

STATE OF VERMONT
PUBLIC UTILITY COMMISSION

CASE NO. 23-2220-RULE

PROCEEDING TO DESIGN THE POTENTIAL
CLEAN HEAT STANDARD

December 15, 2023
9:30 a.m.

Via videoconference

Workshop held before the Vermont Public
Utility Commission, via videoconference, on December 15,
2023, beginning at 9:30 a.m.

P R E S E N T

COMMISSION MEMBERS: Anthony Z. Roisman, Chairman
J. Riley Allen

STAFF: Thomas Knauer, Utilities Analyst

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P R E S E N T

1
2 Greg Morse, VGS
3 Jill Pfenning, VGS
4 Dylan Giambatista, VGS
5 Mary Bouchard, VGS
6 Luce Hillman, TAG
7 Michelle Keller, TAG
8 Emily Roscoe, EVT
9 David Westman, EVT
10 Haley Roe, EVT
11 David Hillman, Pro Se
12 Rick Weston, TAG
13 Geoffrey Gardner, Pro Se
14 Thomas Weiss, Pro Se
15 Annette Smith, Vermonters for a Clean Environment
16 Henry Mauck, DPS
17 Ben Bolaski, DPS
18 Brian Cotterill, DPS
19 Melissa Bailey, DPS
20 Stephanie Austin, VFDA
21 Matt Cota, Meadow Hill, Northeast Hearth, Patio &
22 Barbecue Association, VFDA
23 Chris Vaughn, GMP
24 Victoria Underhill, Irving Oil
25 Apryl McCoy, VPPSA
Amber Widmayer, BED
Sarah Braese, VPPSA
Emma Ardington
Dan Gillen
Deirdre Morris, PUC
Dominic Gatti, PUC
Erin Hicks-Tibbles, PUC
Dylan Zwicky
Tracy Myers, PUC

1 MR. KNAUER: Good morning. This is a
2 workshop in Public Utility Commission Case No.
3 23-2220-RULE regarding the Public Utility
4 Commission's design of the potential Clean Heat
5 Standard rule.

6 My name is Tom Knauer. I'm the policy
7 director at the commission, and I've been asked to
8 lead today's workshop. Also in attendance today from
9 the commission are Chair Roisman, Commissioner Allen,
10 and multiple staff members including our Clean Heat
11 Standard team Deirdre Morris, Erin Hicks-Tibbles and
12 Tracy Myers. We are also joined by Dominic Gatti,
13 who is a clean energy innovator fellow from the U.S.
14 Department of Energy.

15 I will begin with a few administrative
16 preliminaries. First, please know that I will not
17 mute anyone's microphone. This means that you should
18 keep yourself on mute unless you're speaking. That
19 way we can minimize disruptive background noises.
20 Second, as we work through the workshop, if you would
21 like to speak, please raise your hand or use the
22 raised hand function of GoToMeeting, and I will call
23 on people in the order in which I see them. But if I
24 don't notice you or call on you, please feel free to
25 interrupt me or drop a note into the chat.

1 Third, today's workshop is being
2 transcribed by a court reporter, and a transcript of
3 today's proceeding will be available in ePUC. In
4 order for us to establish a clear record, please say
5 your name each time that you wish to speak and also
6 please refrain from talking over one another.

7 And having covered these preliminaries,
8 I would like to begin by allowing attendees who
9 intend to speak during the workshop to introduce
10 themselves for the record. And if anyone intends to
11 record today's workshop, please say so when you
12 introduce yourself.

13 So I guess I'll call on people in the
14 order that they appear on my screen, and if I miss
15 anyone, I apologize. And please feel free to
16 identify yourself at the end. So I'll start with
17 Greg Morse from Vermont Gas.

18 MR. MORSE: Good morning. I'm Greg
19 Morse from Vermont Gas. On the line today we have
20 three other members of the Vermont Gas team; Jill
21 Pfenning, who you see here. Dylan Giambatista, and
22 -- who is our last team member, Jill? Mary. Mary is
23 on board too. I'm sorry, Mary.

24 MS. BOUCHARD: Morning.

25 MR. KNAUER: I suppose this also serves

1 as a good microphone check.

2 Next I'll call on Luce Hillman.

3 MS. HILLMAN: Hi. Good morning. I'm
4 Luce Hillman. I'm with the Technical Advisory Group.
5 Do you want me -- are we going to call on next
6 people, Tom, or do you want to call on them? You
7 probably need to call on them. There is a lot.

8 MR. KNAUER: Yeah. I think just to do
9 this in an orderly way, and make sure I try to get to
10 everyone, I'll call on folks.

11 Next up will be Michelle Keller.

12 MS. KELLER: Good morning. Michelle
13 Keller also from the Technical Advisory Group. Happy
14 to be here and not planning to speak, but will do so,
15 if so inspired. Thanks, Tom.

16 MR. KNAUER: You're welcome. Emily
17 Roscoe.

18 MS. ROSCOE: Good morning. I'm here
19 with Dave Westman and Haley Roe from Efficiency
20 Vermont. And I'll give them a chance to introduce
21 themselves if that's okay, Tom.

22 MR. KNAUER: That's fine. Go ahead,
23 Dave and Haley.

24 MR. WESTMAN: Morning. Dave Westman
25 for Efficiency Vermont.

1 MS. ROE: Morning. Haley Roe from
2 Efficiency Vermont.

3 MR. KNAUER: Good morning. Next up,
4 David Hillman.

5 MR. HILLMAN: Hi. Participant. And I
6 do not plan on speaking.

7 MR. KNAUER: Okay. Thank you, and
8 welcome. Rick Weston.

9 MR. WESTON: Hi. This is Rick Weston.
10 I'm also with the Technical Advisory Group.

11 MR. KNAUER: Good morning. Geoffrey
12 Gardner.

13 MR. GARDNER: Good morning. Geoffrey
14 Gardner here. I'm a private citizen, and I will
15 speak if I have something pertinent and succinct to
16 say.

17 MR. KNAUER: Thank you. Thomas Weiss.

18 MR. WEISS: Good morning. I'm Thomas
19 Weiss. Pro se party, I guess is how I'm listed on
20 the party listing, from Montpelier. And I probably
21 will be speaking at some point today. And I'll have
22 to gently interrupt to let you know that I would like
23 to speak. I don't have the hand raising ability.

24 MR. KNAUER: Understood. Thank you.
25 Please do just let me know when you have a comment or

1 a question that you would like to make.

2 Annette Smith.

3 MS. SMITH: Annette Smith, Vermonters
4 for a Clean Environment. I will speak if I have
5 something to say today. And I am attempting to
6 record this audio recording. Thank you.

7 MR. KNAUER: Okay. Thank you. Henry
8 Mauck from the department. I apologize if I got your
9 last name wrong.

10 MR. MAUCK: That's all right. It's
11 pronounced "Mock." You're pretty close. Henry Mauck
12 from the Vermont Department of Public Service. And
13 I'm an attorney there. I'm joined by my colleagues,
14 Ben Bolaski, Brian Cotterill and Melissa Bailey
15 today.

16 MR. KNAUER: Okay. Do the other
17 members of the department wish to identify
18 themselves, or was Henry's introduction sufficient?

19 MS. BAILEY: We can move on, Tom.
20 Thanks.

21 MR. KNAUER: Okay. I have someone
22 identified as Stephanie from the Vermont Fuel
23 Dealers.

24 MS. AUSTIN: Good morning everyone.
25 Yes, Stephanie with VFDA. I do not intend on

1 speaking today, but Matt Cota will represent the
2 VFDA, if necessary.

3 MR. KNAUER: Okay. Chris Vaughn.

4 MR. VAUGHN: Good morning, everyone.
5 Chris Vaughn from Green Mountain Power.

6 MR. KNAUER: Good morning. Victoria
7 Underhill. Victoria, I can't hear you if you're
8 speaking. It might be --

9 MS. UNDERHILL: Sorry. How's that?

10 MR. KNAUER: That's great. Thank you.

11 MS. UNDERHILL: Sorry about that. Good
12 morning. My name is Victoria Underhill. I'm in
13 regulatory affairs for Irving Oil, and I won't be
14 speaking today. I'll just be listening in.

15 MR. KNAUER: Okay. Thank you. Apryl
16 McCoy.

17 MS. McCOY: Good morning. Apryl McCoy
18 for VPPSA. I will just be listening as well.
19 Thanks.

20 MR. KNAUER: Okay. Amber Widmayer.

21 MS. WIDMAYER: Good morning. Amber
22 Widmayer for BED. Not planning on speaking, unless
23 necessary.

24 MR. KNAUER: Okay. Thank you. Matt
25 Cota, do you wish to introduce yourself?

1 MR. COTA: Yeah, hi. Matt Cota, with
2 Meadow Hill representing the Heating and Cooling
3 Contractors of Vermont; Northeast Hearth, Patio and
4 Barbecue Association; and the Vermont Fuel Dealers
5 Association. I work for a company called Meadow
6 Hill. I also serve on the Equity Advisory Group and
7 the Technical Advisory Group for the CHS.

8 MR. KNAUER: Welcome. Sarah Braese.

9 MS. BRAESE: Good morning. Sarah
10 Braese with VPPSA. Just planning to listen in today.
11 Thank you.

12 MR. KNAUER: Okay. And Emma Ardington.
13 Emma, if you're speaking, we can't hear you. Emma,
14 if you have a chat functionality, and you wish to
15 participate at some point, please let us know.
16 Otherwise, you might need to change microphone
17 settings on GoToMeeting.

18 So that's everyone. Have I missed
19 anyone?

20 (No response)

21 MR. KNAUER: Okay. Moving along. The
22 purpose of today's workshop is to discuss the topic
23 of Clean Heat credit ownership, specifically the
24 establishment of a standard methodology for
25 determining who will own a Clean Heat credit upon its

1 creation pursuant to Section 8127(b) of Title 30.

2 The commission requested participants
3 to file written comments on this topic by December 8
4 of this year, and we received written comments from
5 Vermont Electric Co-op, Burlington Electric
6 Department, the Department of Public Service,
7 Efficiency Vermont, Green Mountain Power, Mr. Weiss,
8 the Vermont Fuel Dealers Association, and the Heating
9 and Cooling Contractors of Vermont, Global Partners,
10 and Vermont Gas.

11 So my plan for this workshop is to ask
12 questions based on my review of those written
13 filings. And I suspect that my colleagues at the
14 commission may have additional questions as may the
15 workshop participants. So before I jump to my
16 questions, and I do hope that my questions will
17 prompt discussion among all the participants, but
18 before we jump in, does anyone have any questions on
19 this approach to this workshop?

20 (No response)

21 MR. KNAUER: Seeing none, I will jump
22 right in. And I'm going to -- this is in no
23 particular order except for the order in which I
24 reviewed the comments as they appeared to me in ePUC.

25 So first would be Vermont Electric

1 Co-op who in their comments said that they support
2 GMP's suggestion that in the case of a customer
3 action, the creation of the credit may begin with the
4 customer who could then offer all or a portion of the
5 credit to other entities in exchange for services,
6 equipment or incentives.

7 And Vermont Electric Co-op also
8 supported BED's comment that the methodology should
9 ensure that a utility who implements a Tier III
10 measure will continue to receive full Tier III credit
11 for that measure.

12 So here's a question for all
13 participants or all participants who have an opinion
14 on this. Does anyone believe that the passage of Act
15 18 or any of the language in the Act creates an
16 expectation that existing ownership constructs will
17 be changed? In other words, using the Tier III
18 example, if under, you know, existing ownership
19 constructs VEC would be able to claim full credit for
20 the Tier III savings associated with providing an
21 incentive for a thermal measure, like a heat pump or
22 weatherization, does Act 18 call for a change in that
23 ownership expectation, all else being equal?

24 Anyone wish to respond to that
25 question?

1 MR. KNAUER: Amber.

2 MS. WIDMAYER: I can jump in. No, I
3 don't believe there is any understanding that it
4 would change the construct. We just wanted to put
5 that out there to make sure in case there was a
6 discussion.

7 MR. KNAUER: And Dave Westman, I see
8 your hand is raised.

9 MR. WESTMAN: Thanks, Tom. I think I
10 agree with Amber, and others in this proceeding have
11 made the comment that existing structures for EEU
12 energy efficiency savings or distribution utility
13 Tier III savings are really important and existing
14 programs that are being implemented today.

15 And we have built programs and
16 structures and collaborations around that under the
17 current scenario. And I think as we pull on the
18 thread of ownership of credits, you know, our
19 perspective is that any rules that come out of the
20 Clean Heat Standard or Clean Heat credit formation
21 should not impair the EEU or the DU ability to claim
22 savings under its current structures and regulations.

