11,14 253:10,13 256:7,16 257:22 264:6,21 268:4,11, 17,21 269:2 270:15, 20 272:10 277:7 283:14 285:2,6 286:1 287:4 290:21 291:3,6 292:1,5 294:9,12,22 295:19 296:1,10,15,21 297:7,13 298:14 299:13,18,22 300:14 301:5,21,23
fair 59:22 60:9 89:7 100:7,14,20 111:5 120:9 145:12 148:1 153:9 217:14 229:18 275:14	finance 64:10 200:22 201:21	format 112:7	Garcia 10:18,23 211:20 212:3,5,10, 15,17,21	generally 44:10 223:20 257:1 258:9, 12 261:9 263:8 269:22 272:2,3 274:14 277:23
fairer 230:19	financed 201:16	forms 188:5	gas 186:15 189:19,20 202:8	generate 298:6
fairly 52:13 55:3 110:4 125:18 275:1	financial 77:15,19 79:6 108:9 263:6 264:15 265:8 267:11	formula 11:18 14:6 267:17,18	gave 160:20	generated 188:12
fairness 282:23	financiers 200:21	formulas 257:11	gears 60:19	generating 26:21 125:4 132:1
false 21:11	financing 77:6 200:15 202:9	forward 12:9 51:12, 13 77:3 91:18 126:13 152:12 171:23 246:16 256:8,12 280:20 288:19 298:16	general 29:19 39:4 70:11 84:12 115:19 137:20 158:5 173:8 199:4 202:11 264:23 269:11 270:5 274:5 287:21 289:23	generation 26:5 40:14 108:13 131:4 140:8 147:13 156:15 168:4 199:19 215:7 216:7 218:7 219:1, 13 220:17 221:20 222:23 223:12 233:4,14 234:19 235:10,11,15 249:8 259:13,16 261:5 266:17 280:22 281:19,22 286:20
familiar 43:12 45:23 46:7 63:5,11 71:1 149:4 239:11 243:9 252:3 253:5 259:6 262:4	find 19:15 78:5 114:15 199:10 229:14	found 110:13 131:1 139:11	generally 44:10 223:20 257:1 258:9, 12 261:9 263:8 269:22 272:2,3 274:14 277:23	generator 35:22 65:8 71:5,13 75:22 79:14 84:7 94:16 130:19 133:2 167:7 181:22 182:23 201:10 203:6 215:7 217:12 219:5 230:16 232:19 260:22 261:10 286:15,21
Fantastic 207:5	findings 228:15	Foundation 7:15,18 16:17,19 57:22 58:11	generate 298:6	generators 26:19 27:2 31:18 33:6 37:23 54:6 65:13 66:10,16 79:15 82:6 101:6 104:6,9,11 120:15 125:3 131:23 135:22 141:15 149:16 157:7,13,15, 21 162:7 165:14 169:11,21 196:10 217:16 218:1,14 220:7 221:6 257:13, 20 258:4 260:11,19 261:3 286:11
fashion 123:3	finding 228:15	foundations 148:10	generating 26:21 125:4 132:1	get alignment 13:5
fast 153:3 155:17	findings 229:6	fourth 131:17	generation 26:5 40:14 108:13 131:4 140:8 147:13 156:15 168:4 199:19 215:7 216:7 218:7 219:1, 13 220:17 221:20 222:23 223:12 233:4,14 234:19 235:10,11,15 249:8 259:13,16 261:5 266:17 280:22 281:19,22 286:20	give 11:20 12:20 48:23 50:13 109:22 119:16 128:20 136:20 160:16 168:22 191:19 194:14 219:3 232:6 234:17,21 243:23
favor 18:8	fine 13:2 47:2 261:13 300:21	frame 17:8 161:19	generation 26:5 40:14 108:13 131:4 140:8 147:13 156:15 168:4 199:19 215:7 216:7 218:7 219:1, 13 220:17 221:20 222:23 223:12 233:4,14 234:19 235:10,11,15 249:8 259:13,16 261:5 266:17 280:22 281:19,22 286:20	giving 130:14,16 161:16
FDGP-1 262:23	finger 99:18	free 161:22 187:6	generating 26:21 125:4 132:1	glad 21:17 270:5
feasibility 127:18	finish 220:1 221:2	frequency 122:3 148:4,11 170:15	generation 26:5 40:14 108:13 131:4 140:8 147:13 156:15 168:4 199:19 215:7 216:7 218:7 219:1, 13 220:17 221:20 222:23 223:12 233:4,14 234:19 235:10,11,15 249:8 259:13,16 261:5 266:17 280:22 281:19,22 286:20	goal 80:22 197:14, 16,23 198:8
features 260:18	firsthand 273:18 275:19	frequent 148:7	generator 35:22 65:8 71:5,13 75:22 79:14 84:7 94:16 130:19 133:2 167:7 181:22 182:23 201:10 203:6 215:7 217:12 219:5 230:16 232:19 260:22 261:10 286:15,21	goals 186:8 188:8 197:20 198:1
February 63:6	fit 184:14 286:19	frequently 122:2 184:3	generators 26:19 27:2 31:18 33:6 37:23 54:6 65:13 66:10,16 79:15 82:6 101:6 104:6,9,11 120:15 125:3 131:23 135:22 141:15 149:16 157:7,13,15, 21 162:7 165:14 169:11,21 196:10 217:16 218:1,14 220:7 221:6 257:13, 20 258:4 260:11,19 261:3 286:11	Goldner 6:9,15,19,23 7:5,9,14,19 8:1,5 11:3 12:6,16 13:3,13 14:20 15:8,13,16,22 16:2,16 17:15,20,23 19:14,18 21:23 22:7, 12,13 38:22 47:8 48:8,17,22 49:6,13 50:14,22 51:2,14 53:7 57:15 62:17 68:7 69:3 71:20,22 74:3,13,18 75:2,6,7 79:10 88:2 90:11 92:6,12 95:8,13,18, 21,22 112:11,23 113:7,11 114:12,19 118:21 119:15 136:18,23 150:5,9, 16 151:4 152:5,16 153:1,5,17,22 154:3, 6,13 159:15,23 161:9,18 162:1 173:2 177:20,21 185:21,22,23 193:11 194:13 197:13 203:8 204:18 205:11,15 206:1,10,14,15 208:12 212:23 214:5 238:18 241:19 242:14,18 243:19 247:11,14 253:10,13 256:7,16 257:22 264:6,21 268:4,11, 17,21 269:2 270:15, 20 272:10 277:7 283:14 285:2,6 286:1 287:4 290:21 291:3,6 292:1,5 294:9,12,22 295:19 296:1,10,15,21 297:7,13 298:14 299:13,18,22 300:14 301:5,21,23
federal 157:5,9 168:17 173:14	five-minute 279:18	front 19:17,18 41:11 129:5 239:10 243:7, 15 250:22	generating 26:21 125:4 132:1	good 6:7,11,16,20 7:2,7,11,16,22 8:3 13:7 39:3 69:10 86:14 178:2 182:11 210:8 212:5 216:5,9 274:15 277:22 278:19 279:2 292:4
fee 34:18 271:1,4,10, 17,22	five-year 56:8	front-end 87:15	generation 26:5 40:14 108:13 131:4 140:8 147:13 156:15 168:4 199:19 215:7 216:7 218:7 219:1, 13 220:17 221:20 222:23 223:12 233:4,14 234:19 235:10,11,15 249:8 259:13,16 261:5 266:17 280:22 281:19,22 286:20	governing 16:22 17:9,10 97:4 186:9
feel 29:15 216:17	fixed 109:3 110:6 185:13 219:8,22 220:11 240:14 271:1,10,14,22,23 282:14	frustrations 102:10	generator 35:22 65:8 71:5,13 75:22 79:14 84:7 94:16 130:19 133:2 167:7 181:22 182:23 201:10 203:6 215:7 217:12 219:5 230:16 232:19 260:22 261:10 286:15,21	governmental 96:18
feels 148:14	flexibility 40:13	fuel 270:2	generators 26:19 27:2 31:18 33:6 37:23 54:6 65:13 66:10,16 79:15 82:6 101:6 104:6,9,11 120:15 125:3 131:23 135:22 141:15 149:16 157:7,13,15, 21 162:7 165:14 169:11,21 196:10 217:16 218:1,14 220:7 221:6 257:13, 20 258:4 260:11,19 261:3 286:11	Governor 118:4,5
fees 23:19 27:5 31:19 33:19,20 34:9 84:4 87:8 146:11,13 271:15,23	flip 265:20	fulfilling 157:16	give 11:20 12:20 48:23 50:13 109:22 119:16 128:20 136:20 160:16 168:22 191:19 194:14 219:3 232:6 234:17,21 243:23	grab 48:13
felt 30:9	floats 220:12	full 47:15 48:2 96:14 113:5 116:1 133:4, 20 136:3,8 137:23 141:18 178:21 183:2,6 205:8 220:15 234:3 267:6 280:6	gave 160:20	graders 96:14
FERC 90:21 121:20, 22 122:10 157:7 163:12,13 164:3,11, 20 203:18 279:15 281:23 282:3 288:10	flopping 51:17	fully 63:21 178:3	generally 44:10 223:20 257:1 258:9, 12 261:9 263:8 269:22 272:2,3 274:14 277:23	grandfathering 76:21 103:17 115:14 120:5 178:5 199:21
FERC-APPROVED 156:13 157:8	flow 224:17	function 155:12,13 174:10 199:7 282:5	generating 26:21 125:4 132:1	Granite 7:19
FERC-REGULATED 231:12	flowing 218:14	functions 97:6	generation 26:5 40:14 108:13 131:4 140:8 147:13 156:15 168:4 199:19 215:7 216:7 218:7 219:1, 13 220:17 221:20 222:23 223:12 233:4,14 234:19 235:10,11,15 249:8 259:13,16 261:5 266:17 280:22 281:19,22 286:20	grant 11:6
fewer 77:9 290:16	flows 281:15	Fund 250:15 252:21 253:4 254:15 255:8	generator 35:22 65:8 71:5,13 75:22 79:14 84:7 94:16 130:19 133:2 167:7 181:22 182:23 201:10 203:6 215:7 217:12 219:5 230:16 232:19 260:22 261:10 286:15,21	granular 107:4 185:1
fiction 156:18	flux 91:18	fundamentally 180:14	generators 26:19 27:2 31:18 33:6 37:23 54:6 65:13 66:10,16 79:15 82:6 101:6 104:6,9,11 120:15 125:3 131:23 135:22 141:15 149:16 157:7,13,15, 21 162:7 165:14 169:11,21 196:10 217:16 218:1,14 220:7 221:6 257:13, 20 258:4 260:11,19 261:3 286:11	graphic 135:2
field 100:17	focus 125:23 129:13 130:10 230:9	funded 253:6	generating 26:21 125:4 132:1	grasping 113:18
figure 73:3 128:20 130:15 165:6 189:1 200:2 237:15 243:10 244:3,10 256:8,12 265:19 285:10 290:9	folks 13:16 32:4 82:2 114:4 270:5	funding 253:14 255:4	generation 26:5 40:14 108:13 131:4 140:8 147:13 156:15 168:4 199:19 215:7 216:7 218:7 219:1, 13 220:17 221:20 222:23 223:12 233:4,14 234:19 235:10,11,15 249:8 259:13,16 261:5 266:17 280:22 281:19,22 286:20	
figured 288:10	follow 11:2 27:8 82:5 114:4 270:5	future 30:9 33:16 42:16,21 60:14 61:20 78:7 117:13 136:15,16 142:20 159:5 164:5 179:8 188:3 202:1 218:21 240:11 241:15,18 245:19 246:5	generally 44:10 223:20 257:1 258:9, 12 261:9 263:8 269:22 272:2,3 274:14 277:23	
figures 128:2	follow-up 101:17 164:13 203:10 295:14	future 30:9 33:16 42:16,21 60:14 61:20 78:7 117:13 136:15,16 142:20 159:5 164:5 179:8 188:3 202:1 218:21 240:11 241:15,18 245:19 246:5	generating 26:21 125:4 132:1	
file 48:5 54:18 207:20 209:15 211:1 212:8	footnoted 284:6		generation 26:5 40:14 108:13 131:4 140:8 147:13 156:15 168:4 199:19 215:7 216:7 218:7 219:1, 13 220:17 221:20 222:23 223:12 233:4,14 234:19 235:10,11,15 249:8 259:13,16 261:5 266:17 280:22 281:19,22 286:20	