23 And so that's a -- it's more of a
24 principle of do no harm to the current process that
25 we will be looking to maintain, because I do not

1 believe and I don't think anyone here would suggest
2 otherwise, that Act 18 somehow changes our current
3 regulations for these programs. It's more of a
4 principle that we wish to express, first and
5 foremost, that anything that comes out of the Clean
6 Heat rule ought not to interfere with either the
7 Efficiency Vermont ability to claim savings under its
8 current regulations.

9 MR. KNAUER: Mr. Weiss, looks like you
10 have unmuted. Do you have something to add here?

11 MR. WEISS: I have unmuted. I believe
12 that the Act creates a, I guess, a parallel track so
13 that when a measure gets installed, and it's eligible
14 for Tier III it would be recorded under Tier III.
15 But if the measure would also qualify as a thermal
16 heat measure under this program, the standard that we
17 are trying to develop, then the ownership of the
18 thermal heat credit would be determined separately
19 from the ownership of the Tier III credit.

20 I think that the Act requires a
21 parallel tracking system so that it would not change
22 the ownership of the Tier III credit, but it would
23 set up a parallel path for ownership under the
24 thermal heat standard.

25 MR. KNAUER: Jill Pfenning from Vermont

1 Gas.

2 MS. PFENNING: Thanks. Good morning.
3 We just wanted to note that we agree that the Clean
4 Heat Standard credit system would not disrupt
5 existing credit structures such as the Tier III
6 program. But at the same time, we just want to
7 reiterate, as we said in our comments, that it's our
8 position that additional incremental investment is
9 needed to sort of activate the Clean Heat credits
10 such that existing incentives that are put into --
11 into measures such as Tier III would not necessarily
12 entitle the owner to the Clean Heat credit, but that
13 additional incremental investment will be brought to
14 bear in order to determine Clean Heat credit
15 ownership.

16 But all of that to say -- to answer
17 your question directly, we agree with VEC that
18 existing ownership constructs would not change.

19 MR. KNAUER: Okay. Thank you. And I
20 do have questions that I'll get to later with respect
21 to the Vermont Gas filing.

22 MR. WEISS: Thomas Weiss again.

23 MR. KNAUER: Yes.

24 MR. WEISS: Could you have the previous
25 speaker explain what is meant by incremental

1 investment? I understand the words, but I don't
2 understand how it would be applied here.

3 MR. KNAUER: Jill, are you prepared to
4 respond to that?

5 MS. PFENNING: Sure. And actually I do
6 have a question. This does raise a sort of
7 procedural question about questions being asked
8 between or among participants.

9 So Tom, is that something that would go
10 through you? Or is it conceived of that questions we
11 ask directly between participants?

12 MR. KNAUER: You know this -- I view
13 this as much a dialogue among participants as it is,
14 you know, the commission directing questions. So I
15 personally don't mind if someone on the call has a
16 question based on something that is said by a
17 participant today or based on their review of
18 someone's filing. You know, that's how I view a
19 workshop is really an open dialogue as opposed to
20 when we have more formal hearings, it's more of a
21 structured approach.

22 MS. PFENNING: Thanks. So to answer
23 the question, I think when we talk about additional
24 incremental investment it relates to the idea that is
25 presented in the Act itself that the stacking of

1 credits is allowed.

2 So to the extent that a Clean Heat
3 measure comes into existence as part of an existing
4 program, like Tier III or energy efficiency, that
5 credits can stack on top of the existing credits and
6 that goes back to what we said earlier and what we
7 have been discussing per your question related to
8 the idea that it sort of sits on top of existing
9 programs.

10 In order for that to be the case, it's
11 our position that additional incentive money or other
12 subsidization be brought to bear in order to
13 determine Clean Heat credit ownership. And that's
14 so, for example, if there were a Tier III measure
15 that was carried out, by let's say BED in our service
16 territory, and we also contributed an incentive to
17 that, then the understanding would be that the
18 additional investment on top of what investment had
19 already been made would be what determines the Clean
20 Heat credit and to whom it pertains.

21 MR. KNAUER: Thank you. I see Dave
22 Westman has raised his hand as has Annette Smith. So
23 we will go in that order.

24 MR. WESTMAN: Thanks, Tom. I actually
25 have a follow-up question for Jill. So Jill, in that

1 situation where an existing program provider is
2 offering a financial incentive, is the anticipation
3 that that entity continues to provide the incentive,
4 while the Clean Heat credit is awarded to the
5 incremental financial incentive?

6 MS. PFENNING: I think -- can you
7 restate that question, Dave? I'm not sure I totally
8 understand what you're asking.

9 MR. WESTMAN: If the efficiency utility
10 is providing an existing incentive, that would
11 qualify the efficiency utility to then claim an
12 energy efficiency savings, let's call it an MMBTU
13 reduction. And then the additional party comes in
14 and offers an additional incentive, so let's say we
15 are offering a hundred dollars and the additional
16 incentive is 50 dollars. The total incentive is now
17 150 dollars.

18 Is it anticipated that the efficiency
19 utility continues to offer the incentive -- the same
20 incentive that it has historically, or, you know, in
21 absence of the Clean Heat Standard? Just trying to
22 understand the budget ramifications for this.

23 Because offering incentives today to
24 claim savings off of our evaluation criteria and our
25 market characteristics and our budget is a really

1 complicated process. And if a third party comes in
2 with a new incentive amount, we may not be able to
3 afford the same offer. And so where we are sort of
4 struggling with this comment is that if the point of
5 the Clean Heat Standard is to increase the total
6 number of projects and the total number of Clean Heat
7 measures that are being installed, you know, in order
8 for the EEU to offer the same incentive it needs to
9 have additional funds to support that, because there
10 is supposed to be more measures being implemented.

11 So my question is, back to this
12 question, is that comment made by VGS in the comments
13 based on the assumption that the EEUs will continue
14 to offer the same incentive amount on top of what the
15 incremental incentive would be?

16 MS. PFENNING: Thanks for the
17 clarification. If I understand your question
18 correctly, I think that the continued investment by
19 the EEU is sort of irrelevant to the question of
20 Clean Heat credits. I mean I think that those
21 programs will run in parallel, as other commenters
22 have noted, and we, you know, also VGS also operates
23 as an Energy Efficiency Utility as well. So my
24 understanding is that, you know, we -- I can speak
25 for us, I can't say for other EEUs, but that we would

1 continue to bring incentives to bear for the program
2 itself or the EEU program itself which are separate
3 and different from the Clean Heat program.

4 MR. WESTMAN: Thanks, Jill.

5 MR. KNAUER: Do you understand the
6 response and did that -- did that help to clarify
7 Vermont Gas's position?

8 MR. WESTMAN: It does. But I think,
9 you know, we will address this in reply comments.
10 But I think our point on this matter is that a lot of
11 Clean Heat measures are efficiency measures. And so
12 if the intent of the Clean Heat Standard is to
13 increase the total number of those measures that are
14 being installed, then that means that there will be
15 more money needed to offer financial incentives.
16 These measures don't just sell themselves. If they
17 did, then we wouldn't have needed the Clean Heat
18 Standard to begin with.

19 The point of the Clean Heat Standard is
20 to increase the total number of projects. And so in
21 order to do that, you know, we are talking about
22 providing higher incentive amounts to get more people
23 interested in these measures, to get them to purchase
24 them. You have EEU standards -- I'm sorry -- EEU
25 incentives stack on Tier III incentives, and now we

1 will have Clean Heat incentives. Presumably that
2 means that there will be, you know, X number of
3 greater measures being sold in the market and
4 installed in people's homes and businesses.

5 And that means that all of these
6 participants will need to come up with the additional
7 revenues to support that.

8 MR. KNAUER: Okay. Matt, I see you
9 waving at me. I had Annette Smith going first. Is
10 your question or your point related to the last
11 couple comments from Vermont Gas and Efficiency
12 Vermont?

13 MS. SMITH: It is, but let Matt go
14 ahead, and then I'll follow him.

15 MR. KNAUER: Thank you.

16 MR. COTA: I just wanted to -- thank
17 you, Tom. I just wanted to gently push back on what
18 Dave Westman just said. There will be credits
19 generated with no incentives, that will not go
20 through the EEU, that do not qualify for Tier III.
21 That's how the law is set up, and that's how
22 obligated parties will avoid the disincentive of
23 making an alternative compliance payment to a DDA.

24 In fact, we could create -- it's
25 possible, was intended, if we want to just create an

1 expanded Tier III program to include the heating fuel
2 sellers, they would have done that. They did not do
3 that. Instead what we have is this Clean Heat
4 Standard in which fuel companies, importers of fossil
5 fuels, are incentivized to avoid an alternative
6 compliance payment, to avoid any payment at all to
7 the delivery agent, by doing things that reduce
8 greenhouse gas emissions in the products that they
9 deliver, and in doing so, may not need any incentives
10 at all and may not need a DDA at all. That's what we
11 set up. That's what the legislature approved.

12 MR. KNAUER: Thank you, Matt. Annette
13 Smith.

14 MS. SMITH: So I would like to play
15 dummy here. I -- sort of representing the average
16 Vermonter/consumer perspective. I find this all very
17 confusing. And so I wonder if someone could simplify
18 this.

19 If a Clean Heat credit is generated
20 that is also claimed for Tier III, how -- what is
21 that interaction, which I gather is allowed by the
22 legislation, but some people use the term double
23 counting. And I'm hearing this idea of additionality
24 added to this.

25 So could someone please put this in

1 plain language what is required or allowed in the
2 legislation? And what the interaction is between
3 Tier III and the Clean Heat credits?

4 MR. KNAUER: I think that's an
5 excellent question. I don't have the answer,
6 Annette. That's what we are going to try to figure
7 out in the next year.

8 But if anyone here would like to offer
9 their take on that, great question. Please do so.
10 And, Matt, I see you've lit up.

11 MR. COTA: So thank you, Tom, and thank
12 you, Annette, for that question. Yeah. We brought
13 this up during the legislative process both during
14 the failed Clean Heat Standard and the successful
15 Clean Heat Standard, which is this is, in fact,
16 double counting. A single measure could count for
17 both regulatory programs.

18 A heat pump is installed. And GMP or
19 some utility could get credit or the efficiency
20 utility could get credit for that installation. But
21 you could also get credit under a Clean Heat Standard
22 for the exact same pieces of equipment. Who gets
23 credit, whether it's the efficiency utility which
24 bought down the cost of that heat pump at the
25 wholesale supplier, or it's the utility which

1 advertised the fact that these resources are
2 available and offered some more of their own, or
3 whether it's the actual individual, the heating and
4 cooling contractor or the fuel dealer that went into
5 the home and actually did the work, or the home owner
6 that ended up paying for the balance after the
7 rebates and incentives. That all needs to be
8 decided.

9 And clearly, there is some double
10 counting that the legislature allowed. But we also
11 think that there is some value both to the consumer
12 and the installer that does the work and them being
13 able to claim credit and monetize that.

14 MR. WESTMAN: I'm going to also take a
15 stab at this because I think it's a really important
16 question, Annette, so thank you for asking it. In
17 the interest of sort of keeping that framework in
18 mind, I don't disagree with anything that Matt just
19 characterized it as. I think of it as the -- going
20 back to the responsibility that the Public Utility
21 Commission is being handed a new market, and they are
22 charged with identifying the total number of credits
23 that need to be generated in a given year. And
24 again, those credits are proxies for emission
25 reductions. And those credits are supposed to be

1 generated in proportion to the Global Warming
2 Solutions Act requirements in proportion to the
3 thermal sector.

4 So it's a very technical requirement
5 that we haven't talked about in this ownership
6 context. But ultimately, the PUC is charged with
7 quantifying the number of emission reductions that
8 the thermal sector is intended to generate, and that
9 all programs, projects, that are currently funded
10 count towards those thermal emission reductions.

11 And the idea of the market is that the
12 needed number of credits is effectively larger than
13 what the current projects that are in place today
14 would generate.

15 In other words, the sum of the EEU and
16 DU thermal projects are not equal to all of the Clean
17 Heat credits needed to meet this requirement. And
18 that is a lot of interrelated parts of this
19 rulemaking process that we haven't gotten to yet.
20 But I think it's a really important point because
21 that's the space that we are dealing with, is that
22 the sum of the projects that would have happened
23 without the Clean Heat market is effectively lower
24 than what the total credits needed would be.

25 MR. KNAUER: And Melissa, I saw that

1 you had your hand up.

2 MS. BAILEY: I don't know whether this
3 will clarify. I agree with what Dave said and Matt's
4 explanation. I think to the point of double counting
5 the legislature was explicit that credits could count
6 under both the existing programs such as Tier III and
7 the Clean Heat Standard.

8 Conceptually we think of Clean Heat
9 Standard as an umbrella that sits over all of those
10 other programs, and I think to what Dave kind of
11 accurately characterized, we know there is an
12 increment of additional work that would be required
13 to meet the Global Warming Solutions Act proportional
14 emissions reductions from the thermal sector, and
15 really the Clean Heat Standard needs to be designed
16 to accomplish that additional increment of work as a
17 starting point.

18 The Department's view is that that
19 additional work, beyond what would be accomplished
20 anyway, is what will need to be funded by the
21 obligated parties in potentially generating
22 additional credits beyond what's already happening
23 through existing programs, state funded, ratepayer
24 funded, federally funded programs.

25 MR. KNAUER: Thank you. Annette, did

1 that help you to kind of frame the question that we
2 are trying to answer?

3 MS. SMITH: Sort of. I still think
4 it's confusing in the interaction between the two. I
5 mean I guess as I was following what the legislature
6 was doing one of the things I wondered was why Tier
7 III was -- for these Clean Heat measures was being
8 continued at all.

9 So I guess I'm still confused, and I'll
10 look for this process to clarify it. I'll leave it
11 at that.

12 MR. KNAUER: All right. Thank you. So
13 I'm going to move along to my next question. And
14 this is based on Burlington Electric's filing.

15 BED suggests that initial ownership
16 should be based on causation with the entity that
17 took the most significant action to cause the measure
18 to be installed to be the initial owner.

19 So I wanted to dig into that suggestion
20 a bit. How would we, the commission, or maybe the
21 department in its verification work, how would we
22 determine -- what is the standard for determining who
23 took the most significant action?

24 MS. WIDMAYER: So that comment was less
25 meant to be instructive on how to set things up, and

1 more just documenting how things are currently done
2 with Tier III. I think the point was -- I think we
3 were trying to distinguish is -- if a credit was in a
4 tradable market versus not and who the ownership
5 would be.

6 But I understand the confusion that the
7 significant language raises. I don't think we were
8 proposing any new system, just documenting what's
9 already there.

10 MR. KNAUER: All right. And just so we
11 are kind of setting a level playing field, can you
12 take a minute to describe what exists today with
13 respect to establishing causation and ownership of --
14 you know, there is no standard today where credits
15 are claimed other than, you know, like achieving
16 savings in either the efficiency or the Tier III
17 world.

18 MS. WIDMAYER: I don't directly do the
19 reporting for our Tier III program. May need to
20 borrow somebody else's expertise on this.

21 MR. KNAUER: Would it be a fair
22 characterization that the distribution utilities and
23 the efficiency utilities come to agreement, you know,
24 if each entity is putting up, you know, \$200, for
25 example, for a measure that would be creditable, they

1 would essentially equally share savings claims?

2 MS. WIDMAYER: I believe that's a fair
3 characterization.

4 MR. KNAUER: Okay. And so here's a
5 general question -- oh, I see someone has raised
6 their hand. Melissa. Please go ahead.

7 MS. BAILEY: Tom, I'm actually -- I
8 think I want to clarify that. My understanding of
9 the Tier III DU and EEU interaction is that the EEU's
10 claim a different set of savings than the DUs under
11 Tier III. And I just want to clarify that. And the
12 efficiency utilities can speak up if that's not
13 completely accurate. But my understanding right now
14 is that Tier III programs the DUs are claiming the
15 fossil fuel savings, and the electric efficiency
16 utilities are claiming electric savings.

17 So I just want to be explicit on the
18 point of shared savings. I don't believe there are
19 thermal measures or there are shared savings. I know
20 that that's really in the weeds, but I think it's
21 important that we all be pretty clear on that.

22 MR. KNAUER: For the record, Sarah
23 Braese gave the thumbs up. I don't think the
24 transcript can see that, so I just had to report that
25 for the record.

1 Go ahead, Dave.

2 MR. WESTMAN: Thanks, Tom. Yeah.

3 Melissa's characterization is correct. That in a --
4 9 times out of 10, the efficiency utility pays an
5 incentive out of the electric EEC budget for improved
6 electric efficiency of heat pumps. And the
7 distribution utilities pay for an additional
8 incentive on top of that to compel the customer to
9 make the fuel switch. And that's the thermal --
10 that's the thermal efficiency savings.

11 And all of that right now is dealt with
12 in one single incentive to the customer. So the
13 customer does not see that differentiation. They
14 don't need to see that differentiation, but we know
15 it's there, and we account for it in our final
16 reporting. So the distribution utilities claim the
17 thermal savings as their Tier III credit, and the
18 efficiency utility claims the electric savings
19 towards their megawatthour efficiency targets.
20 That's how Efficiency Vermont does it with our
21 utility partners.

22 There is a couple utilities that have
23 started to change their tact on that, and so I think
24 it's worth noting that where utilities are not
25 putting in Tier III funds for thermal conversions,

1 the efficiency utility is stepping in and doing that
2 with our thermal budget.

3 So it's not a -- it's not a universal
4 thing that happens. It's more of a by-utility
5 practice at this point.

6 MS. BAILEY: And just really quickly on
7 that. I only bring that up because I do think early
8 on in the Tier III construct there was discussion of
9 essentially proportional savings flowing with dollars
10 and having a 60/40 split or a 50/50 split. I think
11 the department doesn't see that as a desirable
12 outcome for credit.

13 I think credit splitting and sharing
14 gets really complicated really quickly and probably
15 is not -- would not be our preference when we get to
16 credit ownership, essentially having a methodology
17 that splits savings according to dollars invested.

18 MR. KNAUER: I just want to make sure I
19 understand that last point. The Department's
20 preference would be to not have credit sharing based
21 on dollars put into an incentive?

22 MS. BAILEY: We are concerned about the
23 complexity and changing incentive levels and needing
24 to have agreements between parties. I think that's
25 probably -- that's certainly not our first preference

1 for credit -- credit sharing.

2 Essentially, I think credit sharing
3 should be avoided. Again, Tier III credits can be
4 applied to both, which I don't see as credit sharing.
5 I see that as essentially both entities claiming
6 credit.

7 But I think the proportional credit
8 sharing model is going to be -- face challenges.

9 MR. WEISS: This is Thomas Weiss.

10 MR. KNAUER: Go ahead, Mr. Weiss.

11 MR. WEISS: I think that the
12 complexities of trying to decide who is the single
13 owner of all the credits when there were multiple
14 parties making investments, are also there. And I
15 think on -- the statute allows multiple owners. And
16 I think that it would be better to allow multiple
17 owners rather than trying to figure out who, with a
18 small investment, gets all of the credits. That's my
19 comment.

20 MR. KNAUER: Thank you. Matt Cota, I
21 see that you've raised your hand.

22 MR. COTA: I mean I'm just reiterating
23 what a lot of people are already saying or what is
24 not being said, which is this is really the
25 existential question for the CHS. Who owns these

1 credits?

2 I can understand why an electric
3 utility would want to count, if they spend money and
4 want to use it to get Tier III credits, they also
5 want Clean Heat credits, because there is a monetary
6 value to that. Some obligated party is going to have
7 to buy that. The efficiency utility wants to do that
8 on behalf of the heating/cooling contractors who are
9 installing them, actually doing the work, they are
10 going to want all the credit. The consumer's going
11 to want some of the credit. The heating company
12 that's installing these are going to want some of the
13 credit.

14 This really needs to be resolved going
15 forward, particularly because we are already claiming
16 credits. There was a filing we received already in
17 the hands of installers, our early action credit
18 forms. And work that was done 11 and-a-half months
19 ago, they are now counting credits. Who owns them?
20 That's really fundamental to determine whether or not
21 this policy can even go forward. I'm just
22 highlighting, I think, what everyone else is
23 thinking.

24 MR. KNAUER: Thank you. Luce Hillman.

25 MS. HILLMAN: Yes. I just want to add

1 to what Matt is saying. We are talking about dealers
2 and utility companies, but I just want to bring out
3 the university, the state universities, the
4 hospitals. How is this all going to work for our
5 very large users? Are they going to be able to keep
6 their credits and use it to reduce their impact for
7 greenhouse gas emissions without having to go through
8 a third party?

9 I'm just saying that needs to be
10 discussed also, especially since the University of
11 Vermont is one of the largest Vermont Gas users in
12 the state, along with, you know, manufacturing, and
13 ski areas not as much, but some impact there, too.

14 MR. KNAUER: So I had a question about
15 -- that's related to this. So currently we have got
16 electric utilities providing Tier III projects,
17 efficiency utilities also doing thermal projects.
18 I'm wondering, and we have heard comments today, and
19 there were comments in the written filings suggesting
20 that those entities who are implementing those
21 projects now would have some ownership rights to the
22 eventual Clean Heat credits.

23 And I'm wondering does anything need to
24 change in order to implement that ownership
25 construct? In other words, customer agreements. Do

1 those need to now make clear, and this kind of
2 relates to Luce's comment from a minute ago. Right
3 now, it's probably ambiguous. Does the customer get
4 credit for the project done at their building, or
5 does the efficiency utility, or does the electric
6 utility?

7 So do we need to -- practitioners need
8 to clarify in customer agreements, scope of work, et
9 cetera, who has the legal right to those Clean Heat
10 credits? So that's a question to everyone. And
11 Matt, you're first.

12 MR. COTA: Tom, I want to just -- I
13 appreciate what you're doing but -- and I appreciate
14 the world the PUC is living, but I'm living in the
15 world of heating contractors. People in vans that go
16 into homes install Clean Heat measures. And they are
17 going to claim -- and there are hundreds of them.
18 And they are going to be the ones that claim these
19 credits. And they are going to be the ones that are
20 going to battle with the EEU's and the electric
21 utilities over who gets those credits.

22 So it's not just the regulated world,
23 the currently regulated world, that is going to claim
24 these credits. They could be vastly outnumbered by
25 the legions of men and women out doing the work now

1 that are going to be claiming these credits. So
2 don't forget about them. Because there are many.

3 MR. KNAUER: Absolutely. Yeah. I
4 think that's what we are trying to do is clarify now
5 is it the person doing the work? Is it the customer?
6 Is it anyone who is offering a financial incentive?
7 That's exactly what we are trying to clarify.

8 And I think it behooves us all, both in
9 terms of writing a rule and avoiding, you know, a
10 fight, you know, a year from now, when someone's --
11 or two years from now when someone's trying to, you
12 know, make a claim on ownership. You know, let's
13 clarify as soon as we can as these projects are
14 completed.

15 Dave, I saw you raised your hand.

16 MR. WESTMAN: Thanks, Tom. Yeah, I
17 wanted to just allude to the comments that we
18 provided -- sorry -- I wanted to refer to the
19 comments that we provided last week which allude to
20 the but-for test that the efficiency utilities are
21 subject to generally which is, for those not
22 familiar, would the project take place but for the
23 intervention of the efficiency utility?

24 And generally speaking, we follow a
25 general guideline that those projects can be measured

1 in and verified by determining whether or not the
2 financial incentives or the -- which is honestly the
3 most common form, or the direct install of the
4 measure would have happened without the intervention
5 of the efficiency utility.

6 And so that is basically why, at least
7 for the EEU, our standard for -- our standard under
8 the but-for test tends to be a financial one. Did
9 the incentive have an impact on the consumer's
10 willingness to purchase the efficiency measure? If
11 that is not an applicable point of measurement for
12 the Clean Heat Standard, then I would like to sort of
13 hear what are other parties think would be.

14 But otherwise, I think it's an
15 important -- I think it's an important characteristic
16 for us to recognize what does it mean for the project
17 to be completed? Would it have been completed in the
18 absence of an individual party? And who gets the
19 credit on the basis of that?

20 And so I understand Matt's point
21 completely. And I've read the legislation, and I
22 completely understand that that's what the
23 legislation says. I am pointing -- I'm raising my
24 hand to sort of point out that an installer who are,
25 you know, as Matt said, hundreds of them in the

1 state, any hundred installers could install a heat
2 pump in the state, but would that heat pump have been
3 installed but for the generous incentive packages
4 that are available in the state.

5 And so that is why the efficiency
6 utility claims efficiency credits is because we give
7 incentives for the electric efficiency. That heat
8 pump would be less efficient if it were not for that
9 incentive. And that's sort of the basis for all of
10 this. And if there is going to be an alternative
11 mechanism out there, I think we need to talk about
12 it.