287:15	hand 95:19 206:11 244:19	highlighting 12:17 301:6	252:13 257:23	inclusive 132:4 295:22
great 15:7 28:20 83:18,22 100:20 140:10 151:11 180:20	handful 106:7	highlights 40:5	identifying 208:14	incoming 193:15
greater 77:5 117:7,13 125:4 127:7,15 132:1 194:18 219:5, 15 244:22 290:14	handle 185:17	highly 32:1 64:17	illustrate 162:5	inconsistent 255:16
grid 120:15,19 121:6, 17 124:6,12 125:9 128:2 131:5,15 132:6 156:17 166:7, 10 186:19 222:14 223:3 248:3 249:14 250:16 253:20,21 254:13 260:21 261:1,18 270:11	hands 22:9	historical 93:7	illustrations 31:4 160:21	incorporate 178:23 293:13
grossed 182:4	happen 61:13 65:1 77:7 80:19 91:11 119:8 136:17 281:10	history 17:4 103:11	illustrative 141:22 163:5	incorporated 89:3 298:7
ground 102:9	happened 69:13 184:14 242:10,23	hodgepodge 257:11	imagine 47:3 152:21 194:2	incorporates 41:4
group 38:14 70:8 74:1 93:20 122:7 133:1 163:12,20 165:4 172:1 182:18, 20 184:5,9,15 189:13,14,17 190:5, 9,14,16,19 195:10 210:18 230:4 265:6 286:14,16	happening 95:1	hold 99:9 204:14 210:10 268:18	imaging 96:13	incorrect 99:7
group's 163:21	happy 122:23 245:5 252:17	holding 252:8	imminently 83:21	increase 78:17 82:22 117:22 128:14,15,23 168:6 182:21 236:18 281:2 288:1,22 289:1 290:8
groups 27:6 286:10	hard 50:17,22 231:21 247:19	honest 34:17	impact 11:14 14:1 26:15 59:8 118:17 127:18 160:21 221:9 241:4 275:4	increased 129:3 131:6 236:22
grow 64:22 136:7	hate 152:10	Honestly 46:22	impacts 49:22 176:19 273:16	increases 108:14 129:8 290:14
growing 101:14 222:13	Hayden 7:22,23 17:19	hope 64:3 300:15	imperative 187:19	increasing 172:12
growth 120:10 252:20	head 13:1 229:16 242:13,20 274:17 275:11	hopes 90:12	impossible 157:9	increasingly 222:22
guarantee 11:18 14:5 64:3,5 94:22,23 95:3 200:7,10	headwinds 220:20	hoping 62:22 186:13	implement 126:17 163:12 172:4,7	incremental 148:21 172:9,11,17 175:8 179:11 222:9
guaranteed 201:4	hear 114:20 143:7	Horne 8:3,4 17:21	implemented 26:9 122:10 128:8	incurred 224:4,5
guess 41:23 42:6 54:15 59:15 68:10 72:12 78:1 113:18 196:5 223:19 240:7 259:6 274:2 296:20	heard 43:2 78:15 80:8,20 81:1,7 82:1, 3,5 84:18 85:15 91:2 92:3 94:4 108:2,7,19 109:13 116:16 117:21 121:19 137:18 143:2,3 175:19 188:1 277:22 301:19	host 72:21 74:11 75:21 76:16 77:4 118:7 193:9 195:10, 11,20	implementing 91:4 141:11 221:10 232:13	independent 229:6
Guidehouse 46:8	hearing 8:8 12:8 15:6 19:2 29:17 113:15 114:7,10 153:15 154:16 159:19 302:13	hosted 261:6	implications 164:4 203:5 273:2	indicating 91:14
guy 150:2,6 271:20	hearings 219:1 248:18	hosting 109:14 188:19	importance 116:21	indication 145:21
guys 239:3	heat 290:13	hosts 56:22 69:22 70:3,4,8 71:8 74:1 76:10,12 195:13	important 114:8 115:18,21 116:10 187:2 202:6,14 215:12 217:4 221:14 222:5 235:19	indiscernible 19:13 27:7 33:6 35:9 37:8, 18 41:10 80:23 81:7 93:10 98:18 151:16 167:21 190:3 194:12 197:9 215:13 244:1 269:15
<hr/> H <hr/>	heater 21:3	hour 99:14 110:12 131:5,14 153:2,4,12 171:8 181:10,18 215:6 219:8,16 220:11 221:20 248:4 249:3 250:7 251:6 261:18 266:18 278:4,17	impose 149:11	individual 20:6 21:19 169:4,10 170:2 217:7 227:23 229:10
half 98:10 192:17 219:15 220:10 234:20 235:5,7	Heavily 20:10	hourly 128:2 185:1	impossible 201:15	individualized 182:12
Hampshire 6:6,13 7:6,10 12:1 15:23 16:3 30:22 60:3 66:19 96:10 98:7 107:21 109:17 135:8,10,14 155:14 156:18 157:23 158:17 164:2 168:3, 6,15 173:16 174:7, 10 186:22 199:23 201:12 207:15 209:8 214:15 220:6 231:11,13,18 245:6, 18 246:10 250:15 251:13,20 252:21,23 269:17,19 281:18 283:21 287:10 289:5	hedge 185:7	hours 20:19 108:3,6 131:10 179:23 181:3 192:10 214:17,21,23 215:17 235:2,3 244:7 246:19,23 249:11 261:17 282:15,16 289:21 290:11,16	impress 55:18 174:9 190:15 195:5	individually 170:22
	hedging 185:10	house 144:4 188:14, 16 271:21,22	improve 121:6 290:17	individuals 187:3 198:10 265:7
	helped 75:12	huge 180:6 199:16 236:7 258:10	incentive 236:23 260:1 261:3	inevitably 275:3
	helpful 12:23 42:2,5 47:12 51:6 75:1 76:1 86:22 194:6 215:18 245:2 296:12 297:12 301:14	hydro 195:7	incentives 129:13 223:1 260:11,15	inform 60:14
	helping 140:12 264:15 282:11 288:16	Hydropower 7:20	incentivize 109:20 260:6 289:7	information 20:9 51:8 68:21 70:22 148:22 241:10 242:8 268:22 294:5
	helps 75:9 130:16 138:17	hypothetical 77:13 134:2	incentivizing 289:10, 23	informed 91:16
	high 20:11 100:12,19 101:2 158:4 177:2 183:12 185:16 230:4 288:5	IBT 185:11	include 14:19 18:11 60:6,7 125:6 144:5 149:14,17 183:3 210:16 227:8	informs 91:6
	high-level 196:12	idea 18:4 89:19,21 119:8 136:17 190:14 193:14 200:9 229:15 255:22 270:6 301:8	included 26:14 34:5 45:16 58:23 59:15, 16,21 70:21 72:6 73:1 86:13 276:18	infrastructure 82:22
	higher 81:20 135:10 183:11 235:9,10	ideal 55:17 116:3	includes 36:23 60:2 76:9 266:1 267:8	initial 18:14 84:3 279:8 283:22
	highlight 91:19 260:14 295:2,11 300:18,19	identified 105:18	including 11:9 30:13 98:17 101:5 104:5 136:1 155:11 158:14 207:14 209:7 281:18	initially 23:20 93:2 102:6 169:12
	highlighted 49:21 103:3 294:17	identify 35:8 95:14 97:12 111:18 160:15 205:3 206:3 225:16 226:4 241:20 242:15	inclusion 216:13	initiated 139:15

inquiry 253:9	223:13 224:10 231:4	154:22 158:19 169:8	144:1 147:21 177:9,	larger 35:23 37:22
inside 100:7 186:3	232:1 236:1 281:10	170:13 172:10	15 180:11 197:11	55:12 81:19 82:2,8
301:9	287:20	175:3,18 177:19	217:2 222:18	93:20 105:3 141:14
insignificant 176:3	investments 109:21	205:17 206:19	234:20,21 238:3	176:5,10 193:9
installation 21:6	223:11 224:6 287:23	208:17,23 209:9,14	246:11 271:1,3,4	233:1
Installer 252:20	288:2	210:5 214:12 216:10	274:3 282:22	largest 262:14
instance 43:17 86:1	investor-owned	218:16 221:4 223:18	Kingston 43:11	lasts 60:23
87:14 108:8,11,12	198:6	224:8,14,22 225:9	92:19 93:23 94:1	late 109:10 285:10
109:9 123:18 141:19	invite 95:10 277:12	227:19 228:12,18	262:5 266:1,11,17	300:7
168:10 180:2 189:19	involve 188:23	229:8,18 230:7	knowing 61:20	launched 97:8
instrumentality	involved 37:3,7 58:8	232:3 236:9 237:2	knowledge 32:15	launching 25:19
96:19	82:18 172:2 213:11,	238:16 251:22	81:4,5 176:16 195:4	Laura 9:10
insufficient 295:11	12 273:19	272:14 273:9 275:14	271:9 273:18 275:19	law 7:15,18 16:17,19,
integrated 16:8	involves 181:17	284:17 291:11	Kommineni 9:8,13	22 17:9 57:22 58:11
intended 240:2	202:17	293:18	10:14	66:7 71:11 136:13,
249:10	IP 27:6	Joe 205:21 206:6	Krakoff 7:16,17	15 139:18 150:8
intent 16:21 20:8	irrational 193:16	208:20 209:3 258:1,	16:18,19 17:16	155:14 156:2 157:5,
93:5,19	Island 135:17	18 259:5 273:6,22	57:17,19,21,22	10 158:11,14,16,17,
intention 60:11,13	ISO 31:20 33:3 44:3	joined 10:21 296:19	58:11,16 59:4,11	18,20 159:1 173:16
190:15	53:18 66:19 67:2,7	joint 8:14,23 9:7 45:9	60:11,18 61:7,11,23	174:10 186:22
interconnect 61:8	124:15 135:2 156:5,	53:8 69:4 72:8 74:8	62:10,15,21 118:19,	187:6,10,14 190:15
195:17 220:23	13,14,20 157:14,16	76:3,18 81:16 88:9,	20 119:5,7 136:11,	201:12 293:3
interconnected	167:6,13 168:2	21 97:3,6,14 98:6	12,19 296:17,18	lawyers 264:10
61:17	181:9 188:22 230:13	113:16 138:11 151:8	Krakoff's 18:10	lay 8:7 18:6
interconnection 90:4	231:15 266:13	152:18 153:23 154:8	Kreis 7:2,3 15:18	laying 19:2
117:2 139:4 195:6,9	issuance 298:9	207:19 213:8 254:4,	297:9,10	layout 18:20
196:6 260:17,19	issue 9:17 10:14,16	18 283:15 295:15	KVA 190:1	layouts 25:4
261:2 286:17	11:5 14:8,13 19:1	296:16 297:14	KW 101:13 117:5	leading 17:12
interconnectors	74:18,21 77:22	Joseph 123:18	133:17 137:22	learn 93:5 194:5,11
62:13	141:20 160:22,23	206:13	141:15 145:20	learned 93:19
interconnects 61:16	162:15 170:6 175:20	judge 154:13	190:1,7 196:18,23	learning 93:18 94:3
interest 21:15 49:21	178:5 204:9 227:11	jump 71:20	286:12	leave 13:4 14:21
186:6 218:4	253:18 254:8 255:13	Jumping 10:9	KWH 163:6	48:19 238:5
interested 77:2	256:14 280:1	June 187:12	<hr/>	leaves 8:16
113:15	293:12,20 294:23	jurisdiction 129:9	<hr/> L <hr/>	Lebanon 109:23
interesting 193:13	302:8	168:16 201:14 279:8	lack 65:10 102:12	146:23 186:13,18
interests 104:6	issue's 187:10	282:1 283:23	108:1 133:19	189:3
122:21 199:7	issued 24:17 58:13	jurisdictional 156:3	Ladwig 6:7,8 12:3,	left 9:8 10:15 19:10
interim 46:8 185:11	63:6 145:17 293:19	157:7 168:17 173:14	11,22 22:21,22 23:6,	legacy 28:14,16
intermittent 249:7	issues 8:8 10:7 11:9,	201:9	10,14,22 24:6,19	29:10 30:21 31:5
internal 185:11	22 12:4,9,13,14	jurisdictions 279:3	25:18 27:11,18	33:11 42:18 54:22
interpret 150:19	14:18 15:18 16:7	justice 106:21 107:3,	28:10,22 29:7 30:18	55:2,6 60:20,22 61:9
interpretations	18:9,11,14 19:6	6 282:22	32:14 33:8,17,22	62:12 68:18 76:22
149:23	27:22 28:6,12 62:22	justification 214:22	34:7,14 35:10 36:7,	77:8 79:4 89:12
interrelated 158:12	74:19 114:17 143:15	230:14 244:6	19 37:9,19 38:2,9,18	116:6 119:14 126:15
interrupting 247:12	158:10 159:6,14	245:13,17 246:19,23	47:9,22 68:2 72:13,	145:22 179:2
interstate 122:4	174:23 225:16 226:4	justify 234:13 254:7	16 73:9 74:14,17	legal 14:13 18:9
interval 126:4,10	248:23 293:8,14,16	justness 117:16	75:3,4 89:22 92:16,	140:20 149:22
142:3 171:7 180:5,	294:8 300:18 301:12	<hr/>	17 95:6 152:10	150:3,23 155:10
11 215:10 230:21	issuing 169:18	<hr/> K <hr/>	153:19,20 268:9,19	156:17 158:5,9
231:1,5 232:9	italicized 103:3	keeping 100:12,19	269:6,7,16,20	159:3,7,8 291:22,23
256:21,23	item 20:13 49:5	101:2 128:12,22	270:13 285:4	293:6,8,22 294:3,7
intervention 175:10	56:12,13	key 125:22 126:23	laid 63:22 73:7	legally 42:3
interview 232:9	items 19:21 71:23	135:21 142:1	landfill 186:15 202:7	legislation 101:18
intricacies 259:7	<hr/>	kicked 9:18 83:21	language 17:5	118:6 188:14
introducing 169:7	<hr/> J <hr/>	kilowatt 20:18 99:14	103:12,22 104:4	158:14
invest 290:5	January 145:18	108:3,5 110:11	158:14	large 56:18 69:17
investigation 83:19	207:19 209:16 211:3	127:8 131:14 137:17	large 56:18 69:17	71:4,13,15 75:21,22
90:3,8	284:13	181:3 192:10	79:15,19 81:4 82:6	166:10 169:11,17,20
investigative 83:15	Jeff 205:20 206:4	214:17,21,23 215:6,	170:3 176:19	179:10,21 181:2
investing 280:22	210:13,14 262:6,16,	17 219:8,16 220:11	179:10,21 181:2	182:18,20 184:15
investment 86:8	20 263:5 265:5,17	244:7 246:19,23	188:7 189:11 190:4,	7,14,18 194:8 197:3
108:16 109:7 129:14	266:8,14,21 267:3,	282:15,16 286:4	217:16,23 218:18,19	219:4 220:7 221:1
	19 273:7 274:4	290:11,16	222:13 239:19	240:2,4,20 254:5
	276:10,16,21 277:3	kilowatts 190:12	286:16	
	JEFFREY 206:12	266:19		
	Jessica 6:12 53:12	kind 26:18 51:5		
	56:5 57:11 73:8	54:22 83:4 93:14		
		114:14 121:8 143:18		

73:14 77:4,5 101:13
105:4 117:6,7,10,13
124:12,14,16 125:5,
22 126:3,10,17
127:7,8,16,22 132:1,
23 140:9 145:20
184:8 186:15 189:4,
16 190:11 193:18,19
194:3,17 202:15
219:5,15 240:21
256:22
megawatts 26:6
37:20 56:20 57:2
69:18 70:2,13 73:20
74:1,8 75:15 117:8
118:7 177:8 188:20
282:3
Melissa 8:3
members 6:1 97:2,8
98:9 186:7
memory 21:12 44:2
mention 56:6 71:17
73:23 112:15 117:20
121:19 145:1 203:19
mentioned 30:4
31:14 34:2 35:23
53:16 54:17 56:14
90:1 112:14 118:12
163:3 165:13 175:4
203:21
merchant 195:1
196:1,9
mercifully 154:11
merited 163:20
met 64:1
meter 20:19 21:11
55:5 61:8 70:7 81:13
165:13 167:8 192:6
272:6 286:23
metered 53:16 54:19
124:7 157:12
174:14,21 177:4
225:2,7 233:12,15
237:6,12,20,21
238:8 271:11 274:20
275:6,9
meterer 196:15
197:15
meterers 61:15
197:21
metering 11:12 13:22
20:16 21:10 26:1,4,
22 29:3,5 31:15,16
32:1,17 33:4,5 35:13
36:13 37:14 38:4
39:11 42:20 51:9
54:1 56:1,3 60:3
62:2 63:7 64:17,21
65:11 74:9 82:14
84:9 86:15 93:15
94:21 100:21 101:5,
11,12,20,22 102:18
103:13,21 104:2
106:19,22,23 108:13
118:6 125:2 126:4,
10 129:2 131:22
137:16,19 139:10
143:22 144:5 145:13
147:16 148:15 149:9
151:17 155:12 156:4
157:4,5,18 167:10
168:17 172:12
173:21 174:5,18

175:21,23 176:17
177:3 181:22 186:3,
23 191:21 192:5,6
193:2 194:23 195:8,
10 200:21 201:3,10,
20 216:14 217:7
225:12,23 226:3,10,
15,19,23 227:7
228:4 235:7 240:4
241:6 244:11,14
254:10 269:11,14
270:3,7,8,9,12 272:3
281:19 284:19
meters 65:20 230:21
231:1,5 232:9
256:21,23 272:5
method 174:3 228:22
230:19 231:6,7,9,16
232:13 234:10
279:13
methodology 221:23
222:6 231:20 235:9
236:13 237:4 272:23
273:3,17 289:4
microphone 19:15
50:16,20 211:23
middle 102:8
Mike 6:16 48:14
212:7,11,18
million 167:6 263:4
mind 101:2 128:22
197:17 219:8 270:22
mini 97:8
minimal 26:16
232:17
minimize 29:23
107:7 141:12 151:18
179:3 198:22 261:17
minimizing 104:8,16
minor 234:5,12
minutes 19:16 53:14
122:2 160:16 205:9
268:16
mirror 281:21
miscalculations
216:21
miscellaneous 233:9
misconstrue 222:6
misleading 280:10
misplaced 99:12
missing 11:23 255:2
misspeak 54:2
misstate 213:15
mistake 162:13
mistaken 49:18
mistakes 107:22
mitigate 138:17
179:1 183:10
mitigated 200:19
mixing 190:21
model 129:21 263:6
267:12
moderate 223:1,7
260:23 261:10,15
modification 45:19

modifications
231:17,23 236:8
modifies 233:3
modify 121:16
moment 8:13 48:23
50:13 66:2 69:14
90:10 130:4 152:13
154:23 168:22
186:21 190:5 194:15
204:20 232:7 259:20
263:19 291:17
294:10 301:23
momentarily 154:2
monetary 125:5
132:5,11
money 193:3,5,8
198:3,8 200:5
232:15 253:7 289:5
monitor 270:1
monopoly 155:12
174:4,9
month 130:10 171:9
181:9 192:15
221:20,21 278:5
287:19
monthly 30:4 46:19
50:1,8 51:23 131:5
181:7 184:18,21
192:13 266:18
271:1,4,10,15,22,23
278:9 287:11
months 21:6 184:12
186:14 192:19 198:4
moot 293:12
morning 6:7,11,16,
20 7:2,7,11,12,16,22
8:3 13:12 39:3 69:10
85:17 109:10
Morrison 20:15
motion 11:5,7 16:20
move 12:9 13:7
17:17 19:5 22:1
33:18 50:15 53:8
92:9,14 107:15
111:8 115:11 116:13
131:16 141:1 144:1
145:1 153:23 159:6
173:18 174:15
177:21 181:16 190:4
198:10 203:11
204:21 214:7,8
238:19 243:13 247:2
256:8,12,15 270:16
272:12 277:11
279:19 285:3,6
291:14 294:14
moved 65:13,21
66:11 160:4 174:2
moves 146:15
moving 9:3 40:3,10,
18 87:14 95:13
137:11 144:16
155:17 159:5 160:6
171:23 174:21
178:17 179:3 182:7
199:20 245:17
291:8,9 292:2
294:22
multiple 72:19
249:11 255:18
269:18 299:21

multiplied 131:9
multiplying 171:10
municipal 56:21
69:22 70:3,4,8 71:8
72:21 74:1,11 75:21
76:9,12,16 77:4
96:22 97:1 118:7
188:19 193:9
195:11,13,20
municipalities 98:7,
17
Mutual 257:6

N

nameplate 267:1
names 22:23
narrative 267:17
narrow 62:22
narrower 249:14
native 49:19 51:18
184:10 189:13,16
natural 190:13
nature 87:17 136:21
161:11
necessarily 25:19
57:9 93:9 96:20
141:7 250:2 293:8
necessity 238:14
needed 27:8 79:8
83:4 94:20 140:14
179:23
needing 202:15
negative 104:9,17
124:11 275:4
negotiations 192:1
neighbor 271:21
neighboring 227:12
neighbors 271:20
NEM 30:12 32:13
35:18 36:3 38:4,6
77:2,15 126:13
162:7 166:10 179:15
181:2
net 11:12 13:21 26:1,
4,22 29:3,5 31:15,16
32:1,17 33:3,5 35:12
36:13 37:13 39:11
42:20 51:9 53:16,23
54:19 55:5 56:1,3
60:3 61:7,15 62:1
63:7 64:17,21 65:11,
20 70:7 74:9 82:14
86:15 93:14,15
94:21 100:21 101:5,
11,12,20,22 102:17
103:12,21 104:2,8,
16 106:19,22,23
108:13 118:6 124:6
125:2 129:2 131:22
133:18 137:16,19
139:10 143:22 144:5
145:13 147:16
148:15 149:9 151:17
155:11 156:3 157:4,
5,12,18 165:13
167:8,10 168:16
172:12 173:21
174:4,17,21 175:21,

23 176:17 177:3,4
181:22 183:18,19,21
186:3,22 191:21
192:5,6 193:2
194:22 195:8,10
196:14 197:15,21
198:21 200:21
201:3,10,20 216:14
217:6 225:2,7,12,22
226:3,10,15,19,23
227:7 228:4 233:12,
14 235:7,20 237:6,
11,20 238:8 240:3
241:5 244:11,13
254:9 269:11,14
270:2,7,8,9,12
271:11 272:5 274:19
275:6,9 281:5,19
284:19
netting 272:7
network 44:12,23
221:7
network's 128:4
networks 21:14
newly 55:4 56:3
125:3 131:22 228:8
nexus 255:2
Nick 7:17 16:18
58:11,16 59:4,11
60:11,18 61:7,11,23
62:10 118:20 119:7
136:11
Nixon 22:4,10 23:2,9
24:4 27:16 32:23
33:13 36:1 37:16
38:1,8 41:5,13,22
42:11 43:10,15,22
45:22 46:3,4,10,22
50:6,10 52:2 53:15
54:4 55:20 56:4 57:3
64:2 65:5 66:5,13
70:15,18 71:11
75:18,20 76:16,17
77:23 79:23 81:12
84:16 86:5 87:1
91:22 92:5 93:6
94:14
node 66:19
nominal 232:19
non-nem 118:17
119:2 151:20
non-net-metered
26:17 258:13
non-participants
236:5,6
non-utilities 296:22
non-utility 296:20
noon 109:4 140:13,
17 249:20
note 10:18 11:7
18:15 23:23 40:4
91:23 121:21 133:11
139:7 291:22 292:3,
20
notebook 285:22
noted 113:23 240:16
notes 49:18 262:3
301:7
notice 11:10 13:19
104:21 164:14 279:7

noticed 16:11 214:4 227:1 293:17	offered 198:4	optionally 16:10	pairing 254:19 261:14 270:8	Partnering 252:22
noting 175:21	offering 170:2 171:19	options 199:6,18	panel 10:17 39:5 46:3 51:13 53:5 56:14 57:14 92:2 143:4 154:9 175:20 204:21 205:8 211:21 213:8,11 238:17 242:22 246:18 261:11,20 268:2,14 272:13 279:19 282:19	parts 35:3 93:7 182:14 295:2
notion 289:16	offhand 66:9	order 15:1 24:9,12, 14,17 25:3,5 56:20 58:4 59:1,9,16,20 60:21 61:3 63:6,8 66:1 69:19 74:19 85:3 90:21 91:17 94:21 104:21 110:11,15 121:20 122:10 138:8 139:21 142:21 145:17 147:8 157:18 163:13 164:3,11,20 178:18 200:11 203:18 234:20 249:13 284:8,12 289:16,17 295:1 302:8	panels 113:3,4 190:17	party 61:7 76:19 102:5 114:9 205:4 227:8 283:15 293:7 300:23
November 46:7	Office 6:23 15:16	ordering 151:14	paper 48:20	pass 136:16 141:19 184:21
NSTAR 279:16	offset 87:10 121:17 133:8 156:16,20 167:9 185:6 187:15 188:11,21 192:7 232:23 266:5 281:3	orientation 109:3 110:6	papers 114:2	passage 156:21
number 24:10,12,14 40:5 48:9 49:3 55:9, 12 66:9 89:16 99:17 105:8 121:11 122:11 181:3,6 183:23 199:16 217:23 221:1 222:13 235:20 239:8,19 242:11 263:14 297:20	offsetting 181:19 274:7	oriented 197:4	paperwork 86:8	passages 155:2,7 291:19 292:12
numbers 10:3 47:4 239:13 292:17 300:2,16	one-hour 109:2	original 63:15 101:10 165:10 192:6 216:22	paradigm 174:3	passed 172:11,18 175:9 203:5 225:7 265:20
numerous 188:9 210:22 289:14	onerous 230:5	outcome 88:11 103:20	parallel 121:21 164:11 198:1	past 29:10,11 198:7 200:19
nutshell 258:19	ongoing 148:8	output 21:11 131:9 141:20 171:8 176:18 185:13 221:19 223:1,8 237:23 248:3,9 249:11,12, 13 260:12,23 261:6, 10,16,17 266:5,17	pardon 72:1	Pat 255:11
O	open 44:23 73:15 90:2 112:3 118:6	outlined 87:9	parent 124:2,11	path 111:23 288:19 298:16
object 68:4 149:21 161:3 264:17 294:2	opens 105:7	output 21:11 131:9 141:20 171:8 176:18 185:13 221:19 223:1,8 237:23 248:3,9 249:11,12, 13 260:12,23 261:6, 10,16,17 266:5,17	parsing 217:7	Patnaude 298:23
objection 112:1 118:19 119:5 136:11 150:15,23 161:11,13 172:21	operate 94:3 97:11 171:15 230:2 266:2	outstanding 213:1	part 29:11 32:20 36:12 42:17 65:2 76:8 83:12,15 85:5 86:13 88:15 90:5 91:8 92:2 102:6 125:1 126:13 127:19 131:21 136:10 139:10 152:21 160:16 178:17 195:13 202:12 209:16 211:2,21 212:9,12 228:21 233:13 235:1 259:12 265:6 271:14 283:2 301:19,20	Patrick 6:21 210:8, 19,23 211:6,10,14 213:6 276:2,17,23
objections 14:16 292:6	operates 97:2 175:14	over-market 185:14	partially 187:10	Paul 6:8
objective 198:21	operating 20:16 21:5 96:22 98:18 110:8 156:14 207:13 209:7 222:3,19 223:22	overarching 106:10 107:18 111:4,12	participants 50:8 51:23 74:9 250:18	pause 53:3 95:12 99:10 294:11
objectives 60:3	operation 198:4 224:4	overlap 102:5	participate 37:2 121:23 146:19 218:8 241:5 282:4	pay 83:5,6,8 84:8 128:6 142:13 169:17 187:7 193:7 202:16 236:22 251:11 290:16
obligation 99:15 120:18 121:18 133:9 187:16 192:3,12,20 193:3,4,7 202:11 232:20 233:2,7,20 235:2,3,14,16,18,21 237:5 258:21 274:7	operations 208:22 230:6	overproduction 140:13	participated 102:1	paying 196:15
obligations 138:16 156:23 157:17 218:10	operator 175:14	owner 173:11	participates 240:5	pays 84:21
observation 55:10 112:2,10 135:11 274:5	operators 173:12	owner/operator 175:13	participating 10:19 84:14 94:18 157:7, 18 270:12	peak 46:19 49:22 50:2,3 108:10 125:4 131:6,10,23 171:9 181:10 222:4 250:8, 17 251:4 253:22 266:18 278:9,18,23 279:11 282:9,12 283:5,6 287:11,23 288:10,16 289:15, 17,18 290:1,18
observe 173:10	opinion 65:2,12 77:22 103:4 228:10	owning 223:22	participation 156:3 158:1 168:16 227:10	peak's 289:20
observed 106:19 135:13 171:5	opinions 159:13 258:14,16 259:4	P	parties 8:23 11:8 18:6,13,16 27:23 34:11 53:8 57:13,16 58:8 69:4 72:5 73:16,21 74:8 76:20 89:12 102:4,11 113:16 122:6 135:12 140:5 151:8 152:18 153:23 159:12 163:18 174:17 204:23 215:3 227:2, 6 281:20 291:14 293:2,3 295:5,15,21 296:16,20,22 297:5, 14 299:14 300:20 301:10	pencil 300:3
obtained 298:10	opportunities 164:18	p.m. 153:14 249:21 302:13	participating 10:19 84:14 94:18 157:7, 18 270:12	penetration 81:14
obvious 300:11	opportunity 14:18 21:22 78:17 79:11 105:20 107:3,5 109:17 114:7,9,10 142:2 148:21 150:14 159:13 161:17 218:3 240:10 260:23 291:15 300:21	pager 21:14	participated 102:1	Pentti 19:8
OCA 147:10 214:15 297:10	opportunity 14:18 21:22 78:17 79:11 105:20 107:3,5 109:17 114:7,9,10 142:2 148:21 150:14 159:13 161:17 218:3 240:10 260:23 291:15 300:21	pages 127:9 129:22, 23 152:22 153:7 155:4,5 166:8 227:22 292:15,18 295:10,20 296:2,4,5, 9,11	participates 240:5	Pentz 205:20 206:4, 5,12 210:9,13,14,22 211:5,9,13,17 213:13,17 262:2,4,6, 16,20 263:5,12,23 264:10,18 265:5,10, 17 266:3,8,14,21 267:3,11,19 272:18 273:7,10 274:1,3,4 275:22 276:4,7,10, 16,21 277:3
OCA's 245:22	oppose 255:22	pagin 21:14	parties' 8:15 9:7 30:20 33:20 34:1 36:21 72:8 81:16 88:9,21 246:12	people 30:2 55:16 87:20 144:12 288:12 289:19
occasions 210:22	opposed 16:14 173:8 226:18	paid 82:8 85:21 86:2, 3 133:7 179:23 181:23 219:12 224:21 232:23	participating 10:19 84:14 94:18 157:7, 18 270:12	percent 35:20,21,22 46:20,21 50:2,4,5,9 52:1,16,17 66:2 98:11,12 110:2,11 124:4 129:13 135:9, 18 136:8 167:9 233:16 234:20
occurs 67:11 278:17	opposite 40:1 223:6, 17	pair 226:14	participating 10:19 84:14 94:18 157:7, 18 270:12	
October 300:5,6	opt-in 144:13 178:20	paired 249:8 251:17	participating 10:19 84:14 94:18 157:7, 18 270:12	
odd 231:11	opt-out 98:19		participating 10:19 84:14 94:18 157:7, 18 270:12	
off-takers 185:5 188:10	optimal 221:16		participating 10:19 84:14 94:18 157:7, 18 270:12	
offer 112:10 143:10 150:3 158:15 174:18 199:14 236:23 295:6,7,9 296:4,11, 23 297:15,18	optimize 109:1		participating 10:19 84:14 94:18 157:7, 18 270:12	
	optimizing 129:14		participating 10:19 84:14 94:18 157:7, 18 270:12	
	option 16:11 27:2 174:12 179:20 186:21 188:4 237:21 238:6		participating 10:19 84:14 94:18 157:7, 18 270:12	
	optional 16:8		participating 10:19 84:14 94:18 157:7, 18 270:12	