13 MR. KNAUER: Okay. Matt, you had your
14 hand up. And then Melissa.

15 MR. COTA: Yeah. I understand Dave's
16 point. The generous incentive is what has changed
17 the marketplace. Absolutely. But if we are not
18 there putting them in, they do not go in. Efficiency
19 Vermont does not do that work. Electric utilities do
20 not do that work. It's us. So we think the but for
21 is us.

22 MR. KNAUER: Melissa, did you still
23 have something to say?

24 MS. BAILEY: Just cautioning against
25 the complexity of the but for. I mean can I agree

1 with Dave and Matt; right? Like yes, both entities
2 are doing important work here, and do we want to go
3 down that path of trying to decide who the sole
4 entity that caused the customer; right? We are
5 trying to assign causality to installing these
6 measures. Do we want to say that came because the
7 obligated entity was in the customer's home and
8 recommended a certain technology versus an incentive
9 that was given when both are important in making that
10 decision?

11 I guess what we are skirting around, I
12 think, is what if both entities claim the credit.
13 And I guess I wonder if Efficiency Vermont and, you
14 know, Meadow Hill have a position on that. What if
15 the obligated entity claims that Clean Heat credit
16 and the either DU or EEU continues to claim the
17 credit under their existing paradigm and there are,
18 you know, program requirements.

19 I think that's, again, we came to this,
20 you know, workshop with an open mind and wanting to
21 understand different perspectives, but I think that's
22 the kind of straw proposal where we are with
23 attribution and ownership at this point.

24 Anyway, I hope I can put that back to
25 Matt and Dave.

1 MR. KNAUER: Yeah. Matt, go ahead.
2 And then Annette Smith has also raised her hand.

3 MR. COTA: I think that's clearly part
4 of the negotiation. But for us showing up to do the
5 work, the equipment doesn't get installed. So -- and
6 but for us getting credit for it, there is less
7 incentive to do such.

8 So I think reasonable people would come
9 to an accommodation to recognize that that is the
10 negotiation.

11 MR. KNAUER: Annette Smith. And then
12 Dave Westman.

13 MS. SMITH: But for the consumer who
14 pays for it. So as a consumer wouldn't I want to own
15 the credit? Just asking.

16 MR. KNAUER: Go ahead, Dave. And then
17 it looks like Matt after Dave.

18 MR. WESTMAN: I do think Annette's
19 point is well taken by Efficiency Vermont. I saw
20 similar comments filed by GMP which is that the
21 customer is the one paying for this. The installer
22 is being paid for the services rendered. In this
23 case the installer is being paid to install that heat
24 pump. So if the installer wants to install the heat
25 pump for the consumer at no price, 100 percent those

1 credits are yours. But if the consumer is involved
2 in a financial transaction, then the customer is
3 paying for that.

4 And so our point of view would be that,
5 you know, the customer paying for the project is
6 entitled to all energy and environmental attributes.
7 That is why in our efficiency agreements with
8 customers and installers, where a midstream incentive
9 is offered, acceptance of those incentives is
10 contingent upon the signing over of all energy and
11 environmental attributes to Efficiency Vermont, which
12 we then use as our savings claim in the efficiency
13 savings -- annual efficiency savings claim or the
14 forward capacity market at the ISO.

15 So, you know, without that signing over
16 of the attributes, we don't have claim on it because
17 the customer paid for the project. Yes, we put an
18 incentive forward, but they can always say no to that
19 incentive. And that's fine. We are happy to not
20 give an incentive to a project if there is a Clean
21 Heat credit that wants to be wholly assigned to
22 someone else.

23 But, you know, the point that we are
24 sort of raising there is that as long as that
25 financial incentive is on the table, this -- this

1 issue will sort of remain. And I don't have a clear
2 answer to it. This is something we are struggling
3 with internally as well.

4 MR. WEISS: This is Thomas Weiss. I
5 would like to get into the queue.

6 MR. KNAUER: Yes. Go ahead, Mr. Weiss.

7 MR. WEISS: I would like to share my
8 experience with my hot water heat pump. I installed
9 it a number of years ago, eight or nine, I think.
10 And I did not get -- the price was reduced because
11 the company that I -- or the distributor that I
12 bought it from got the credit. And I was not even
13 informed of the potential that if I turned down the
14 credit that I could have ownership of it.

15 And the other point is that the credit
16 was not a but-for situation. It was an incentive
17 that made the cost a little less, but the incentive
18 was not the driving force for my installing the heat
19 pump.

20 And in my particular case, the heat
21 pump has been leaking refrigerant since I bought it.
22 So that would get factored into I guess the -- the
23 other part -- another part of this program which
24 determines how much credit an installation would get
25 and what is the lifetime of the credit. It's leaking

1 refrigerant; lifetime would be much shorter.

2 And I have had to have it recharged
3 twice since I bought it. So the incentive -- having
4 a small incentive doesn't create a project, in many
5 cases, from my experience and with other people that
6 I know who have installed these. So I think claiming
7 a hundred percent of the credit for a small incentive
8 is inappropriate.

9 MR. KNAUER: Thank you, Mr. Weiss. I
10 think you've made two points that go to kind of the
11 Technical Advisory Group and the eventual Technical
12 Reference Manual. One would be kind of the net-to-
13 gross factor that would be applied to most or all of
14 the measures. And the other is -- yeah, the
15 persistence of those measures. Make sure the
16 lifetime is well understood.

17 Unfortunately, I have shared your
18 experience with the heat pump water heater leaking
19 refrigerant. I see Matt Cota has his hand raised.
20 Then Melissa Bailey. And then I think Jill as well.
21 We will go in that order.

22 MR. COTA: Yeah. And I don't mean to
23 harp on this, but I will bring it up repeatedly which
24 is to say, yes, the legislature allowed double
25 counting, allowed the EEU when we are talking about

1 heat pumps, but remember, the CHS is not just about
2 heat pumps. It's not an electrification program.
3 It's about thermal measures that reduce greenhouse
4 gas emissions. And some of those will have nothing
5 to do with an electric utility or an EEU or any of
6 the regulated entities the PUC is familiar with.

7 It will involve sustainably sourced
8 biofuels, biomass, gaseous fuels, and biodiesel and
9 renewable diesel. And that will be completely
10 outside of the universe of Tier III or what you've
11 done so far in the PUC. And those shouldn't not be
12 -- because we are so focused on who gets credit for
13 advertising the heat pump, for giving out a rebate,
14 for installing the heat pump, for buying the heat
15 pump, all those need to be sorted out, but that's
16 just a small slice of what the Clean Heat Standard
17 is.

18 I know it's an important slice for
19 those that sell electrons, but for those of us that
20 help customers stay warm, there is a much bigger pie
21 that we need to look at. And that is going to have
22 nothing to do with the DDA, the EEU, or any entity
23 that the PUC has currently or ever dealt with.

24 So I don't want to lose that when we
25 talk about Clean Heat credit ownership, because we do

1 need focus on that as well. Because that will be a
2 majority, in our opinion, of how obligated entities
3 comply with the Clean Heat Standard.

4 MR. KNAUER: I do have some questions
5 later on about biofuels and credit ownership for
6 those. So we will absolutely turn there eventually.

7 Next up. Melissa, I think you had your
8 hand up.

9 MS. BAILEY: Yeah, thanks. And Matt, I
10 think that's a good point. I think we are probably
11 focused on the existing programs because that's where
12 there is likely to be the most tension around credit
13 ownership; right? But it's a good point that
14 whatever ownership methodology is agreed on, it
15 probably should apply to things that overlap with
16 existing programs as well as things that don't.

17 I just -- I appreciate Ms. Smith's, you
18 know, bringing it back to the customer perspective
19 multiple times and just want to make the point,
20 right, that I think we all share that avoiding
21 customer confusion should be one of the top goals in
22 establishing this methodology.

23 And, Tom, I think you started the
24 question off with, like, customer agreements. And
25 probably goes without saying, I'll say it anyway,

1 like, a really bad outcome would be having dueling
2 customer agreements where the customer is signing an
3 agreement with their installer and then also signing
4 an agreement with an efficiency provider, potentially
5 unbeknownst to the customer they are signing over the
6 attributes or the credits in both agreements. We
7 really just want to avoid that kind of outcome.

8 And I think it's undesirable to have a
9 system where we have fighting over these credits
10 essentially. So just wanted to bring it back to the
11 customer experience. So thanks.

12 MR. KNAUER: Jill Pfenning.

13 MS. PFENNING: Thanks, Tom. I guess I
14 just wanted to return to your original question which
15 was around whether -- and Melissa's point -- whether
16 customer agreements will need to change. And I think
17 the answer to that question is yes, because this
18 program does create an additional layer on top of
19 existing programs. I think that's what we have been
20 talking about for most the workshop so far.

21 That being said, I think also this
22 question and the discussion that has ensued in the
23 last couple of minutes is really quite complex. But
24 I think that the charge in the law is for, you know,
25 the commission in consultation with the TAG to

1 determine who owns the credit upon creation. And as
2 it relates to installed measures, in our comments, we
3 discussed that the credit upon creation rests with
4 the customer.

5 And then subsequently, and I think
6 other commenters agreed with that as well,
7 subsequently then that can be determined through
8 agreement as to who else, you know, may be able to
9 claim ownership of that credit.

10 So I think there is sort of a narrow
11 question before the commission and the TAG which is
12 determining where the credit originates. And then
13 subsequent to that, you know, person with the
14 comments that Dave made as well, that that will be
15 addressed through agreements with the customer at
16 least as it relates to installed measures.

17 MR. KNAUER: Thank you. Did anyone
18 else have a comment here? Dave Westman, I see your
19 hand is up.

20 MR. WESTMAN: Yeah. Two points.
21 Thanks, Tom. First, I agree with Melissa. Nobody
22 wants to have disagreements and ownership battles
23 over these credits. We all want to work in the same
24 space. We want to create more Clean Heat measures.
25 And, you know, we raise these issues not to be

1 problematic but to be aware of what the current
2 environment and situations are so that we can
3 navigate them.

4 You know, we filed clarification
5 comments in this round as well, speaking to our MOUs
6 with distribution utilities. This is an already very
7 complex space filled with multilateral and bilateral
8 agreements and regulations. So we are putting that
9 out there for everyone's awareness of what we need to
10 work around. Because we don't want to fight over
11 these credits either. We just want there to be
12 clarity in the market so we can all keep doing what
13 we do best and encouraging these customers to
14 participate.

15 I also heard Matt -- Matt's comments
16 that the majority of the credits are probably going
17 to be formed by biofuels. We probably agree with
18 that situation but agree with Melissa's
19 characterization as well, that, you know, the sources
20 for potential conflict and overlap are really where
21 the regulation will probably be most needed in order
22 to provide clarity and continuity in existing
23 programs.

24 Lastly, to Jill's point, I think we are
25 probably well aware that customer agreements will

1 need to change. We are not opposed to those changes
2 and we have offered comments on this line of
3 questioning to explain what our current customer
4 agreements have. And I have no doubt that Clean Heat
5 credits will cause a lot of customer agreements to
6 have to change as a result.

7 But as of today, you know, we are not
8 -- a Clean Heat credit today is useless and
9 meaningless because there is no market for it. And
10 so we have not modified any of our agreements to
11 include Clean Heat credits specifically. But once
12 that market is actually formed, then we will
13 certainly work with everyone here and all of our
14 partners to make those modifications, as necessary,
15 and as the PUC regulates them.

16 MR. KNAUER: Thanks, Dave. Very robust
17 conversation about this. I'm going to switch
18 direction a little bit and just so folks have a sense
19 of my direction, I want to ask a question that
20 pertains to Efficiency Vermont's filing. And then
21 after we go through that, I'm going to suggest that
22 we take a short break. And then we will return and
23 we will talk -- I'll have some questions about
24 biofuels and renewable natural gas and whatnot as it
25 pertains to ownership.

1 Going to -- I'm going to look at you,
2 Dave, and your team. In your comments you talked a
3 bit about indirect market transformation activities.
4 And Efficiency Vermont suggested that the commission
5 should direct the Technical Advisory Group to
6 evaluate the impact of indirect market support on
7 Clean Heat measure uptake, and that subsequently a
8 proportional share of credit ownership would be
9 determined and presumably allocated to market actors
10 such as Efficiency Vermont who are providing that
11 indirect market support.

12 So the question to you, Dave, and
13 others from Efficiency Vermont, is why is it
14 important for entities that provide indirect market
15 support to potentially receive a portion of credit
16 ownership? I'll leave it there for now.

17 MR. WESTMAN: Great question. And it's
18 really a main element of our proposal here for
19 consideration of credit ownership, because if we go
20 back to the original idea that the Clean Heat
21 Standard was passed, the Affordable Heat Act was
22 passed, in order to compel more thermal efficiency
23 projects, and clearly low carbon fuel usage, then the
24 market needs to increase substantially.

25 Work force capacity right now on

1 thermal weatherization projects is probably at its
2 maximum that it can be. And so if we as a state have
3 determined that the current market rate is not high
4 enough, and we need more activities, then that's
5 going to take a significant investment in work force
6 development and market growth as well as market
7 awareness, consumer education, a lot of the sort of
8 nonfinancial transactions that are necessary in order
9 for these projects to complete.

10 And that is going to be a substantial
11 investment if we want to make the attainment of the
12 Clean Heat credit requirements through things like
13 efficiency projects. And to the extent that they
14 aren't, then this is probably a lesser comment. But
15 this is specifically where we would call out that if
16 the goal is to grow the weatherization market in
17 Vermont as a result of the Clean Heat Standard, the
18 weatherization market is going to need long-term
19 investments in work force development, worker
20 training, and the types of installation work that
21 Matt and his members do. Does not -- you know, you
22 can't learn it on a YouTube video. This is not a
23 self-learned process.

24 And that is why Efficiency Vermont
25 sponsors the Efficiency Excellence Network and has

1 for many years. And so that training and that -- and
2 that support for the market is really important to
3 get the jobs done well and to avoid, to the greatest
4 extent practicable, the types of refrigerant leaks
5 that Tom -- sorry to hear that you had an issue and
6 Mr. Weiss. You know, those are regrettable.

7 But having been working in this sector
8 for many years, I actually know that installation is
9 -- proper installation is the best way to secure
10 reduction in refrigerant emissions. And those two
11 examples are really regrettable, and I'm sorry that
12 you both experienced that. That's the type of work
13 that we have out there. That's the type of -- that's
14 the type of work force training that we need to do.

15 And so if the goal is to do this right,
16 we are going to need more incremental resources to do
17 it right. And so if the point of the credit, the
18 point of the market, is to rise the waters for all of
19 Vermont, then, you know, that's what we are alluding
20 to, which is that someone will need to support that
21 work force development.

22 And so if that's through an ownership-
23 based structure so that every share of a Clean Heat
24 credit that is sold to an obligated party then flows
25 back to an entity; whether that's, you know,

1 Efficiency Vermont does current work force
2 development, whether that's a DDA responsibility in
3 the future, you know, which is a matter to be
4 addressed in the other proceeding by the commission.
5 But there should be some form of recognition in the
6 fact that every credit generated through work force
7 development should be recognized. It shouldn't just
8 be an invisible force.

9 I hope that clarifies the comment.

10 MR. KNAUER: I mean I think what you're
11 saying that we need to grow the market and the work
12 force and, you know, customer awareness, I don't
13 think anyone on the call is going to disagree with
14 that premise, and that to do so will require
15 investment.

16 My question is really why does that get
17 tied up in credit ownership? Presumably there are
18 other ways to raise money to support that type of
19 indirect market support, market transformation,
20 whatever you want to call it, without implicating
21 credit ownership.

22 MR. WESTMAN: Really good question, and
23 I definitely want to hear other commenters' points of
24 view on this. But our perspective is that this is
25 not a regulated service. This is not a -- this is

1 not a regulated tax. This is a market. And so the
2 only incremental revenue that's generated will be
3 through the sale of credits.

4 And so the assumption is that if this
5 is a market-based solution, then the market needs to
6 provide for the whole solution. And so either that
7 market supports work force development or it doesn't.
8 And it risks not creating the types of long-term
9 training and work force development programs that are
10 needed.

11 Now if the alternative, and I'm just
12 going to sort of, you know, channel this, but if the
13 revenue from the sale of a Clean Heat credit to an
14 obligated party is sort of enough for a business to
15 do its own work force development and training, then
16 that would be great. That would be an ideal outcome.
17 But our experience is that in a small state like
18 Vermont a centralized and state-sponsored resource
19 like the Efficiency Excellence Network will be used
20 and useful for the long-term success of the program.

21 So that's really the point of why
22 ownership -- why does this get tied into ownership?
23 Because this is a market-based approach to a thermal
24 emissions problem. And so therefore, the market
25 needs to reflect the fact that it costs more to get

1 these projects done than just the incentive alone.

2 MR. KNAUER: Okay. Thank you. And it
3 looks like Matt Cota would like to respond.

4 MR. COTA: Yeah. Yes. Work force is a
5 tremendous challenge. And as the largest trainer of
6 HVAC sector heating/cooling contractors of Vermont,
7 Vermont Fuel Dealers Association trains over a
8 thousand men and women every year in this field in
9 licenses of gas, natural gas, propane, oil heat,
10 electric and plumbing. We would love to take the
11 credits. I don't think that's appropriate. I think
12 it's appropriate that it goes to the men and women
13 that are actually doing the work and the companies
14 that are investing in the work force to do the work,
15 not the entities that provide the training.

16 MR. KNAUER: Jill.

17 MS. PFENNING: Thanks. So, you know, I
18 agree with what you said earlier, Tom, that none of
19 us would disagree that market uplift and training and
20 work force development, all of these indirect
21 activities that we are talking about are going to be
22 required for the success of the Clean Heat program
23 and for the success of Act 18. But as we stated in
24 our comments, we disagree with the idea that those
25 activities should be creditable.

1 You know, like Matt Cota just said, VGS
2 is a huge provider of thermal solutions in the state.
3 And so we perhaps would stand to benefit from that,
4 but we don't feel comfortable with that approach, I
5 think for a couple of reasons. One is that it draws
6 focus and attention away from the fundamental goal of
7 the Act which is to reduce greenhouse gas emissions.
8 And that's where the credits lie in direct investment
9 that's made to achieve emissions reductions. And so
10 to the extent that credits start flowing to other
11 activities, you're creating an extremely complex
12 market. It's already going to be complex enough.
13 But it would be very difficult to quantify what
14 credits, you know, would flow to indirect activities
15 that can't be tied directly to greenhouse gas
16 emission reduction.

17 I think we have a big task in front of
18 us already to manage this very complex and new
19 market. And the simpler that we can keep it and the
20 more focused on the ultimate goal of the Act, which
21 is greenhouse gas emission reduction, the better
22 position that we will be to be able to be successful
23 and to meet the goals that are under the Act.

24 MR. KNAUER: Thank you. So I now
25 better understand Efficiency Vermont's proposal. I

1 hear the feedback from others who have spoken up.
2 Any other -- anyone else wish to at a point -- Luce
3 Hillman. Go ahead.

4 MS. HILLMAN: Hi. Another example, I
5 know everyone's talking about more individual
6 customers. But for larger institutions putting in
7 geothermal wells and water source heat pumps, being
8 able to get the credits I think would be very
9 valuable. So just something else -- it's a different
10 -- I know it's sort of two different conversations,
11 but I think it still needs to be considered.

12 MR. KNAUER: Thank you. All right.
13 I'm going to suggest that we take a break. It's
14 10:52. Let's return at 11:00. See you then.

15 (Recess was taken.)

16 MR. KNAUER: Okay. Thanks everyone.
17 Looks like most people are back, so we will
18 reconvene. I would like to change course a little
19 bit and move our discussion to delivered fuels.
20 Biofuels, renewable natural gas, et cetera, and
21 ownership of Clean Heat credits that might accrue
22 from those products.

23 So I mean the general question from me
24 is would there be a different ownership rule for a
25 delivered fuel than for an installed thermal product,

1 or are the -- the principles the same? You know, the
2 customer is calling for renewable or biotype fuel to
3 be delivered.

4 And I guess for sake of discussion
5 let's assume that the customer would be the owner of
6 that. And I guess people could react to that
7 premise. I'm going to call on people whose hands are
8 raised. Looks like Luce Hillman. Followed by Matt.
9 Followed by Jill.

10 MS. HILLMAN: Sorry. That was an
11 error. Pardon me.

12 MR. KNAUER: No problem. Matt Cota.

13 MR. COTA: Yes. So I appreciate this
14 part of the discussion, Tom, because it -- in effect
15 it's important that we have it now even though the
16 Technical Advisory Group which is tasked with
17 recommending to the PUC how to score all of these
18 greenhouse gas reducing thermal requirements, it's
19 important to have this conversation because it is
20 separate and distinct from existing programs to
21 electrify the heating sector, the thermal sector
22 which Efficiency Vermont and the electric utilities
23 are involved in, because they have been since the
24 creation of Tier III in the 2015 renewable energy
25 standard.

1 This is new. And this is important
2 that we get it right, because I think this has --
3 will have a tremendous impact on the marketplace and
4 the ability for the State of Vermont to meet the
5 mandates in the Global Warming Solutions Act. And
6 the supply chain is something that is understandably
7 unfamiliar to the PUC. And it's unfamiliar to many
8 of the advocates of the Clean Heat Standard. And we
9 would love to talk through how those credits --
10 because I can see within the individuals and the
11 companies that are involved in delivering clean fuels
12 on the deliverable side, not on -- necessarily on
13 natural gas side, but where that credit gets
14 generated, where we have fleshed out who the
15 obligated party is for the most part. The same
16 obligated entities may be also claiming credit for
17 the fuels that are delivered that reduce greenhouse
18 gas emissions. Where in the supply chain that gets
19 counted by the PUC, and where the credit is retained
20 becomes critical, because if the fuel is created in
21 Vermont, is it the producer of that fuel that lower
22 -- that fuel that reduces greenhouse gas emissions?
23 Are they credited? Is it the company that sells it
24 to the retailer or the wholesaler? Is it the
25 wholesaler that sells it to the retailer and then, of

1 course, the customer that is ostensibly burning that
2 fuel instead of a more carbon emitting fossil fuel.

3 So we can talk about supply chain for
4 the rest of the afternoon, but I think this is a
5 fundamental point which is this fuel is being
6 delivered now. It has been delivered as of January
7 1, 2023, and credits are being claimed now. And it
8 still hasn't been sorted out amongst the entities
9 that are either obligated or would possibly be in the
10 ability to sell those credits in the future.

11 MR. KNAUER: Jill Pfenning, you're up
12 next.

13 MS. PFENNING: Thanks. I just wanted
14 to echo a little bit of what Matt has said. You
15 know, the Act does lay out specifically an intent to
16 reduce emissions by incentivizing the use of cleaner
17 fuels, by creating, you know, a system for obligated
18 parties that's easy to administer. That will help
19 achieve the goals of the Act.

20 I think to answer your question
21 directly, is it our position that delivered fuel
22 should be treated differently from installed
23 measures? I said earlier in the workshop as it
24 relates to installed measures we would see ownership
25 to lie with the customer. In the case of delivered

1 fuels, however, or specific to us, gaseous clean heat
2 measures, such as renewable and natural gas, we think
3 that ownership should lie with VGS as the provider.
4 We are the sole entity that's responsible for
5 delivering -- for both procuring and delivering this
6 supply.

7 Just as Matt said, VGS has been
8 delivering RNG for a number of years now. We have an
9 established program. We have obtained regulatory
10 approval to provide RNG to our customers through our
11 overall retail gas supply. We are in the best
12 position to manage the cost effectiveness of that
13 portfolio, and that's something that has come under
14 scrutiny by the commission and the department.

15 We work closely with the commission and
16 the department to ensure that the RNG that we are
17 offering to customers is cost effective, but we are
18 the managers of that portfolio. So it would make
19 sense for that reason.

20 We also will have to meet specific
21 requirements as it relates to renewable natural gas
22 in particular. The Act requires that the service be
23 bundled, meaning that the molecule and the attribute
24 be delivered together, and that there be a
25 contractual pathway for physical delivery into our

1 system. Those are all specific requirements that VGS
2 is charged with carrying out, which, you know, we
3 have sort of sole control over in the procurement of
4 that supply.

5 I think the last point that I just want
6 to make is that for us to obtain those credits makes
7 sense from an incentive perspective. We are the ones
8 who are -- who should be incentivized to continue to
9 increase the supply of renewable natural gas and
10 other gaseous Clean Heat measures as part of our
11 overall supply that we serve customers. So it seems
12 appropriate that if we are responsible for increasing
13 those amounts over time, in a cost effective manner,
14 to help keep service affordable for customers, that
15 we, too, should be the recipient of the credits.

16 MR. KNAUER: So I'm going to insert
17 myself and ask a question. And then I see that Rick
18 Weston has also raised his hand.

19 But my question is, for some portion of
20 Vermont Gas customers and presumably for all
21 delivered fuels customers, burning renewable natural
22 gas or a biofuel is kind -- I'm going to posit this,
23 and feel free to push back. It's a premium product
24 that the customer is volunteering -- voluntarily
25 paying more for.