- 235:5,7 237:23
238:4,7 244:22
245:19 267:1 288:22
- percentage** 166:23
228:6
- perfect** 19:19 54:14
264:1
- performance** 46:19
50:2,3 142:9,13
- performs** 94:8
- period** 11:19 14:6
28:14,16 29:10
30:21 31:5 33:11
42:18 54:22 55:2,6,
9,13 56:7 60:20,23
61:9,18 62:12 64:4
68:18 76:22 77:8
78:5 79:5 89:12
116:6 119:14 126:15
130:7 136:4 145:22
184:1 223:8 249:13,
14
- periodic** 147:22
149:12
- periodically** 104:1
149:8
- periods** 40:15 93:11
131:13 288:4 290:18
- permission** 47:6
243:17 264:4 285:23
- permitted** 16:10
- Perruccio** 22:5,11
23:4 24:5,16 25:1
27:17 58:7,10,15,19
59:3,10,18 60:4,16
61:1,2,6,10,19 62:6,
14 63:10,18 64:11
70:5,23 84:1 88:13
89:9
- person** 9:21 91:23
96:20 263:8
- personal** 10:11
- personally** 191:10,12
- perspective** 118:8
158:16 254:23
266:13 275:13
- pertain** 286:20
- pertaining** 216:13
- petition** 37:2 45:10
227:9
- Phase** 46:17,18 50:1
- phased-in** 151:15
- phrase** 257:10
- physical** 185:10
272:4
- pick** 251:6 258:21
269:3
- picking** 50:17 233:1
- picture** 262:12
- piece** 94:16 222:2
- pieces** 87:22
- pile** 114:4
- pilot** 20:15 46:1
80:19 92:20,23 93:5,
18 94:2,18 139:12
143:17 223:22
289:13
- pilots** 92:22
- place** 26:19 32:3 37:4
38:5,7 78:5 80:18
82:7 84:20 87:16
130:13 148:17 156:6
190:13 191:16
230:22 232:6 294:4
- places** 35:5 79:7
- plan** 89:15 112:23
113:3,6 114:11
127:1 154:8 268:13,
20
- planning** 121:13
208:21 299:4
- platform** 173:13
175:13
- play** 199:3
- played** 227:12
- pleasure** 216:23
- plenty** 288:6 290:19
299:17
- point** 8:21 18:2,10
21:13 51:3,7 52:20
54:21 66:1,4 75:23
76:1 78:21 80:1
86:20 105:2 112:13
113:20 115:2 119:9
120:6 125:23 130:12
132:21 135:21
136:10 138:6 140:2
143:22 161:3 178:11
201:21 223:3,19
245:20 254:17
281:16 282:22
286:17 288:8
- pointed** 106:18
193:22 194:19 240:1
- pointing** 249:7 254:2
- points** 114:8 129:7
219:4
- policies** 255:19
- policy** 135:4 155:14
158:11,15,17,19,20
186:8 227:16 251:18
254:21 255:16
281:17
- popularity** 64:23
- population** 98:11,12
- portfolio** 26:13 132:3
- portion** 38:17 86:9
159:10 164:22
202:19 233:5 234:5,
23 281:14
- portions** 145:9
- posited** 198:20
- position** 23:1 28:12,
15 33:23 36:14 37:3
42:23 43:5 62:4
68:18 74:7 79:4,21
81:16 85:17 92:21
111:14 114:3,6
115:7 132:10 134:13
142:6 210:10,12
212:4 215:15 240:15
258:10,16 301:11,
13,15
- positioning** 76:20,21
- positions** 15:20 18:9
25:21 51:11
- possibility** 104:14
118:10 128:13
135:14 146:5
- possibly** 30:12
128:13 129:16
230:20
- post-hearing** 11:6
12:13 15:1 114:5
293:14,16
- potential** 117:11
120:10 127:17
142:20 160:21
172:2,14 174:18
176:18 185:5 215:23
241:3,9
- potentially** 40:13
104:17 126:12
130:17 140:10 142:8
145:20 164:3 168:7
174:20 178:20 188:4
215:16 227:3
- power** 7:9,21,23 16:2
17:17 31:18 81:2,8,9
96:10 97:6,7,9 98:16
124:12 156:4,12
157:13 166:11
174:13 183:5
186:18,19 187:5,7,
20,21 188:11,17,20
192:16,18 196:2
201:7 222:14 223:3
248:8,11 282:6,13
287:22
- Powerclear** 87:16
- powers** 97:3,15 98:6
282:13
- practical** 232:12
- practice** 191:15
274:15
- pragmatic** 227:20
- pre-file** 9:7 22:16,19
112:16
- pre-filed** 9:11 97:19
112:18 216:19
- pre-responses**
123:10
- precise** 215:10
- precisely** 79:2
188:18
- predict** 218:21
241:15,17 246:5
- preempted** 157:9
- prefer** 238:11 295:16
- preferable** 249:18
250:3
- preference** 263:20
- preferred** 232:13
234:10 236:12 237:4
272:23 273:17
- prefers** 296:18
- prehearing** 72:1
- prejudicing** 237:19
- preliminary** 12:14
- premature** 268:12
- premium** 38:16
- prepare** 23:7
- prepared** 15:19 46:8
208:2 209:20 211:8
212:13 264:12,14
265:3
- present** 8:23 9:5
18:17 268:14 295:5
- presentation** 135:2
- presented** 45:17
146:13 215:4
- presenting** 154:8
202:3
- presents** 114:10
164:4
- preserved** 297:15
- presume** 42:12
- pretty** 55:3 143:17
171:5 196:19 219:18
255:17
- previous** 19:11 64:16
65:6 67:22 275:16
- previously** 67:17
68:15 139:18 164:7
218:23 246:5 251:9
- price** 20:2,5,11,12,
17,23 21:2,8 81:1
108:2 109:19,20
122:1 126:22 127:2
142:7 174:16 185:13
191:6 219:14,19,21
220:11,12,14,15
222:6 279:2,4,13
281:20,21 283:9
288:11 289:19
- prices** 20:18 184:20
- pricing** 183:13
215:10 219:23
223:15 283:3
- primarily** 263:7
- primary** 230:14
- prime** 173:23
- principle** 226:18
- principles** 227:17
- prior** 11:11 13:20
26:13 83:19 106:20
132:4 136:4 138:22
225:17 226:5 297:6
- priority** 138:5
- pro** 245:14 293:4,7
- problem** 77:20
135:13 176:3 177:8
- procedural** 8:8 19:1
295:1 301:3 302:8
- procedure** 11:2
105:15
- procedures** 156:14
- proceed** 49:14 51:15
136:21 154:18
- proceeding** 18:3,23
23:12 24:2 28:7
29:4,12 37:5,15
38:7,12 83:16 105:5
139:22 145:7 164:15
177:10 178:18
227:10 246:14
247:22 293:6 302:7
- proceedings** 229:5
- proceeds** 156:10
- process** 8:7 20:22
32:21 36:23 58:6,9
89:4 107:7 121:21
170:20 179:12
208:13 231:12
234:15 237:18
298:17
- processes** 25:7
272:7 273:19
- processing** 87:11
171:4
- processor** 21:12
- procure** 198:15
- procurement** 184:20
199:6 210:16,17
- procuring** 97:7
- produce** 109:3
135:22 138:13
140:10 167:21
186:15 192:8,19
193:1 197:1,6
250:23
- produced** 110:10
131:3 133:22 138:2
142:14 192:16 215:7
- producer** 193:19
194:4
- producers** 194:8
- produces** 109:9
- producing** 120:18
- product** 135:22
216:8
- production** 108:18
109:2,11 128:2
130:22 131:11 249:3
260:6 281:8
- products** 176:10
218:19
- profile** 109:12 233:11
259:9
- profound** 231:3
- program** 21:1
219:12,14 224:9
250:19 251:22
252:2,6,13,15
254:11,22
- programming** 171:12
- programs** 92:23
98:18 219:2 220:17
259:23 289:12
- prohibit** 156:15
157:12,20 167:13
- project** 43:12 45:17
92:20 93:3,5,6,18
94:1 110:13 176:11
184:8 186:15 200:23
201:16 202:8,20
213:12 219:5,9
220:3 223:23 262:5,
8,13,19 263:7
265:13 266:2,12
278:11,12 279:23
280:6,7,8,12,18
- project's** 266:17
- projected** 45:10
- projection** 142:14
- projections** 94:7