1 So why wouldn't the customer retain the
2 environmental attributes for purchasing that premium
3 product absent some disagreement with its fuel
4 supplier? And I guess I'm looking to Matt and to
5 Jill to respond. And we will go in that order.

6 MR. COTA: So our dealers that sell
7 wood pellets, they are not paying a Clean Heat
8 premium. They are just buying pellets, and they are
9 getting them delivered -- automatically delivered
10 into their bins. For biofuel sellers in many cases
11 they are not paying a premium. Biodiesel or
12 renewable propane that's been sold in Vermont, that's
13 market rate. And there is no fixed cost or adder or
14 regulated price increase. It's whatever the market
15 -- whatever they can get it for and sell it for.
16 Sometimes it's at a discount. Sometimes it's at a
17 premium. Sometimes it's on par. Depends on the day
18 and the time.

19 MR. KNAUER: Okay. And Jill?

20 MS. PFENNING: Sure. Thanks. So for
21 the majority of the renewable natural gas that's
22 currently flowing through our system that is not
23 through the voluntary program. So as you recall, we
24 have both the voluntary program and a program through
25 our alternative regulation plan that allows us to

1 incorporate increasing amounts of renewable natural
2 gas into our overall retail supply that we serve from
3 customers. And so as it relates to the RNG that goes
4 out to all customers, there is, you know, a price
5 premium on that, but that is shared equally by all
6 customers. And that's not a voluntary election that
7 customers make to have that RNG served to them.

8 MR. KNAUER: And so what about the
9 customers who are voluntarily signing up to have a
10 portion of their gas served through the renewable
11 program?

12 MS. PFENNING: Yeah. I mean I think
13 that we would take the position that they, too,
14 because we are the ones responsible for procuring the
15 supply and providing it to them, that we would be the
16 owners of the credits. However, you know, that's
17 something that we would be willing to consider, you
18 know, in light of what the commission ultimately
19 decides about ownership of as it relates to delivered
20 fuels.

21 MR. KNAUER: And now I guess I'll yield
22 to Rick Weston followed by Geoffrey Gardner.

23 MR. WESTON: This discussion just
24 answered my question. So I'll pass the baton to
25 Geoffrey.

1 MR. GARDNER: I think the distinction
2 between the voluntary program and the RNG that goes
3 to all VGS ratepayers is an important one. And I
4 think there is no question that those who choose to
5 enter the voluntary program, which is relatively
6 small, are the owners of those credits. They are
7 paying for them through a premium price. But I think
8 also it's the case that those who don't choose RNG,
9 but get it because it is the program of the PUC and
10 VGS, to supply RNG as part of what they use, they too
11 are paying a premium price. That is there is a rate
12 increase that follows that passes through the cost
13 which is rather high, of the RNG that they get.

14 And I think it's important to take into
15 account the fact that one of the major reasons the
16 PUC thinks that that rate increase is justified is
17 that they have said it's a way for people who can't
18 afford heat pumps or other efficiency measures to
19 participate in the state moving toward cleaner fuels
20 and meeting the goals of the Global Warming Solutions
21 Act. That is, they see that as a benefit to the
22 customers. If it's a benefit to them, and they are
23 paying for it, then I think pretty clearly the credit
24 is theirs.

25 MR. KNAUER: Thank you, Mr. Gardner.

1 And Annette Smith has raised her hand.

2 MS. SMITH: I gather that we are
3 talking about having multiple owners of credits in
4 various sectors. And so it would seem appropriate
5 that for the gas sector that the customer own the
6 portion of the credit for the RNG. And I don't know
7 who they share it with, but I don't think that what
8 VGS is proposing makes any sense; that they want to
9 own everything compared to how the other credits
10 would be handled.

11 So again speaking for -- from the
12 perspective of the customer, if I'm getting RNG, then
13 I want to own that portion of the credit.

14 MR. KNAUER: I want to go back to --
15 I'm still trying to understand the marketplace, and
16 Matt and the fuel dealers' world, trying to
17 understand -- someone can choose to have conventional
18 heating products, fossil fuel heating products
19 delivered to them, or they can choose to have
20 biodiesel or some blend delivered to their building
21 where they will consume that fuel.

22 MR. COTA: Or --

23 MR. KNAUER: Go ahead.

24 MR. COTA: I'm sorry to interrupt. Or
25 they might not even know. We can blend up to 20

1 percent renewable diesel fuel or biodiesel into our
2 supply and still meet the ASTM spec, and they may be
3 completely unaware. We have the records, but not
4 required to disclosure. There is no Vermont law that
5 requires us to disclose the content of renewable
6 supply in our supply. Unless there is that law, it's
7 an added administrative burden. And so it's
8 happening now, and customers may be unaware that they
9 are burning renewable fuel.

10 MR. KNAUER: Interesting point, you're
11 right. We at the PUC continue to learn about that
12 industry. So thank you for sharing that.

13 But so the question is for those who do
14 know and elect to have some blend, your previous
15 comment suggested that really it's a moving market
16 and the customer may not be paying a premium for that
17 product. You're nodding. So I'm accurately
18 characterizing what you said.

19 MR. COTA: Yeah. That's right.

20 MR. KNAUER: Maybe that's really not
21 the point though. If a customer is choosing "I want
22 to be burning a renewable type product" and they are
23 paying their fuel company to bring that renewable
24 product to them, why wouldn't the customer retain
25 ownership for purchasing that product?

1 MR. COTA: Yeah. The fundamental point
2 is who made the decision? Is it the fuel company
3 that purchased it and blended it into their supply?
4 Is it the wholesaler that purchased it and blended
5 into their supply? Is it the producer that created
6 it? All up and down the supply stream there is going
7 to be a claim for credit.

8 And the idea that the consumer is going
9 to be able to -- there is going to be a large
10 business. If it goes to the consumer -- I'm just --
11 going forward this is what's going to happen. We can
12 see this in Massachusetts. There is going to be an
13 aggregation service. And those that purchase wood
14 pellets and sustainably sourced biofuels that earn
15 credits under the Clean Heat Standard if it is
16 enacted by the legislature after the rules
17 established by the PUC, these aggregation services
18 will then collect these credits from the consumers
19 and offer them money and/or some other service. And
20 those then will be then collected, aggregated and
21 sold to obligated entities.

22 That's what's going to happen if the
23 credit is retained by the consumer. That's one way
24 to do it.

25 MR. KNAUER: And do you have an opinion

1 on that outcome, if it happened that way?

2 MR. COTA: Yeah. I think that's a
3 cluster. I don't know how you regulate that. I
4 don't know how to enforce that. I don't know how you
5 ensure that that is a valid credit that these third-
6 party for-profit aggregators are bringing to your
7 desk and dumping a whole load of invoices on your
8 desk and determining whether or not it's valid.

9 Following the supply stream through
10 well-tested and well-used methodologies to determine
11 where the fuel comes from, if it is, in fact,
12 renewable, and sustainably sourced, you've got to go
13 further up the supply chain.

14 Getting it at the consumer level seems
15 like an administrative nightmare for the PUC, but it
16 can be done. Anything can be done with enough
17 resources and money. The question is whether it's
18 worth it.

19 MR. WEISS: This is Thomas Weiss. I
20 would like to get into the queue.

21 MR. KNAUER: Please go ahead, Mr.
22 Weiss.

23 MR. WEISS: I would like to share my
24 experience with burning biodiesel. I have been
25 burning for heating B100 biodiesel a long time, 10

1 years maybe. My fuel dealer does not charge a
2 premium. I got a flier a couple months ago in my
3 bill that they will be providing B100 biodiesel to
4 anyone at the same price that they are charging for
5 the number 2 heating oil. So that is how my supplier
6 is handling it.

7 And so in that case, not paying a
8 premium, and it's the supplier who is providing the
9 biodiesel to me. And I think it's more reasonable to
10 have the fuel dealer own the credits because the fuel
11 dealer is the one who has actually decided to provide
12 the biodiesel at no additional charge. If a premium
13 were being charged, then I would tend to agree with
14 those that the credit ought to belong to the
15 customer.

16 But, you know, as Matt said, B20 can be
17 done with no amendment to any of the facilities in
18 the house or the business or whatever. So that's my
19 experience and my thoughts on ownership of biodiesel
20 in particular.

21 MR. KNAUER: Thank you for that
22 perspective. Those are kind of my only questions on
23 this topic.

24 Would anyone else -- does anyone else
25 have a question on the topic of delivered fuels or

1 any further comments? I see Luce Hillman. Please go
2 ahead.

3 MS. HILLMAN: Yes. Just that we choose
4 to buy renewable natural gas, and it is at a premium
5 in order to meet some of our sustainability goals.
6 So it would seem like, again, retaining some of those
7 credits would be useful to encourage more of that.

8 MR. KNAUER: Thank you. And Geoffrey
9 Gardner.

10 MR. GARDNER: Yeah. I have one more
11 observation to make about RNG. And that is current
12 PUC case having to do with generation of renewable
13 natural gas from a very large farm in northern
14 Vermont, the developer of that project is claiming
15 that the gas that will be produced has a carbon
16 intensive value of minus 251.

17 That is likely to produce a fantastic
18 number of credits, especially compared to, say,
19 renewable gas that's produced out of state at
20 landfills or water treatment plants. And I think
21 also compared to the likely credits that are to be
22 generated by biofuels of the sort that Matt and his
23 people are likely to supply.

24 If those credits are owned by VGS, it
25 makes them probably a dominant, if not the dominant

1 player, in the credit market with an enormous amount
2 of control about who gets credits and of what the
3 price of those credits will be. And I think that
4 needs to be cautioned and taken into account.

5 MR. KNAUER: Thank you for that
6 comment. Any other comments or questions on
7 delivered fuels and credit ownership before I switch
8 gears again?

9 (No response)

10 MR. KNAUER: Seeing none, I did want to
11 go back. I realize I missed a question that I had
12 for Vermont Gas. And this has to do kind of with --
13 we talked about this maybe almost two hours ago.
14 This has to do with the idea of stacking benefits.
15 And I think Vermont Gas's position was that ownership
16 would accrue to the entity that brings a new
17 incremental investment to the installation of a
18 measure.

19 And I know we did talk about this for
20 awhile. And I'll admit I still don't understand how
21 this works. And I think -- so let's say there is an
22 existing program to install thermal measures where
23 incentives are provided to customers. And I'm trying
24 to understand Vermont Gas's position that -- is it
25 the position that nobody could claim Clean Heat

1 credits unless an incremental investment is made? Is
2 that the case?

3 MS. PFENNING: I mean I think it
4 depends. I think it depends on the specific project
5 or investment. I think that our point in the
6 comments, and we did discuss this earlier, but is in
7 cases where there are other programs at issue, like
8 Tier III or energy efficiency, that it seems to us
9 that the point of the Act would be to bring
10 additional incremental investment to those types of
11 efforts.

12 So in other words, for example, if it
13 were a weatherization project that was also
14 incentivized through energy efficiency efforts, that
15 whoever is incentivizing the energy efficiency effort
16 would not also necessarily claim the Clean Heat
17 credits for that project with the existing funding.
18 The energy efficiency funding would be coming from
19 customers and would be meant to address, you know,
20 specific goals in the energy efficiency program. But
21 those dollars shouldn't be brought to bear for Clean
22 Heat investment. It's a separate -- it's a separate
23 program.

24 So we would say that in that case,
25 additional investment would need to be made in order

1 to determine ownership of the Clean Heat credits. So
2 I don't know if that answers your question, Tom, but
3 I think that just goes back to our initial point. I
4 think that point is being made in the context of
5 situations where there would be stacking of credits.
6 But, you know, to sort of Matt Cota's point earlier,
7 there will be many situations in which that is not at
8 issue, in which case, you know, it goes back to what
9 we said before that the customer, you know, that is
10 installing the measure for installed measures would
11 be the owner of the credits, and that by agreement or
12 otherwise, those credits could flow to other parties.

13 MR. KNAUER: So does that mean that
14 right now Vermont Gas runs efficiency programs for
15 its customers using ratepayer funds, you know, that
16 derive from the efficiency charge? Does that mean
17 that all the savings that results from those
18 efficiency programs are ineligible for Vermont Gas to
19 claim in the Clean Heat Standard because there is not
20 an incremental investment made?

21 MS. PFENNING: I mean I guess there is
22 a couple of ways of thinking about it. So on the one
23 hand, I mean and things -- we welcome the commission
24 and the TAG's guidance on this because we certainly
25 aren't claiming expertise on this. We are just, you

1 know, participating in this discussion and providing
2 input from our background.

3 On the one hand, if that efficiency
4 measure were to be taken with, you know, with one of
5 our customers, that would reduce demand which would
6 affect our overall obligation. In terms of
7 generating the actual Clean Heat credit, I think it's
8 our position that we would need to put additional
9 money to work in order to lay claim to that credit
10 beyond what was already being contributed by on the
11 efficiency side.

12 MR. KNAUER: All right. I see two
13 hands. Geoffrey Gardner. Followed by Dave Westman.

14 MR. GARDNER: I just neglected to take
15 my hand down. Sorry.

16 MR. KNAUER: Thanks. Dave Westman.
17 Dave, can't hear you right now. Dave, I think we
18 have got time. So if you want to leave and rejoin,
19 or sometimes you have to select -- reselect your
20 microphone in GoToMeeting.

21 While we are waiting for Dave, Annette
22 Smith has raised her hand. So go ahead, Annette.

23 MS. SMITH: I figured I would fill the
24 time. We haven't talked about propane. I've heard
25 reference to renewable propane. I am off grid and

1 dependent on propane and don't see that I have any
2 alternatives. But is there an alternative for my
3 small family propane dealer to provide anything that
4 would earn any credits?

5 MR. KNAUER: I don't know the answer to
6 that, and I'm not sure -- is Matt still here?

7 (No response)

8 MR. KNAUER: Yes. It's a great
9 question. Well so as we are waiting for Dave to
10 rejoin, I've gone through the questions that I intend
11 to ask.

12 Do any of my colleagues from the PUC
13 have questions that they would like to ask?

14 (No response)

15 MS. SMITH: I see Matt is back. Maybe
16 he could answer the question. Did you hear my
17 question, Matt?

18 MR. COTA: I'm sorry, Annette, I
19 didn't. I had to step away. What was the question?

20 MS. SMITH: So I asked about propane.
21 We haven't talked about that today. And so for
22 someone who's served by propane, and a small fuel
23 dealer that only deals in propane, is there any way
24 for that dealer to earn any credits, or is there a
25 way that renewable propane is going to get into the

1 mix? Or am I just going to see that it's all going
2 to cost me more because I don't have any
3 alternatives?

4 MR. COTA: So that's a good question.
5 And there is renewable propane. Not in the abundance
6 or the availability of which renewable distillate is
7 available. That is the fuel that is mixed with
8 diesel fuel and heating oil and kerosene. And there
9 is a higher premium for propane, to be honest with
10 you, because it is in such scarcity and such demand
11 in other areas that have clean transportation credit
12 systems such as California.

13 That said, it all really depends on
14 what the Technical Advisory Group does and what the
15 PUC adopts or accepts in terms of propane as a
16 renewable propane as a lower carbon fuel or not. And
17 if the incentive structure is such that it negates
18 the increased cost of renewable propane and it
19 inspires the marketplace because not only Vermont but
20 other areas are doing it, then perhaps. But really
21 there is not -- there is an opportunity, but there is
22 not a giant financial advantage for propane companies
23 to be in that marketplace right now. Will that
24 change? Perhaps. But it's a less mature market than
25 the sustainably sourced distillate market which has

1 been around for 30 years.

2 MR. KNAUER: Thank you, Matt. Dave
3 Westman, you're back. Hopefully you remember the
4 question.

5 MR. WESTMAN: Can you hear me?

6 MR. KNAUER: Yes, we can.

7 MR. WESTMAN: Okay. That was the
8 question. Great. Hi, everyone. My question was in
9 reaction to the weatherization project that Jill
10 Pfenning had talked about. And her answer -- I'll
11 just represent VGS is an EEU and also a potential,
12 you know, credit forming entity in that regard. And
13 so I want to think about the same question as if you
14 had asked Efficiency Vermont the same question, Tom,
15 which is if we were thinking about a weatherization
16 project which is, you know, as everyone here knows,
17 not in VGS territory, so we are only talking about
18 the unregulated fuels sector of weatherization. You
19 know, we are paying something like up to 85, you
20 know, 90 percent of project costs for some customers.
21 Moderate income customers get about 75 percent of
22 their weatherization project covered. And qualifying
23 customers can, you know, in -- get higher amounts.

24 So the idea of what would incremental
25 funding actually do for formation of a Clean Heat

1 credit is a little bit -- it's not clear what kind of
2 impact it would have. I think that would have to
3 fall under some type of evaluation. It's not enough
4 to just say that if we come in with an extra hundred
5 dollars on top of a total incentive package of
6 \$10,000, that that hundred dollars should warrant,
7 you know, full awarding of the Clean Heat credit.

8 And I think that's probably pretty
9 obvious to everyone. But I guess what I'm always --
10 what I'm trying to frame all of my comments in is
11 this context of there is supposed to be a market for
12 the free sale or trade of credits. And those credits
13 are a defined quantity that are required by the
14 commission in order to achieve these goals.

15 So we are really talking about a couple
16 different markets in all of these contexts. And I'm
17 assuming that there are going to be willing buyers of
18 Clean Heat credits presumably by obligated parties,
19 and that that willingness to buy a credit will drive
20 a price to the point where credits will create
21 incremental revenue that if it were directed at
22 Efficiency Vermont would be used to do more
23 weatherization projects.

24 And so from the perspective of if we
25 are using our TEPF budget to currently incentivize

1 projects, TEPF budget and grants and other sources of
2 funding, and that's still not enough to meet the
3 requirements, then that's what we are saying the
4 incremental revenue would be used for is to drive
5 more projects.

6 And that brings us to the sort of
7 larger point which is that if you put a number and
8 you say, you know, X number of projects are required
9 to meet the Global Warming Solutions Act requirements
10 for thermal emissions reductions, then that X number
11 of projects has a finite price. And if we are
12 currently supporting a lesser amount of projects at
13 something like 75 to 85 percent of project cost, you
14 know, how are we going to support projects at that
15 higher volume?

16 And so that's why we are thinking about
17 this in terms of if -- if the purchase and sale of
18 credits is meant to drive the market, then we are
19 thinking about it from that perspective. And so we
20 are talking about some pretty complex market
21 mechanisms there. But the idea that someone could
22 come in and offer an additional incentive on top of
23 our incentive and then get the revenue essentially of
24 the sale of the Clean Heat credit for that, then that
25 doesn't appear to be helpful for the entity that's

1 already putting down the majority of the financial
2 incentives. Right? You could easily see where that
3 becomes highly asymmetrical.

4 And if that were the case, and if those
5 additional incentives actually drove incremental
6 effect in the market, then we would run out of budget
7 very quickly, and we would have to reduce our
8 existing incentives.

9 And so that's where we sort of get
10 concerned with this idea that all of the credits go
11 to any single entity, because that would essentially
12 reduce any existing entity's potential for
13 incremental revenue to then put for -- put towards
14 incremental projects.

15 And so that's what we are sort of --
16 that's what we need to think about, is if the
17 structure's built on the efficiency utility's
18 existing incentives, and then we need to drive more
19 projects, then we need to think about them -- this
20 secondary credit market as the only tool to create a
21 revenue source that is scaled for funding those
22 incremental projects. Right?

23 We can do the existing number of
24 projects with our existing budget. But if we are
25 going to support that existing level of activity plus

1 the activity that is meant to be driven by the Clean
2 Heat Standard, then we need to think about that
3 market in those ways, in those terms. And again, I'm
4 sorry. This is all -- this is very helpful for
5 conversation. But I really think that reply comments
6 will be a better opportunity for us to sort of put
7 some of these really complex and secondary and, you
8 know, ramifications, you know, down on paper where we
9 can do some more wordsmithing.

10 MR. KNAUER: Thank you, Dave. Luce
11 Hillman.

12 MS. HILLMAN: Yes, Tom. I wondered, we
13 have heard from quite a few people who put in
14 comments. We have not heard from Green Mountain
15 Power which have -- which had an interesting take on
16 comparing it to RECs. I didn't know if Chris Vaughn
17 was still on, if he could talk a little bit about
18 that. Because I found that an interesting parallel.

19 MR. VAUGHN: Thank you. So it's our
20 position that the credit really would begin with the
21 customer's decision to implement the measure, similar
22 to the generation of a REC, at which point a customer
23 has the opportunity to release that or retain it for
24 their use downstream. We see it very similar to
25 that. Don't have too much more to offer there.

1 MR. KNAUER: Thank you, Chris. I see
2 Annette Smith. Go ahead. And Dave, your hand is up.
3 I don't know if that is a holdover or if that's a
4 new --

5 MS. SMITH: I have another scenario
6 that we haven't talked about. There is a -- a
7 proposed district heating system from Burlington
8 Electric and McNeil that would be a pipeline
9 providing heat to, I guess, UVM or UVM Medical
10 Center. So could anyone care to explore the credit
11 ownership of a system like that where I guess Vermont
12 Gas and a couple other entities are involved in a
13 non-profit that would own the pipeline or perhaps own
14 the heat? I think it's -- I don't think I fully
15 understand all the players. But ultimately, would
16 the recipient of the heat be the owners of the
17 credit? Or would the non-profit be the owners? Or
18 would the entity that's providing that heat be the
19 owners?

20 MR. KNAUER: I certainly don't have the
21 answer to that question. It's a great scenario to
22 raise. So I open the floor in case anyone would like
23 to provide their perspective on that scenario.

24 MS. PFENNING: Hi, Tom. Thanks a lot
25 for your question. This is Jill Pfenning at VGS.

1 Amber, do you want to jump in? Maybe not.

2 MS. WIDMAYER: You're welcome to go
3 first.

4 MS. PFENNING: Okay. I think all I was
5 going to say is those are sort of open questions, and
6 they will be, you know, determined as part of this
7 process. I think that ultimately that project is
8 somewhat unique, and so it's likely that it would be
9 dealt with separately by the TAG. The law does
10 provide for the TAG to address specific projects that
11 are sort of unique in the way that they are
12 structured. So I suspect that that would be the way
13 that credit ownership, et cetera, would be determined
14 for this particular project. But it's still under
15 negotiation and discussion at this time.

16 MR. KNAUER: For the record, Amber gave
17 the thumbs up signal. So I take it to be that she
18 agrees with Jill's representation that it's to be
19 determined.

20 Okay. Any other questions from
21 commission staff or the commissioners or any
22 participant in the workshop?

23 MS. MYERS: Tom, good morning. So we
24 haven't really addressed the involvement of the DDA
25 in credit ownership. So under the Act it's

1 anticipated that most credits would be generated
2 through the involvement of the designated delivery
3 agent. So if an obligated party were to contract
4 with the DDA to get a Clean Heat measure installed or
5 delivered, but then if we are anticipating that the
6 homeowner would be the owner, then are we removing
7 the incentive for the obligated party? Should they
8 be required to then meet their obligations to the DDA
9 for that Clean Heat measure? I'm just trying to
10 figure out what the involvement -- how the DDA's
11 involvement changes this relationship.

12 MR. KNAUER: I think Matt would like
13 to --

14 MR. COTA: Can you hear me okay?

15 MS. MYERS: Yeah.

16 MR. COTA: Tracy, I appreciate that
17 comment. As we stated in our filings, we believe
18 that is a false assumption. That the legislature set
19 up the Clean Heat Standard so that the DDA in a
20 perfect market would be irrelevant, will be
21 unnecessary. Now are we going to have a perfect
22 market? Probably not. But to make the assumption
23 that the DDA will be responsible for the entirety of
24 the Clean Heat credit market I think is the wrong
25 assumption.

1 MR. KNAUER: Okay. I think time will
2 tell. And none of us knows sitting here today. But
3 let's imagine a world where a DDA is involved in
4 fulfilling some portion of obligated parties' annual
5 requirements. In that hypothetical, yeah, how do we
6 address Tracy's question of who is owning the
7 credits?

8 MR. WEISS: This is Thomas Weiss. I
9 would like to get in the queue.

10 MR. KNAUER: Let's let Matt respond.
11 And then, Mr. Weiss, you'll go after that.

12 MR. COTA: Well not to reiterate my
13 talking points, but there is an entire universe of
14 obligated parties which will address the Clean Heat
15 Standard if it is implemented by the legislature in
16 2025 in various different ways. Some will have no
17 option other than to shut down; turn out the lights,
18 sell their trucks, and go out of business. Others
19 will see a great opportunity in order to use their
20 diversified services in order to gain a new market
21 share. Others have no capabilities because their
22 wholesale terminals they don't have vans and people
23 and electricians and retail trucks. So they will
24 have no opportunity to participate in this market.