projects 55:4 56:15, 19,21,23 57:2 64:10 69:18,21,23 70:2 73:14,19,23 94:13 105:4 108:9,23 110:1 115:20 116:20 117:5,13,14,18 118:13,14 120:11 126:2,6,13 127:22 128:5,14,23 137:17 140:8,10 141:14 169:17 173:8 176:5, 10 179:21 184:4 186:12 195:7 198:18 219:13,14,23 220:16,23 221:1 239:8,19,22 240:5,9, 13,19,23 241:1,4,9, 15 242:5 256:22	prudent 243:12 299:4 PSNH 272:6 PT 186:20 public 6:1,2,13 207:14 209:8 284:6, 12 publish 14:23 15:5 124:2 published 171:11 252:10 257:12 Puc 88:11 90:14 102:7 157:12 283:21 pull 71:11 pumps 290:13 purchase 85:2,9 156:19 188:22 purchased 182:3 purpose 106:10 147:7 173:20,23 250:15 253:18 257:20 purposes 60:2 96:11 124:3 147:5 214:19 270:9 push 142:19 pushing 194:10 put 10:21 35:13 51:12 67:16,22 74:21 80:17 82:7 84:20 85:3 99:18 101:21 103:18 104:20 121:11 159:18 185:17 193:12 222:14 223:2 227:3 230:8 234:9 273:15 293:11 300:1,4 puts 184:17 189:14 putting 51:13 87:16	159:17 161:4,13,15, 17,20,21,23 162:5 164:23 166:17 172:10 175:18 180:16 195:9 196:12 202:21 207:3 213:23 214:13,20 225:10,19 230:10 232:8 240:18 242:23 244:16 256:15 257:4,7 259:1,21 260:10 264:10,20,22 269:21 271:14 274:1,16 275:15,16 276:3 287:5 294:2 295:18 296:16 298:3,12,22	question's 172:22 questioner 161:16 questioning 22:22 23:6,10,14 24:19 27:11,18 28:10,22 29:7 30:18 32:14 33:8,17,22 34:7,14 35:10 36:7,19 37:9, 19 38:2,9,18 40:9 41:1 42:14 43:18 44:20 45:14,16 46:6 51:4,8 57:23 63:13, 20 64:6 65:17 66:14 67:1,6,12 68:3 75:9 88:3,5 96:7 100:23 102:20 105:16 106:4 107:13 111:3 118:11 124:17 125:14 132:8 137:3,13 140:19 142:16 147:6 148:2, 19 185:22 204:12 238:23 240:17 241:7 242:2 243:3 249:18 250:12 251:15 254:19 256:11 257:18 258:23 260:4,13 261:8 268:1 269:16,20 270:14 277:21 280:1 282:20 questions 9:12 10:4 16:6 21:19 22:1 24:8 28:6 39:5 40:20 43:9,11 45:21 47:19 53:6 57:13,16 59:13 62:16,18 64:16 67:15,22 68:6 69:2, 3,5,7 75:7 87:4 88:7 92:14,19 94:6 104:23 105:3,9,13, 20 111:12 121:20 149:21 150:11 151:9 152:4,8,19,20,23 153:8,11 168:13 175:2 177:22 191:3 203:21 204:17 230:9 239:1 246:17 247:2 262:2,7 268:2,10 270:16,19 272:15 276:14 277:6 283:13 285:7 293:19 queue 117:2 127:23 195:21 196:6 218:18 220:20 239:8 240:1 242:6 quick 24:8 48:13 89:23 149:3 168:15 261:23 268:5 quicker 123:3 quickly 13:11 115:11	159:22 222:15 quo 28:18 29:1,15 30:17 80:3 108:5 110:23 117:15 118:15 119:21 129:1 145:14,19 148:16 216:4 217:9 220:5 240:6 244:14 245:14,17 246:14 quote 40:4 147:14 149:7,14 155:11,13 156:2,6,11 157:1,12 169:14 228:21 253:21,23 279:12 quoted 279:9 283:18, 20 quotes 155:21 quoting 39:12 129:8 284:1,5,8	<hr/> R <hr/> raise 22:8 66:4 68:12 95:19 206:11 236:18 280:21 raised 18:14 28:13 284:20 ran 192:6 range 219:19 220:10 rank 200:2 rapid 108:22 117:21 rapidly 129:16 rate 11:18 14:5 26:4, 15 27:3 33:3 41:4 44:4,13 50:12 52:15 59:7,8 65:21 66:11 71:15 74:10 78:4,6,8 84:15 85:1,8,12 86:16,20 87:4 115:19 116:2 119:2, 14 126:11,16,21 128:4 129:21 130:11 133:3,4,5,21 136:4,9 137:23 138:1 141:18 143:19 144:1,3 146:3 164:15 170:16 171:11 173:9 181:2, 22 182:8,22 183:2,7 184:9,13 186:3,4 189:1,2,11 191:4 192:4 194:23 196:22 198:5 203:2 204:8 217:5 219:7,9 220:7 227:16 228:9,13,14, 20 229:2,7,10 240:11,13 271:16 278:8,19 280:21 281:2 286:18 290:18 ratepayer 77:2 82:10 197:15 253:7 287:10 ratepayers 11:12 13:22 14:9 78:2 104:7 117:19 128:9 130:17 175:9 193:6 197:21 280:8,13 289:5 ratepayers' 77:20 rates 26:8,14 28:3 30:13 32:8 35:11,14, 17 36:4,13 38:16 39:12 41:19 42:2,4, 20 43:3 44:22 45:1	54:19 60:14 61:14 65:10,14 77:20 78:16 79:14 80:21 81:17 116:8 130:9 131:7 142:8 143:5 146:16 147:2 148:9 157:8 181:12 184:18 196:14 203:7 212:6 216:1 217:10 220:9 224:19,21 228:5,6 229:5,12,14 251:13 279:16 286:13 rating 143:11 ratio 235:12,23 rational 65:1 rationale 42:17 127:6 re-consume 192:17 reaction 280:9 read 27:12 90:23 113:2 115:2 153:3 155:2 157:1 readily 133:8 257:16 reading 155:21 250:22 253:20 297:21 reads 98:5 ready 22:14 95:23 203:14 206:16 277:16 real 48:13 81:2 261:22 real-time 20:7 182:9 298:20 realistic 51:10 reality 80:8 280:16 realization 192:2 realize 235:19 263:3 realm 129:18 158:13 168:11 reason 26:21 43:4 52:8,12 65:1 81:11 108:9 221:1 255:2 272:2 reasonable 15:19 28:3 44:8 45:5 64:12 78:9 119:3,14,22 129:2 146:15 161:7 170:15 199:2,13 215:8 217:6,10,14 224:6 228:16 229:7, 14 244:15 246:15 251:1 reasonableness 117:16 reasoning 79:17 111:16 137:15 139:4 144:22 reasons 10:11 29:9 79:3 218:22 238:11 rebuttal 8:23 10:19 139:8 154:8 155:3 165:11 204:21 206:17 207:20 210:6 211:2 212:1 214:10 216:19 238:21 269:5 272:16 276:5 282:19 291:19 292:12,13,18 294:16
--	---	---	--	--	---	--

Q**Q3** 189:22**qualification** 61:12**qualified** 206:21**qualify** 74:2 167:19**qualifying** 195:10**quantity** 240:23
241:3 301:12**quarter** 79:20**quarterly** 169:14
170:14 180:3**question** 10:9,23

12:18 17:1,2,12

35:11 41:16 42:1

49:23 51:21,22

53:13 54:15 65:7

66:3 68:8,11,14

72:12 73:15 78:10,
20 79:12 90:17

105:17 106:16

107:15 115:2 116:23

118:22 119:10

120:14 124:22,23

125:10,20 128:22

131:3,20 138:10

144:15 147:7 155:1

REC 138:17 210:16 281:7	reconciliations 132:4	reflected 130:12 139:23	remote 233:6	requiring 156:18
recall 44:4,6,11,21 45:3,7,16 46:15,17, 23 47:4 60:10 66:8 163:14 192:1 285:12	reconciling 34:9	refraining 157:15	remotely 250:19	research 207:13
receive 54:7 66:16 181:7 218:3 221:6 284:19	record 10:5 11:2 22:3 48:11 92:10,13 95:15 106:7,9 114:14 115:8 120:6, 10 122:12 123:5,13, 17 127:11 134:12 138:20 146:18,21 153:15,18 158:22 159:10 191:23 205:13,16 213:19 214:3 216:18 239:9 255:18 268:23 269:3 277:15 291:10 292:2,20,21 293:11 294:6,15	reframe 264:19	removal 132:3 162:16	reserve 297:3,11
received 130:8 167:6 266:6	regard 85:16,23 116:8 258:6 281:18	refresh 44:1 51:21	remove 159:9 162:20 291:13	reside 71:8
receives 236:15 279:17	region 231:13	refreshed 262:10 263:13	removed 291:21	residential 11:15 14:1,10 82:10,19 83:2,5 84:3 138:13 144:4 176:13 190:17
receiving 32:17 196:15	regional 44:22 128:4 221:7 222:3 250:8 251:4,12 265:15 267:15 276:20	regard 85:16,23 116:8 258:6 281:18	renew 208:13	residual 165:17 166:1,20 233:6,13, 21 234:6 235:4 236:16 257:9,12 259:8,12,14 274:22 275:1
recent 44:16 65:10 73:12 182:17	register 218:1 237:22	region 231:13	renewable 30:21 93:12 135:3,18 186:10 198:11 199:15,19 218:7	resiliency 199:12
recently 46:12,23 55:10 65:22 198:6 217:11 220:9	registered 167:7 168:11 237:23	regional 44:22 128:4 221:7 222:3 250:8 251:4,12 265:15 267:15 276:20	renewal 26:12	resilient 198:13
recess 48:12 92:11 153:16 205:14 269:1	registering 157:15 167:13	register 218:1 237:22	rent 200:7,10	resolve 10:13 66:12 105:15 141:9
recognition 108:3 176:10	registration 168:2	registered 167:7 168:11 237:23	repeal 201:20	resolved 28:6
recognize 80:15,16 127:21 215:12 221:15 238:10 279:3	regular 149:1 271:19	registering 157:15 167:13	repeat 13:10,15 74:4 83:2 225:19 288:17 292:9	resolves 27:22
recognizes 290:10	regulated 224:2	registrat 168:2	repeating 292:16	resource 105:6 226:17 248:6 249:8, 10 261:15 271:3 280:6
recognizing 104:13 116:11	regulating 173:11	regular 149:1 271:19	rephrase 81:21 118:21 259:1 264:22	resources 8:12 109:16 121:23 128:15 129:4 171:19 198:17 218:2 222:13,16 223:5 234:13 244:12 248:3 251:3 254:21
recollection 189:21 263:12 267:20	regulation 157:6 173:18	regulator 100:16 224:3,7	replacement 84:10 231:7	respect 58:1 119:11 120:4 137:4,16 143:2 144:19 242:11 247:9 292:19 298:2
recommend 26:3 122:5 146:14	regulatory 142:14 149:15 175:10 200:17 201:17 202:4 212:6	regulation 157:6 173:18	reply 295:6 296:3 297:16 299:19 300:5	respectfully 13:10
recommendation 72:14 73:19 74:16 77:7 111:16,20 112:21 120:12,21 121:4,5,12 123:7,22 124:19 125:12 127:20 131:17 132:19 137:11,15, 16,20 139:2,3 140:2 141:2,3,4 144:16 159:3 160:2 163:17 164:7,9 165:2,3 169:1 171:21 183:10 192:22 204:1,2 225:1 246:12	reduced 50:8 51:23 225:2,6 234:2 287:10	regulator 100:16 224:3,7	report 46:8,18 47:7, 10,15 48:2,6 49:23 50:6,7 51:22 52:3,5, 7,9,12,13,21 58:23	respond 18:14 20:9 150:14,15 252:4 289:19,22 294:1,8
recommendations 27:19 28:5 35:15 37:11 38:6 93:1 107:16,19 111:9,10, 15 115:9,14 116:7 120:4 121:1 122:14, 18 125:23 126:8 132:20 144:20,21 145:11 147:9 151:15 160:7 175:6 254:7	reducer 94:4 167:21 266:2,11 282:5	regulatory 142:14 149:15 175:10 200:17 201:17 202:4 212:6	reported 47:14 110:19	responding 23:17 25:23 27:15 28:17 29:13 31:1 34:3,20 35:16 36:17 38:13 39:19 40:16 44:9 46:4,10 52:10 55:7 57:3 64:2,20 66:21 78:11 80:7 81:22 82:15 83:7 85:14 88:23 93:2 96:17 119:19 125:17 127:10 132:15 139:5 145:2,15 158:8 212:15,17,21 258:1, 18 259:5 273:6,22 281:20 282:21
recommended 27:4 35:12 36:9 88:10 125:18 163:10 245:23	reduces 88:16	regulate 149:1 271:19	represent 205:4 258:3 293:4	response 30:19 68:16 106:15 116:22 123:23 124:10 127:10 133:11 136:13,20 138:10 239:7,9,11 242:9 250:20 282:19
recommending 168:3 225:13,21,23	reducing 251:8 274:18 282:8 288:20	regulate 224:2	representatives 177:1,14	responses 18:11 64:15 66:15 137:5 255:15
recommends 36:11 38:11 157:11	reduction 120:16 130:18 133:2 178:21 224:10,12,16,20 225:4 232:20,22 280:14 281:3 287:18	regulating 173:11	represented 9:5,9 218:18 238:14 293:12	responsibilities 156:22 207:10 209:1 210:11,15
reconcile 30:5	reduced 50:8 51:23 225:2,6 234:2 287:10	regulation 157:6 173:18	representing 19:8 159:12 258:10 293:7	responsibility 157:2 261:1 283:7
reconciled 87:13	refer 38:3 108:1 116:14,15	regulation 157:6 173:18	request 10:5 11:2 13:10 65:13 72:5 74:20 123:17 127:11 164:14 239:9 257:17	
reconciliation 26:13	reference 39:17,21 41:7 46:14 49:17 50:11,12 51:17 99:6 116:16 163:6 170:11,19,20 239:2, 16 241:10 279:6	regulator 100:16 224:3,7	requested 11:8	
	referenced 56:6 83:19	regulatory 142:14 149:15 175:10 200:17 201:17 202:4 212:6	requesting 18:7	
	references 19:11 71:13	regulates 224:2	requests 8:22 106:8, 9 122:12 123:5,13 134:12 166:6 292:22 295:3	
	referencing 239:21	regulating 173:11	require 21:9 41:9,19 88:14,22 89:16 93:12 157:21 195:19 228:14 229:5 231:1, 17	
	referred 218:6	regulation 157:6 173:18	required 42:4 82:12 84:8 90:2 145:23 227:5 232:10 248:8	
	referring 39:8 57:5 136:14 138:21 251:23 252:1 286:10 296:7	regulation 157:6 173:18	requirement 59:17, 23 71:7 95:5 135:15	
	refers 24:21 99:14 125:21	regulator 100:16 224:3,7	requirements 25:4 91:14 122:9 135:4 156:16 165:7 221:12	
	refine 18:2 107:6	regulatory 142:14 149:15 175:10 200:17 201:17 202:4 212:6	requires 40:21 41:3, 17 128:1	
	reflect 81:1 148:10	regulate 149:1 271:19		
		regulating 173:11		
		regulation 157:6 173:18		
		regulator 100:16 224:3,7		
		regulatory 142:14 149:15 175:10 200:17 201:17 202:4 212:6		
		regulate 149:1 271:19		
		regulating 173:11		
		regulation 157:6 173:18		
		regulator 100:16 224:3,7		
		regulatory 142:14 149:15 175:10 200:17 201:17 202:4 212:6		
		regulate 149:1 271:19		
		regulating 173:11		
		regulation 157:6 173:18		
		regulator 100:16 224:3,7		
		regulatory 142:14 149:15 175:10 200:17 201:17 202:4 212:6		
		regulate 149:1 271:19		
		regulating 173:11		
		regulation 157:6 173:18		
		regulator 100:16 224:3,7		
		regulatory 142:14 149:15 175:10 200:17 201:17 202:4 212:6		
		regulate 149:1 271:19		
		regulating 173:11		
		regulation 157:6 173:18		
		regulator 100:16 224:3,7		
		regulatory 142:14 149:15 175:10 200:17 201:17 202:4 212:6		
		regulate 149:1 271:19		
		regulating 173:11		
		regulation 157:6 173:18		
		regulator 100:16 224:3,7		
		regulatory 142:14 149:15 175:10 200:17 201:17 202:4 212:6		
		regulate 149:1 271:19		
		regulating 173:11		
		regulation 157:6 173:18		
		regulator 100:16 224:3,7		
		regulatory 142:14 149:15 175:10 200:17 201:17 202:4 212:6		
		regulate 149:1 271:19		
		regulating 173:11		
		regulation 157:6 173:18		
		regulator 100:16 224:3,7		
		regulatory 142:14 149:15 175:10 200:17 201:17 202:4 212:6		
		regulate 149:1 271:19		
		regulating 173:11		
		regulation 157:6 173:18		
		regulator 100:16 224:3,7		
		regulatory 142:14 149:15 175:10 200:17 201:17 202:4 212:6		
		regulate 149:1 271:19		
		regulating 173:11		
		regulation 157:6 173:18		
		regulator 100:16 224:3,7		
		regulatory 142:14 149:15 175:10 200:17 201:17 202:4 212:6		
		regulate 149:1 271:19		
		regulating 173:11		
		regulation 157:6 173:18		
		regulator 100:16 224:3,7		
		regulatory 142:14 149:15 175:10 200:17 201:17 202:4 212:6		
		regulate 149:1 271:19		
		regulating 173:11		
		regulation 157:6 173:18		
		regulator 100:16 224:3,7		
		regulatory 142:14 149:15 175:10 200:17 201:17 202:4 212:6		
		regulate 149:1 271:19		
		regulating 173:11		
		regulation 157:6 173:18		
		regulator 100:16 224:3,7		
		regulatory 142:14 149:15 175:10 200:17 201:17 202:4 212:6		
		regulate 149:1 271:19		
		regulating 173:11		
		regulation 157:6 173:18		
		regulator 100:16 224:3,7		
		regulatory 142:14 149:15 175:10 200:17 201:17 202:4 212:6		
		regulate 149:1 271:19		
		regulating 173:11		
		regulation 157:6 173:18		
		regulator 100:16 224:3,7		
		regulatory 142:14 149:15 175:10 200:17 201:17 202:4 212:6		
		regulate 149:1 271:19		
		regulating 173:11		
		regulation 157:6 173:18		
		regulator 100:16 224:3,7		
		regulatory 142:14 149:15 175:10 200:17 201:17 202:4 212:6		
		regulate 149:1 271:19		
		regulating 173:11		
		regulation 157:6 173:18		
		regulator 100:16 224:3,7		
		regulatory 142:14 149:15 175:10 200:17 201:17 202:4 212:6		
		regulate 149:1 271:19		
		regulating 173:11		
		regulation 157:6 173:18		
		regulator 100:16 224:3,7		
		regulatory 142:14 149:15 175:10 200:17 201:17 202:4 212:6		
		regulate 149:1 271:19		
		regulating 173:11		
		regulation 157:6 173:18		
		regulator 100:16 224:3,7		
		regulatory 142:14 149:15 175:10 200:17 201:17 202:4 212:6		
		regulate 149:1 271:19		
		regulating 173:11		
		regulation 157:6 173:18		
		regulator 100:16 224:3,7		
		regulatory 142:14 149:15 175:10 200:17 201:17 202:4 212:6		
		regulate 149:1 271:19		

responsible 212:13	269:8,13,19 271:6 277:23 279:22	S	Senator 101:18	17 42:7,10 56:14 57:9 63:22 69:15 72:8 75:17 79:4 88:21 111:13 115:5, 13 119:13 120:20 121:14,16 124:3 125:11 132:9 133:11 138:4 140:4 141:6 142:18 143:15 144:18 145:1,8 146:10,13,17 160:8 161:6 164:1,5,10,17, 19 165:8,17 166:18, 19 175:15,20 187:9 192:1 204:2,9 206:7, 9 207:9,12 208:21 209:5,6 210:17 216:12 230:9 232:14 233:6,17 234:11 245:23 246:15 256:20 258:7,17,19 272:23 273:17,20,21 274:8 275:13
rest 47:17,20 104:21 234:1 259:13 300:19	Rice's 176:8 270:22	Sadly 300:14	send 144:7	settlement-only 54:6
restate 31:6 67:18 68:8 81:15	rid 174:22	safety 279:1 288:6	sends 279:13	settlements 102:3,7
restatement 301:11, 14	rise 135:3,10 216:14	sake 172:9	sense 15:11 29:16,18 30:10,16 33:15 77:21 80:2,11 81:7 93:22 127:15 172:3 176:22 178:14 183:1 191:8,12 240:3 290:20 298:5	settling 27:22 30:20 33:20 34:1,11 36:21 57:13,16 73:16,20 76:19 89:12 215:3 231:14 246:12
result 28:3 83:17 90:4 118:13 127:13 139:16 146:5 157:23 160:8 161:6,7 162:6 182:21 187:8 224:20 234:4 287:19 289:8	rises 238:13	sale 191:6	sensitivities 59:21	shaded 197:4
resulted 224:10	risk 67:16,23 77:19 79:6 138:6,17 151:18 183:10 185:16 200:14,17 201:18,22,23 202:3, 5 290:15	Sam 7:8 62:19 63:3, 13,20 64:6,13 65:17 66:14 67:1,6,12 297:8	sensitivity 59:15 60:1	shading 110:3
resulting 99:16 163:8	risks 77:15 215:20	Sasso 9:10 10:10,15	sensitized 86:15	share 49:3 51:5 89:14,17 115:22 165:20 236:16 259:15 278:9 288:13
results 12:7 26:3 217:9 273:2	RNS 130:9,11,14 131:9 171:11 181:12 221:8,22 250:9 251:5	saturates 222:15	sentence 267:8 283:2	shared 259:9
resume 8:6	Robert 7:22 212:5, 10,15,17,21	saturation 222:12 223:10 244:23	separate 253:14 272:6 296:23	shareholder 253:4,6
resumé 206:23	robust 52:13	save 198:2 289:5	separately 272:5	sharing 166:23
retail 173:13 182:4 210:18 224:19,20 251:13	role 25:16,17 207:7, 10 208:19 209:2 273:20	saving 198:8	September 300:4	sharp 127:13
retain 224:12	roles 100:17	savings 51:20 172:14 235:20 267:12	serve 98:13 124:15 143:14 174:13,17 177:4 186:17 199:7 237:6,20	shave 282:11
retained 238:8 251:10	rolls 131:10	SB 83:17 90:4	served 187:4 237:13	Sheehan 6:16,17 9:16 11:4 15:10 48:14,15 49:2,4 211:19 212:2,7,11, 18,22
retire 157:16	Roman 103:16,17	scale 80:20 81:4 84:3 136:7 140:9 192:22 193:10	service 6:13 44:13, 15,17,23 79:18,20 116:2 120:16,19 128:4 133:3,4,5,20 134:6 136:3,6,8 137:23 141:18 146:4 155:10 165:19,21 166:21,23 174:22 177:1,14 178:21 182:1,15,22 183:2,7, 17 184:13 187:23 189:1,11 196:22 207:14 209:8 210:16 220:6,9 221:3,8 224:2 240:14 249:6 279:15,17 283:3 286:13	sheet 49:5
return 92:8 153:14 205:12 224:6 268:23 277:9	roof 289:2	scales 193:9	services 125:6,9 174:1,5 179:5 207:13 209:6 210:18 252:20	shift 129:9 133:14,18 135:20 138:7 140:12 162:6 163:5 168:20 192:23 216:16 232:18 234:11 236:4,5 258:10 274:9 289:11
returning 92:7	rooftop 234:19,22	scenario 118:18 119:4 247:8 249:23 250:1,5	setting 98:15,16 120:18	shifting 26:16 55:23 60:19 93:10 107:8 138:18 151:19 179:3 183:11 198:23 282:13 290:18
revenue 53:17,18,22 54:8,10 78:17 85:19 167:7,8,14,17,19 201:4 202:10 220:2 236:18	room 10:19 47:11,17, 21 48:5 50:23 58:9 96:14 134:3 248:23 264:3 295:13	scenarios 31:12 89:20 219:22	sessions 191:23 259:19	short 31:6 64:4 93:17 119:23 155:9 232:15 277:11
review 73:17 86:9 101:20 102:17 103:11 104:1,4 113:5 149:1,8,12 216:23	room's 49:20	schedule 8:18 19:2,3 64:1 271:16	set 11:19 14:6 89:11 131:11 141:9 181:1, 3,4,7 183:16,22,23 184:3,12 187:6 200:23 203:10 254:9 260:1	shorter 249:12 296:4
reviewed 26:8 33:19 46:12 107:1 123:7	rough 106:21 107:3,6	scheduling 298:13	set-it-and-forget-it 147:14	shortest 268:5
reviewing 147:16	roughly 117:9 139:20	school 150:8	sets 130:6,21 131:2	shortly 90:9 195:15 302:9
revised 65:9	round 18:5	Science 188:15	setting 254:14 255:5, 7	show 31:13 35:6 85:1,8 146:21 203:7
revisit 54:21 148:13 178:9	rounds 18:4	scope 19:2 24:10,15 25:4,6 58:2,4,5,18 59:1,17,19 60:7,8 63:8 163:21	settle 122:4 187:12 230:13	
revisited 55:6 88:19	routine 180:11	schedule 8:18 19:2,3 64:1 271:16	settled 154:7 238:1 259:7	
revisiting 30:8 147:22	routinized 148:23	schooling 298:13	settlement 24:20 27:9,12,20 28:2,8, 13,16 31:11 32:22 34:5,10 36:9,10,15, 20 40:18,21 41:2,6,	
RFP 58:13 110:1	Roy 20:15	science 188:15	settlement 24:20 27:9,12,20 28:2,8, 13,16 31:11 32:22 34:5,10 36:9,10,15, 20 40:18,21 41:2,6,	
Rhode 135:17	RPS 99:15 132:10 135:6,15 136:1,13 138:16 162:16,20 182:1 192:3,11,20 193:2,7 216:13 217:19 218:2,9,10, 13	scenarios 31:12 89:20 219:22		
Rice 108:19 175:19 205:19 206:20 207:3,4 214:13,14 215:2 216:11,19 218:17,21 221:5,11 224:1,9,13,15,17,23 225:5 237:3,8 239:1, 5,10,14,23 240:15 241:2,12,17,19,22 242:8,13,14,16,17, 19 243:5,8,15 244:16 245:2,4,20 246:7 247:2,8,11,13, 16,20 248:16 249:6 250:1,21 255:15,20 256:3 259:21 260:10,16 261:12	RSA 17:6 60:2 97:14 120:13 140:22 149:3 173:20	sections 294:16		
	rule 41:14 89:3	sector 100:10		
	rulemaking 83:16 90:3,8	security 185:15		
	rules 41:9 66:7 88:11,22 89:8,15,21 90:6,8 139:17,19	seek 195:14		
	ruling 30:21	seeking 195:5 196:5		
	run 109:8,14	segments 20:5		
	running 286:23	select 86:9		
	runs 202:13	selected 25:10		
	rush 153:6	selectively 141:11		
		self-evident 177:16		
		self-funding 202:11		
		sell 20:12 189:5 201:6,11		
		selling 156:4 157:13 189:9,10 193:5 195:1 196:2,7		
		Senate 101:19		

256:11	sizes 241:2	192:21 194:1 199:6 279:19 281:11	spreadsheets 180:5, 15	status 28:18 29:1,15 30:17 80:3 108:5 110:23 117:15 118:15 119:21 129:1 145:14,19 148:16 195:14,20 216:4 217:9 220:5 240:6 244:14 245:14,17 246:14
showed 108:12	skeptical 218:22 240:7	sound 252:3	square 244:21	statute 41:9 70:6 72:7,20 73:2,11,12 93:14,15 101:21 102:16 105:18 106:23 124:22 125:21 131:19 149:4,14,23 174:1 191:14
shows 20:6 26:15 86:2 108:16 117:4 131:12 135:5 197:12	skepticism 240:16	sounded 252:7	stabling 32:21	statutory 17:5,10 71:7 95:5 103:12 144:18
shut 21:2	skip 261:21	soundness 255:6	stack 281:6	stay 26:18 38:6 80:2 117:15 193:21
sic 120:4 227:4	slide 252:22	sounds 64:11 85:6 193:18 194:7	staff 25:8,11,14 58:12 102:7 171:19	steady 290:8
signal 20:17 81:1 86:11 126:14,22 144:8 222:7 279:2,4, 13 283:9 288:11 289:20	slightly 166:16	soup 96:9	stage 129:12 243:11, 12 244:21 245:7 246:3,4,13	stems 100:16
signaling 178:17	slow 230:5	source 64:8	stages 129:11 243:11	stenographer 15:3 298:4
signals 108:2 109:19,20 122:2 127:2 142:7 174:16 281:20,21	small 79:13 81:17 82:11,13 144:5 176:18 184:5,9 189:13,14,17 190:8, 16 194:8 196:17 217:12,23 218:13 233:5,16 236:20,21 286:9,11,14,15 301:2	sources 168:4 270:2	stakeholder 25:7 36:22 38:14 58:6,9 122:6 146:19 163:11 165:4 172:1	step 171:22
signed 45:8	smaller 35:20,22 80:19 81:21 126:6,9 130:15 133:1 138:8, 12	south 109:3	stamp 49:20 51:18 103:2,6 128:19 265:11	steps 38:12
significance 103:5 104:12 140:1	smart 150:1,6	south-facing 110:23	stamped 171:8	stick 178:12
significant 89:11 124:7 131:2,6 135:13,20 136:9 139:6,14 172:14 184:23 199:18 202:19 220:18 265:7	smarter 109:20 151:17	spacing 298:8	stand 113:2 150:4 277:13	sticking 40:3 131:18
significantly 135:10	smooth 140:15	speak 11:21 12:4 78:13 83:9 84:11 106:10 192:7	standard 7:21,23 17:17 132:3	storage 38:17 46:1 92:20 94:15 108:12 110:22 139:3,10,16 140:7,12 178:23 223:22 225:12,22 226:3,10,15,16,19 227:8 248:5 249:2,9, 10,19 254:10,20 255:3,23 261:14 269:22 280:23 289:11
similar 110:12 126:21 169:15 219:19 274:1 289:8	smoother 154:5	SPEAKERS 299:21	standardized 27:5	store 249:11
Similarly 219:11	smoothly 154:4	speaking 44:10 47:15,18 48:4,15 50:19 53:5 62:20 63:4 64:13 72:17 88:1 98:2 99:1,4,20 100:6,22 101:8 106:13 115:17 116:14 122:19 123:9,15 129:6 134:19 138:19 148:18 149:10 155:18 162:3,16 163:22 166:1 167:2, 16 169:6 170:18 171:1 178:10 179:17 181:5 195:3 196:18 197:18 203:13,22 204:4 209:3 210:13 239:15 252:13 253:2 257:1 261:9,20 263:17 264:9 265:9 267:22 271:6 277:23 280:5 283:10 291:1 292:7 297:2 299:11	stands 161:22	stored 255:23
simple 21:10 169:12, 20 171:5 229:22	so-called 137:18 138:16	spearheaded 263:7	star 193:12	story 93:17
simpler 84:4 176:2	socialized 172:19 236:16	specific 25:4 46:23 65:11 74:21 90:10 94:13 105:2 111:9 271:10	start 12:1 24:7 30:2 38:23 62:23 63:3 79:11,23 83:16 91:3 130:5,13 140:5 142:6 144:10 161:19 165:6 180:10 205:2 218:23 225:14 226:1 239:2 245:15 290:17	straightaway 15:5
simplification 114:20	software 87:22 164:19 231:2	specifically 18:5 71:17 139:9 162:19 164:16 166:18 173:20,23 193:23 200:16 216:12	started 79:5 106:20	strain 250:16 253:19, 21
simply 10:10 52:14, 20 64:21 113:1 121:20 135:13 157:20 173:10 174:8 180:1 231:6 234:9 236:20 239:21 255:8	software-type 87:11	speculated 176:4	starting 82:23 155:3 164:19 273:11	stream 167:14,17,20 201:4 220:2
single 131:5 248:4 261:18 278:17 295:15	solar 43:11 81:14 83:3 85:4 92:19 93:23 94:1,18,21 95:4 108:18 109:4 110:1 111:1 140:13, 17 184:8 190:7,17 193:20,21 216:7 223:23 234:18,19,22 249:8,11,20 251:17 262:5 266:1,12,17 271:2,19,20,21	speculating 136:15 169:16 195:18,22 197:7	state 6:17 7:19 15:20 22:3,23 50:1 51:22 96:4,21 97:15,16 98:18 110:17 112:1 135:3 146:18 156:3, 10 157:5 168:16 169:9 173:13 207:6 208:18 210:9 212:3 227:16 251:18 254:21 255:16,19 284:18 298:18	streams 174:19
single-access 108:15 109:6,9 110:13,20 262:18 265:12,13 278:11 280:11	solar-producing 124:13	speculation 118:19 119:6	state's 98:11,12	stress 288:4,5
sir 171:18 176:20 301:21	sold 31:19 156:12	speculative 119:7,12 136:12,21	stated 24:9 26:14,20 33:14 46:18 54:13 64:14 65:7 66:15 68:16 96:8 169:15	structure 17:10 26:4, 18 29:5,21 35:19 37:21 77:11 78:4,6, 8,18,23 101:5 108:8 115:20 137:22 141:6 142:11 143:20 144:10 146:1 179:2 187:1 198:13 201:3, 6 202:2,4 215:5 217:7,13,15 240:4 241:6 281:17 290:9
site 110:2 284:10	solely 221:19 251:3	spelled 73:10	statement 15:20 64:19 138:22 173:20 174:1 214:21	structures 43:4 108:22
sites 110:16,17	solicit 172:2	spent 52:11	statements 42:15 67:17 114:6 255:13 256:5	struggle 175:23
sitting 150:20	soliciting 121:15	spoke 18:10 230:11	states 27:21,23 56:17 135:6,9,16 168:1,5 174:7,8,10 200:21 219:20 220:17 227:13 231:15 269:18 289:6	struggling 72:9
situation 91:17 109:15 222:19 290:11	solution 175:11	spread 81:18 223:8 260:12 295:20	stating 79:6	study 8:12 24:11,15, 22,23 25:2,6,11,15
six-month 184:9	solutions 173:19 175:5 177:9 199:10 289:13	spreading 260:6 282:14		
sixth 96:14 139:1	sooner 116:9 144:11			
sixth-graders 134:3	sophisticated 141:16 176:5			
sizable 232:1	sort 17:8,11,12 56:12 77:14 79:5 84:9 89:18 107:14 110:12 113:12 121:21 131:3 135:8 138:5 140:15 141:10 147:20 152:8 174:16 176:16 180:17 190:17			
size 56:21 69:21 101:13 127:1 128:6 240:22 241:16 285:13 286:20,21				
sized 288:9				

- 26:3,9,15 27:6 36:8
40:4 58:2,13,18
59:2,6,19,23 60:13
63:9,15 80:2,4
83:12,13 105:6
108:12 140:11
197:11 278:15
- stuff** 76:5
- subdivisions** 96:21
97:15
- subject** 45:12 86:7
226:21 245:5,10
246:2
- submit** 141:14
- submitted** 246:9
- suboptimal** 117:18
118:12
- subset** 122:20
- subsidization** 11:16
14:3,11 17:3,13
151:19
- subsidizations**
107:12
- subsidy** 11:14 14:1
101:16 104:14
- substance** 97:18
113:5
- substantial** 30:11
146:23 231:17
- substantive** 158:9
- substation** 222:15
- subtract** 275:5
- success** 252:23
- successful** 51:10
- sufficient** 216:14
299:12,15
- sufficiently** 231:10
- suggest** 16:9 169:3
217:9
- suggested** 16:14
229:19 232:5 236:13
249:6 273:1
- suggesting** 177:10
178:16 222:7 229:10
233:19 288:19 289:3
- suggestion** 127:20
234:4 248:2
- suggests** 217:18
227:23 228:19
244:11 255:21
- sum** 37:10 235:21
- summarize** 12:7
18:1,8 38:11 111:4
159:19
- summary** 15:2 18:18
25:20 113:12
- summer** 192:17
- sunny** 124:13 249:20
- Supervisor** 206:5,7
208:21 210:14
273:21
- supplement** 53:17
- supplemental** 45:18
137:8 296:11
- supplements** 123:14
- supplier** 81:18 98:20
133:7 195:1 196:1,2
230:17 232:18
233:22 234:6,8
235:6,9,11,17
237:14 238:2,8
259:9 274:9
- supplier's** 121:18
133:9 234:2 258:20
- suppliers** 156:18
165:20 166:22 173:8
174:12 187:14,21
232:21 233:1,8
234:1,12 235:2,13,
22 257:17,19 258:2,
3 259:15 274:21,23
275:2,4
- suppliers'** 233:19
- supply** 97:7 122:3
124:12 134:6 157:17
182:1 206:5 210:15,
18 269:10
- supplying** 282:6
- support** 29:9 34:6,8
36:18 45:16 68:18
81:12 82:8 123:6
145:13 146:12
160:10 162:9 173:13
176:7 179:22 199:19
224:18 226:16 227:8
258:15 259:3
- supported** 237:11
246:8
- supporting** 45:9
175:16 207:21 208:1
209:15,19 211:1,7
212:8 219:20 231:2
272:21
- supportive** 30:15
43:3 145:4
- supports** 51:11 80:4
111:19 120:3 123:21
161:5 216:18
- suppose** 196:4 235:1
- supposed** 85:23 87:9
- surpassing** 245:19
- surprise** 87:4
- surprised** 195:17
- surrebuttal** 205:1
268:14 277:12,19
279:19 282:18
283:16 284:15
- suspended** 168:2
- sustainability** 23:5
199:12
- sustainable** 198:12
- sustained** 150:10
- sweeping** 138:17
218:6
- Swift** 123:18 205:22
206:6,13 208:10,18,
20 209:3,12,18,21,
23 210:3 230:10,20
232:4,8,15 236:10,
14 237:9,18 256:19
257:1,5,8,14,22
258:1,18 259:5
272:18 273:6,10,12,
22
- Swiss** 123:18
- switch** 65:8
- switching** 33:3
- sworn** 22:11 24:1
95:21 100:5 205:5,7,
20,23 206:2,14,21
277:15
- Synapse** 147:11
- system** 20:3,4,10,16
21:5 41:14 54:9
80:10,12 81:6,8 83:3
84:8 85:4 94:11
110:6 166:11 173:12
175:14 189:20
197:3,8 202:18
222:9,10 223:2
230:3 233:8 248:8,
11 250:8 251:4
255:9 256:2 261:7
266:7 274:11 275:9
278:20,21 279:1
283:4,6 288:4,9,14
- system-wide** 26:23
40:6
- systems** 6:22 26:5,
10 39:13,15 40:12
55:12 64:22 70:7
80:18 82:8 87:15
121:15,16 127:7
138:12,13 171:13,14
175:8,15 176:19
222:3 231:2,19
232:1 259:23 272:4
273:19 289:11
-
- T**
-
- tab** 48:9,15,23 49:3
- tabs** 49:8
- takes** 131:8 141:9
260:22
- taking** 6:5 22:15
120:15 158:22
193:19
- talk** 23:18 84:19 94:4
144:17 215:11,18
267:14 295:8
- talked** 128:23 185:4
222:11,18 246:4
258:9 260:16 261:13
- talking** 56:10 76:12,
15 78:7 84:21 96:14
140:21 181:13 253:7
254:14,16 256:2
- talks** 129:11,12
267:15
- target** 46:20 50:5
302:10
- targeting** 298:23
- tariff** 26:1 29:5 37:14,
16 41:3,19 42:3,5
45:1 56:19 57:6
69:17 70:9,10,13,21
71:4,9,12,16 72:7
73:6,7 74:22 75:15
76:9,13 77:9,11
79:14 82:14 101:5
189:5 191:4 226:8
- tariffs** 61:20 62:2
63:23 71:1 73:22
101:22 104:2 106:23
- 125:2 131:22
139:16,23 140:6
149:9,15 156:14
157:3 225:14 226:2
282:3 285:17
- tax** 203:4
- Taylor** 6:20,21 15:14
111:22 112:12
149:20 150:7,22
151:5 154:5 210:7,8,
19,23 211:6,10,14,
18 213:5,6 214:6
255:10,11 263:11,
20,22 264:17 276:2,
3,6,17,23 277:5
283:17 297:23 298:1
299:11 300:10
- TCAM** 228:21 229:3
- technical** 191:3,23
259:19
- technically** 94:2
- techniques** 51:9
- technology** 188:15
231:3 261:12
- temporal** 108:2,17
109:19 122:1 126:22
127:1
- ten** 130:20
- term** 31:6 119:21,23
141:7 218:6 257:19
258:2
- terms** 18:6 26:22
28:1 56:19 69:18
77:10 152:8 157:3
158:16,17 180:12
187:6 191:4 216:12
241:3 246:15 261:5
- terribly** 54:20
- territory** 36:5 165:19,
22 166:21 167:1
231:15 253:1
- Tesla** 93:16 94:22
- test** 21:5
- tested** 231:8
- testified** 24:9 40:11,
19 53:20 116:17
135:12 182:11
207:16 209:10,12
210:20 215:3 216:11
217:3,11,14 230:11
231:9 239:18 244:5
246:18 247:4 256:20
259:22 260:8
265:11,23 269:8
279:22
- testify** 42:19 143:4
263:1 277:23 282:18
- testifying** 68:5
277:18
- testimonies** 97:20
100:4,5,8
- testimony** 8:6 9:1,3,
7,11,14,17 10:2,20
11:11 12:9,20 13:5,
20 19:7 22:15,16,17,
19 23:7,11,16,21
24:1 25:20,22 34:12,
15 35:12 36:10,21
37:12 39:8,10,13,16,
18 43:19,23 44:6
45:3,7 51:12 53:21
- 60:20 95:9 96:11
97:18 98:22 99:23
102:6,22 105:9
108:3 112:7,16,18
113:2,6,17 115:10
116:16 117:21 121:2
123:14 128:18
129:5,7,20 130:12
132:17 135:21
137:9,18 147:10
148:3 151:21 152:1
155:3,8 156:1,10
159:10 160:20 161:5
163:3,14 165:10,11
166:6 168:9 169:3
171:22 176:8
181:16,21 204:8,11,
22 205:1 207:20
208:1,6 209:15,19
210:1 211:1,7,12,15,
21 212:8,12,19
213:9,14,18,22
216:20,22 227:22
228:2,20 229:20
230:12 239:17,18
240:1 243:7,10
244:2,10 245:21
249:1 256:14 258:7,
8 259:2 260:9
262:10,21 264:12
265:3,21 266:1
267:8,14 273:1
276:8,15 280:4
284:21 291:20,21
292:13,18,23 293:23
302:6
- testing** 86:13
- text** 49:21 102:16
103:5
- That'll** 214:6
- theory** 184:7 201:17
- thereabouts** 243:2
- thing** 77:18 78:15
80:15 133:10 134:9
139:6 145:6 197:12
199:13 217:2,21
236:3 237:16 280:17
283:1 301:3
- things** 9:2 30:8 35:6
42:15 46:15 50:15
55:17 58:21 78:21
80:18 82:18 83:22
84:6 86:12 87:8,11,
12,16 91:2 101:2
102:13 148:8 149:18
154:15,17 176:13
191:17,19 217:17
222:21 235:20
- thinking** 57:6 193:22
- thought** 191:18,20,
22 204:5 217:12,15
295:9 301:16
- thoughts** 21:20
- three-part** 143:19
144:2
- threshold** 190:1
- till** 159:18
- time** 15:4,21 20:17
21:10,16 22:2,8 25:8
26:10 33:10 40:6,15
41:10 49:11 50:17
52:5,11 54:21 55:13
58:13 60:22 80:15,
23 88:17 91:10 92:3

93:9 98:10 102:11, 15 106:2,12 108:23 112:9 119:9 120:7 122:21 126:14 127:16,20 128:6 130:7 132:21 138:6 146:22 148:15 152:8 163:18 171:7 180:7 198:9 200:18 213:21 217:20 220:23 223:3,9 242:6 249:13,14 250:10 255:23 256:1 261:6 283:4 290:10 292:10 298:9 299:8,9,17 300:9 302:6,12	19:4 43:9 92:23 279:21	168:6,21 169:1,11 170:23 178:22 179:9 197:6,10 221:6,18 222:1,3,8,10 224:11, 16,18,19,21 225:1,3, 6 228:1,3 229:2 247:23 251:8,12 265:14,15 266:7 267:9,16 276:19,20 278:4,8,16,21 279:11,14,16,17 280:14 281:7 282:7 283:3 284:20 287:8, 20 288:22 289:1 290:15	271:15,16 296:3	unintended 215:20 247:5 248:13
time-of-use 26:8 35:13 36:13 39:12 40:22 41:4,18,20 42:8 54:19 63:23 116:8 126:11,21 142:5,8 143:3,5,11, 19 144:3 145:4 146:1 147:2 148:9	Toscano 22:6,11 23:3,13,17 24:3 25:23 27:15 28:9,17 29:6,13 31:1 32:19 33:21 34:2,13,20 35:16 36:17 37:6 38:13 39:19,23 40:2, 8,16,23 42:13,14,22 43:8,10,14,21 44:5, 9,14,18 45:2,6,12,20 52:10 54:17 55:7,22 56:11 64:14,20 66:21 67:5,9,18 68:15,20 77:1 78:11 80:7 81:22 82:15 83:7,15 85:14 87:6, 23 88:23 90:1,22 93:2	transmit 287:22	U	unique 174:7
time-varying 30:13 43:3 80:21	total 117:8 125:4 131:11,15,23 165:18,21 166:7,20, 23 167:10 202:20 217:4 219:7 235:3, 21 261:5,6 288:14	transparent 35:1	Uh-huh 246:6	uniquely 282:2
timeline 19:3 63:8, 15,22 64:5 65:15 89:17,21 90:10 295:7	TOU 35:11 36:4,6 41:15 65:8,9,14,21 66:11	transparent 121:10	ultimately 80:22 89:2 93:11,19 109:21 219:23 221:2,17 245:22 281:14	unit 54:9
times 30:3 116:18 117:9 131:9 147:19 163:6 250:17 253:22 289:14 297:20	touch 121:3 145:8	transport 191:6	un-analogous 253:8	Unitil 6:19,22 15:13 43:11 44:11,21 65:20 92:19,22 108:15 109:5 110:12 116:17 117:21 124:1 142:2 143:10 171:18 193:23 205:21 206:5 210:15 262:5 263:8 273:7 274:4 278:11 280:11
timing 298:2 300:17	touched 120:2 145:9 280:1	traumatized 50:20	un-metered 274:13	Unitil's 44:17
title 96:4 207:7 208:19,20	tracker 108:16 109:6, 9 110:13,20 265:13 278:11 280:11	treat 127:15	unaccounted 166:3	units 55:22,23
TLV 27:2	trackers 110:4,7	treated 121:7	unaccounted-for 121:8 124:16 166:2	unjust 56:22 68:19 69:23 107:9 133:15 160:8 216:15
today 6:1 8:16 9:11, 14 12:10 13:4 14:15, 18,21 15:3 19:1 22:17 23:16 37:13 42:15 51:10 61:8 62:3 65:7 83:6 95:9 96:11 102:19 106:11 112:9 114:11,23 115:10 133:18 151:21 152:1 154:9 163:18 165:2 171:21 175:7 189:3,4 193:17 194:21,23 195:14 196:15 204:11 206:23 208:6 210:1 211:12,15 212:19 213:23 214:16 216:11 218:17 225:22 227:21 229:21 232:10 237:12 238:6 259:2 270:4,21 293:15 302:4	tracking 35:2	treating 127:7 214:23 244:7 246:19,23	uncommon 220:22	Unknown 10:10
today's 18:3	traditional 174:3 298:18	truth 214:20 241:13	under-collection 182:19	unreasonable 14:11 56:23 68:19 69:23 107:10 133:15 160:9 162:5 216:15
told 63:14 64:7 65:21 67:13,20 150:7 188:9	Training 252:20	Tuesday 6:3 8:9,19, 22 9:5 10:10 11:7,23 12:8 16:20 24:9 31:18,22 34:12 36:21 80:8 94:4 175:19 176:8 204:22 205:5,7 207:1 213:7, 16 214:16 217:3 222:12	under-market 185:14	unnecessary 192:23
Tom 246:9	transaction 86:16, 18,22	turn 75:10 120:13 122:16 124:20 128:19 129:22 134:8 168:23 194:14 290:1	undercompensates 217:15	unreasonable 14:11 56:23 68:19 69:23 107:10 133:15 160:9 162:5 216:15
top 13:1 193:4 229:16 242:13,19 252:18	transactions 173:15 185:12	turning 123:16 128:17 129:19 208:10 227:20 237:3 265:19	undercompensating 133:21	unusual 199:22 288:6
topic 13:20 33:18 54:3 83:14 90:13 167:22 199:20 295:4	transceivers 21:12	twisted 196:21	underline 190:8	unwilling 67:15,22
topics 12:20 13:1,6, 11,17 14:17 16:10	transcribing 280:3	twenty 268:23 295:20	underlying 110:10 148:10 200:13 222:8	up-front 271:13
	transcripts 298:6,9	twist 259:12	understand 51:3 71:10 78:1,3 84:22 112:21 141:16 161:11,12 165:23 166:7 167:3 176:1, 12 177:4,14 183:14 186:1,5 189:15 216:6 240:15 248:21 262:11 263:23 285:19 287:6	upcoming 28:20
	transformed 281:9	two-to-one 235:12	understanding 37:16 53:19 54:13 70:18, 20 71:2,6,12 76:18 83:8 84:10,12 86:7, 22 87:23 91:6,13 113:14 143:8,10,11 149:6 150:20 172:5 249:1 254:3 256:21 259:17 262:13,17 285:16 294:15	update 89:4,20 98:5, 23 99:3 101:22 142:3 206:23 300:8
	transformer 82:21	two-way 21:14	understate 199:14	updated 148:8 220:9
	transformers 84:6	two-year 63:22 83:12	understood 43:17 46:13 53:2 79:1 82:16 87:19 96:19 99:21 113:18 143:4 285:14	updates 89:8,16,18, 19 97:19 98:21 100:3 208:4 209:22 211:11 212:16
	transition 126:15,20 127:1 145:23	type 80:15 171:20 197:8 236:1,22 262:14	undertaking 36:11 232:2 236:7	updating 88:15 121:14
	transitioned 133:2	types 81:6 83:22 243:14 270:6	underway 290:7	upgrade 83:4 84:7 261:7
	transitioning 251:16	typically 112:2 141:16 197:2 224:2	undue 107:7,10 138:7,18 151:19 192:23 198:23	upgraded 87:10
	translate 78:2		unfair 11:16 14:2,11 17:3,13	upgrades 84:5,8 109:15 202:18 222:16
	translating 78:3		uniform 229:12 234:15	uptake 143:12 199:18
	transmission 20:1 39:15 44:12,17,22 45:1,11 79:20 110:19 116:11 125:8,19 126:2,18 127:2 128:1 129:21 131:7 132:22 133:19 146:2 157:20,22		uniformly 231:12	urgency 240:3,8
				usual 298:4
				utilities 11:13 13:22 14:9 30:1,3 34:23 35:1,8 54:8,18 56:18 65:9,19 69:16 73:7 74:21 76:3,19 82:19 83:10 87:15,20 91:3 121:13 130:9 138:11 140:5 142:5 154:8 165:5,18 169:19 170:1,14 171:13 173:11,17,18 174:19 175:22 181:7 193:13 198:6 213:9 216:20 225:14 226:1 230:12 231:18 254:4,18 255:15,18,22 269:22,23 284:7,12 287:12 295:4

<p>utilities' 287:7 296:19</p> <p>Utilities/granite 6:17</p> <p>utility 11:11 13:20 23:3 35:17 54:10 73:6,22 82:7 84:12 86:2 104:7 130:9 147:3 155:12 165:19,21 166:21 170:6 174:4 175:7 179:13 187:23 207:19 223:20 224:1,9,11,17 266:6 274:13 280:5 281:9 285:15 286:7 296:22</p> <p>Utility's 46:1</p> <p>utility-run 289:12</p> <p>utilization 198:16 290:17</p> <p>utilizing 261:14</p> <hr/> <p style="text-align: center;">V</p> <hr/> <p>valid 94:7</p> <p>valuable 140:14 226:17</p> <p>valuation 46:8 53:1 105:6 182:13</p> <p>values 40:6 80:9</p> <p>variably 114:1</p> <p>varied 188:6</p> <p>vary 26:10 80:12 250:3</p> <p>varying 30:6 40:6,14 227:12</p> <p>vast 194:19 230:22</p> <p>VDER 24:10,21,23 25:2 26:3,9 40:4 58:2 63:9,15 64:9 80:2,4 140:11 197:11 278:15</p> <p>vehicles 290:8</p> <p>vein 42:13</p> <p>verbatim 278:3 280:3</p> <p>verge 112:12</p> <p>verified 65:19</p> <p>verify 70:20 86:10 180:12</p> <p>Vermont 110:5 168:10</p> <p>versus 14:10 79:19 94:9 235:10 255:7</p> <p>vetted 227:2</p> <p>viable 179:20 216:7</p> <p>view 29:23 32:6 94:12 118:2</p> <p>virtual 48:5 264:3</p> <p>virtually 168:11</p> <p>visited 43:16</p> <p>volatility 185:9</p> <p>volume 177:2 179:20 271:23</p> <p>vote 188:15</p>	<hr/> <p style="text-align: center;">W</p> <hr/> <p>wait 48:19 144:8 159:18 181:8</p> <p>waiting 117:2</p> <p>walk 28:11 112:6</p> <p>Walmart 8:2,4 17:20, 21</p> <p>wanted 58:22 59:5 75:19 154:1 203:19 213:19 214:2 217:21 236:18,23 293:10</p> <p>water 21:2</p> <p>wave 240:4</p> <p>ways 58:1 103:1 125:19 151:18 174:21 289:7</p> <p>weaving 204:1</p> <p>website 52:18 257:15</p> <p>week 10:11,16 293:5 299:19</p> <p>weeks 299:9,10,12, 14,19</p> <p>weigh 163:19</p> <p>weight 9:22 119:17 136:20</p> <p>well-known 171:10</p> <p>well-rounded 100:15</p> <p>west 197:4</p> <p>Westmoreland 278:13 280:19</p> <p>wheelhouse 85:23</p> <p>whole-house 143:10</p> <p>wholesale 33:3 55:23 66:17 67:3 91:9 120:17 121:18 122:4 168:17 182:3 222:1 224:11,18 225:6 230:13 233:7 237:5 238:2,8 281:23</p> <p>wholly 253:8</p> <p>widely 110:4</p> <p>windfall 183:6</p> <p>winter 192:18</p> <p>wishes 48:12 252:8</p> <p>witnesses 8:10,15,18 9:4,5,6 10:17 22:14 38:20 53:20 74:6 95:9,10 108:8 205:3, 5,18 206:2,16 213:10,13,22 214:15 245:10 268:8 277:8, 9 293:21,22</p> <p>witnesses' 22:16</p> <p>wondering 14:17</p> <p>Woolf 147:10</p> <p>Woolf's 128:18 243:6 244:1,9</p> <p>words 52:2 79:18 102:23 103:2,14 114:4 148:20 149:6 267:17</p> <p>work 35:8 85:3,11 87:21 113:8 122:6 140:5 175:12 200:4</p>	<p>230:3 275:12</p> <p>worked 158:13 209:4 255:19</p> <p>working 27:6 32:3,4 50:21 52:7 141:5 163:12 180:10 220:3 234:14</p> <p>works 86:18 178:19 231:8 274:11</p> <p>worry 76:5</p> <p>worse 61:16 62:3,7</p> <p>worth 227:14</p> <p>wrap 88:6 151:5,10</p> <p>wrapping 274:17 275:11</p> <p>writing 13:11 158:13</p> <p>written 112:7 115:7 208:7 210:2 211:16 212:20 230:12 301:3,8</p> <p>wrong 157:1</p> <p>wrote 98:10</p> <hr/> <p style="text-align: center;">X</p> <hr/> <p>XIII 131:19</p> <p>XVI 149:7</p> <p>XVI(A) 120:13</p> <p>XXIII 124:23</p> <hr/> <p style="text-align: center;">Y</p> <hr/> <p>year 62:4 63:16 65:22 98:10 118:2 128:3 130:23 131:12 132:4 139:20 145:18 170:17 181:18 192:9,10,17 198:3,7 201:20 250:18 259:19 263:2 267:9, 12,15 288:23 289:1</p> <p>years 20:14 28:21 29:15 30:13 32:5,20 54:18,20 55:6,10 56:10 60:23 61:4 67:4 77:10 78:6,7 88:19 91:16 101:10 116:2 129:17 131:1 135:19 141:8 144:9 147:17 148:5,6,17 167:11 178:7,12,15 199:20 200:20 202:13 209:5 218:20 219:10,23 220:16,21 275:23 290:12</p> <p>yesterday 50:21 72:11 79:12 82:6 84:19 116:16 213:17 252:11</p> <p>York 110:21</p> <p>young 96:20</p> <hr/> <p style="text-align: center;">Z</p> <hr/> <p>zero-sum 258:20 274:8</p>
---	---	---