25 And I think that was the intention.

1 That's how it was designed. Recognizing that the
2 distribution of heating fuel in Vermont at 335 homes
3 comes from a trucker. Whatever that product is. And
4 that is an unregulated market by the PUC. It's a
5 wildly diverse market. And some will meet that
6 obligation by doing the work. And the DDA, they
7 won't even know what it stands for because they won't
8 use it. Others will rely on the DDA because they
9 have no other way to meet their obligation other than
10 to write a check every quarter to whatever entity
11 gets the winning bid.

12 MR. KNAUER: I hear you loud and clear,
13 Matt. Yeah. We are not trying to opine on what fuel
14 dealers or obligated parties will do. It's really
15 the question of let's assume that someone is making
16 use of a DDA. You know, I hear your message. There
17 is no confusion about that. But let's assume that
18 someone is using a DDA to meet their obligation. How
19 does credit ownership through that arrangement work?
20 That's the real question we are trying to ask.

21 MR. COTA: So they are assigning their
22 obligation -- obligated person is assigning their
23 obligation to the DDA. The DDA then becomes
24 responsible for meeting the one third/one third
25 metric in the Clean Heat Standard, and would

1 ostensibly be offering incentives that perhaps an
2 obligated party would never even have to offer.
3 Because there is -- only way for a DDA to obtain
4 credits is to incentivize it, if the DDA is an entity
5 like Efficiency Vermont.

6 If the DDA ends up being a
7 weatherization contractor, well we can bet that all
8 of the DDA funds that would be paid by the obligated
9 parties that can't meet their own obligation will use
10 it for weatherization. If it's a wood pellet
11 manufacturer that earns the contract to be the DDA,
12 we can better believe, this is a market-based
13 approach, that wood pellets will be how that
14 obligation is met by the obligated parties that can't
15 obtain their own credits. How they obtain those
16 credits from their consumers, if they are in the
17 business of installing those measures or selling
18 those energy products, they are going to want to
19 retain that ownership, not the consumers. If it's a
20 utility you could see a scenario where they have to
21 -- only way to get the work done is to write a check.
22 And that has to be determined whether or not it's the
23 consumer that owns the credits or the DDA.

24 MR. KNAUER: And Mr. Weiss, let's turn
25 to you now.

1 MR. WEISS: Thank you. I spent -- well
2 part of my comments covers some scenarios that
3 address this in my way of thinking.

4 So when an obligated party pays the
5 credit fee to the DDA, then the DDA is installing
6 measures according to the statute, on behalf of the
7 obligated party that submitted the fee. I mean the
8 big fuel importers will be the ones doing that. And
9 they have no customers.

10 So on my principle of the person who
11 pays for it, is the owner, then the fuel dealer
12 obligated party pays the fee to the DDA. And the DDA
13 would then deliver a measure on behalf of, in this
14 case, the fuel dealer.

15 So the fuel dealer would own -- if the
16 DDA charges the customer for all or part of the
17 installed measure, then the customer would own all or
18 the customer's share of the payment of the -- of the
19 credits.

20 And I've got a few more. But it's
21 along that line. If the DDA uses money other than
22 from the credit fee to install a measure, then
23 potentially the DDA would be the owner of the credit.
24 So these are some scenarios that I have thought about
25 and presented. And it's basis of discussion here,

1 considering the reply comments, but those are my
2 thoughts on how -- some of my thoughts on how the DDA
3 would be involved or not involved in credit
4 ownership.

5 MR. KNAUER: Thank you, Mr. Weiss. Any
6 other questions from commission staff, commissioners
7 or any other workshop participant?

8 (No response)

9 MR. KNAUER: Mr. Cota.

10 MR. COTA: What's next?

11 MR. KNAUER: Yeah. That's a great
12 question. So I'm going to -- I'm gathering we have
13 gone through all of our questions. And people have
14 had a lot of robust participation, which is very much
15 appreciated.

16 We have set up a deadline for reply
17 comments on the topic of credit ownership. Currently
18 stands at January 2nd of 2024. We have received a
19 request from the Department of Public Service to
20 extend that deadline by two weeks. So I was going to
21 take this opportunity, since we have a minute, to ask
22 whether any participant in today's workshop objects
23 to that extension request.

24 MR. WEISS: This is Thomas Weiss, if I
25 might.

1 MR. KNAUER: Please go ahead.

2 MR. WEISS: I do not think that the
3 deadline should be extended. I think that all of us
4 have that same potential. It's during the holiday
5 seasons, but we should be able to work around it.

6 And the reason I am -- think we should
7 not extend is that we still have a lot of work to do,
8 the parties and the TAG and the PUC on getting this
9 off the ground in one year. And the two-week delay
10 here on something makes it a little harder for us to
11 get done in a year. That's the end of my comment.

12 MR. KNAUER: Thank you for that
13 perspective. Any other thoughts at this time on the
14 pending request for an extension?

15 MR. COTA: Matt Cota on behalf of the
16 heating fuel contractors and the Northeast Hearth,
17 Patio and Barbecue Association of Vermont, Fuel
18 Dealers Association, we would support the extension.

19 MR. WESTMAN: Efficiency Vermont
20 supports the extension.

21 MR. KNAUER: Thank you, Mr. --

22 MS. HILLMAN: Luce Hillman supports the
23 extension.

24 MR. KNAUER: Okay. Well so commission
25 staff will advise the commissioners on this request

1 and the stated positions at today's workshop. And we
2 hope to get this resolved soon so people know what
3 their filing deadline is.

4 Absent any additional discussion, I
5 would like to thank all of the participants for
6 attending the workshop and providing the commission
7 with your valuable input today. Last call before we
8 adjourn. Anyone have any final thoughts?

9 (No response)

10 MR. WESTMAN: Thanks, Tom. Great
11 questions. Really pushing the issues forward. So
12 appreciate them. They are hard, but they are
13 important. So thank you.

14 MR. KNAUER: Thanks, Dave. I think we
15 have about a year of these type of workshops and
16 questions and interesting discussions. So again,
17 thanks everyone for participating today. And we are
18 adjourned. Thank you very much, Kim Sears.

19 (Whereupon, the proceeding was
20 adjourned at 11:58 a.m.)
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C E R T I F I C A T E

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2
3 I, Kim U. Sears, do hereby certify that I
4 recorded by stenographic means the Workshop re: Case No.
5 23-2220-RULE, via videoconference, on December 15, 2023,
6 beginning at 9:30 a.m.

7 I further certify that the foregoing
8 testimony was taken by me stenographically and thereafter
9 reduced to typewriting and the foregoing 91 pages are a
10 transcript of the stenograph notes taken by me of the
11 evidence and the proceedings to the best of my ability.

12 I further certify that I am not related to
13 any of the parties thereto or their counsel, and I am in
14 no way interested in the outcome of said cause.

15 Dated at Williston, Vermont, this 17th day
16 of December, 2023.

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19  Kim U. Sears
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<p style="text-align: center;">\$</p> <p>\$10,000 - 78:6 \$200 - 27:24</p> <hr/> <p style="text-align: center;">0</p> <p>05402-0329 - 1:22</p> <hr/> <p style="text-align: center;">1</p> <p>1 - 59:7 10 [2] 29:4, 68:25 100 - 39:25 10:52 - 56:14 11 - 32:18 11:00 - 56:14 11:58 - 91:20 15 [3] 1:6, 1:10, 92:5 150 - 17:17 17th - 92:15 18 [4] 11:15, 11:22, 13:2, 54:23</p> <hr/> <p style="text-align: center;">2</p> <p>2 - 69:5 20 - 65:25 2015 - 57:24 2023 [5] 1:6, 1:11, 59:7, 92:5, 92:16 2024 - 89:18 2025 - 85:16 23-2220-RULE [3] 1:2, 3:3, 92:5 251 - 70:16 2nd - 89:18</p> <hr/> <p style="text-align: center;">3</p> <p>30 [2] 10:1, 77:1 329 - 1:22 335 - 86:2</p> <hr/> <p style="text-align: center;">5</p> <p>50 - 17:16 50/50 - 30:10</p> <hr/> <p style="text-align: center;">6</p> <p>60/40 - 30:10</p> <hr/> <p style="text-align: center;">7</p> <p>75 [2] 77:21, 79:13</p> <hr/> <p style="text-align: center;">8</p> <p>8 - 10:3 802 - 1:23 8127(b) - 10:1</p>	<p>85 [2] 77:19, 79:13 863-6067 - 1:23</p> <hr/> <p style="text-align: center;">9</p> <p>9 - 29:4 90 - 77:20 91 - 92:9 9:30 [3] 1:7, 1:11, 92:6</p> <hr/> <p style="text-align: center;">A</p> <p>a.m [4] 1:7, 1:11, 91:20, 92:6 ability [6] 6:23, 12:21, 13:7, 58:4, 59:10, 92:11 able [9] 11:19, 18:2, 23:13, 33:5, 46:8, 55:22, 56:8, 67:9, 90:5 absence [2] 17:21, 36:18 absent [2] 62:3, 91:4 absolutely [3] 35:3, 37:17, 44:6 abundance - 76:5 acceptance - 40:9 accepts - 76:15 accommodation - 39:9 accomplish - 25:16 accomplished - 25:19 according [2] 30:17, 88:6 account [3] 29:15, 64:15, 71:4 accrue [2] 56:21, 71:16 accurate - 28:13 accurately [2] 25:11, 66:17 achieve [3] 55:9, 59:19, 78:14 achieving - 27:15 Act [22] 11:14, 11:15, 11:22, 13:2, 13:12, 13:20, 15:25, 24:2, 25:13, 49:21, 54:23, 55:7, 55:20, 55:23, 58:5, 59:15, 59:19, 60:22, 64:21, 72:9, 79:9, 83:25 action [4] 11:3, 26:17, 26:23, 32:17 activate - 14:9 activities [6] 49:3,</p>	<p>50:4, 54:21, 54:25, 55:11, 55:14 activity [2] 80:25, 81:1 actors - 49:9 actual [2] 23:3, 74:7 add [2] 13:10, 32:25 added [2] 21:24, 66:7 adder - 62:13 additional [24] 10:14, 14:8, 14:13, 15:23, 16:11, 16:18, 17:13, 17:14, 17:15, 18:9, 20:6, 25:12, 25:16, 25:19, 25:22, 29:7, 45:18, 69:12, 72:10, 72:25, 74:8, 79:22, 80:5, 91:4 additionality - 21:23 address [6] 19:9, 72:19, 83:10, 85:6, 85:14, 88:3 addressed [3] 46:15, 52:4, 83:24 adjourn - 91:8 adjourned [2] 91:18, 91:20 administer - 59:18 administrative [3] 3:15, 66:7, 68:15 admit - 71:20 adopts - 76:15 advantage - 76:22 advertised - 23:1 advertising - 43:13 advise - 90:25 Advisory [9] 5:4, 5:13, 6:10, 9:6, 9:7, 42:11, 49:5, 57:16, 76:14 advocates - 58:8 affairs - 8:13 affect - 74:6 afford [2] 18:3, 64:18 affordable [2] 49:21, 61:14 afternoon - 59:4 against - 37:24 agent [2] 21:7, 84:3 aggregated - 67:20 aggregation [2] 67:13, 67:17 aggregators - 68:6 agree [10] 12:10, 14:3, 14:17,</p>	<p>25:3, 37:25, 46:21, 47:17, 47:18, 54:18, 69:13 agreed [2] 44:14, 46:6 agreement [5] 27:23, 45:3, 45:4, 46:8, 73:11 agreements [14] 30:24, 33:25, 34:8, 40:7, 44:24, 45:2, 45:6, 45:16, 46:15, 47:8, 47:25, 48:4, 48:5, 48:10 agrees - 83:18 ahead [15] 5:22, 20:14, 28:6, 29:1, 31:10, 39:1, 39:16, 41:6, 56:3, 65:23, 68:21, 70:2, 74:22, 82:2, 90:1 Allen [2] 1:13, 3:9 allocated - 49:9 allow - 31:16 allowed [6] 16:1, 21:21, 22:1, 23:10, 42:24, 42:25 allowing - 4:8 allows [2] 31:15, 62:25 allude [2] 35:17, 35:19 alluding - 51:19 alone - 54:1 already [11] 16:19, 25:22, 27:9, 31:23, 32:15, 32:16, 47:6, 55:12, 55:18, 74:10, 80:1 alternative [6] 20:23, 21:5, 37:10, 53:11, 62:25, 75:2 alternatives [2] 75:2, 76:3 Amber [7] 2:14, 8:20, 8:21, 12:1, 12:10, 83:1, 83:16 ambiguous - 34:3 amendment - 69:17 among [3] 10:17, 15:8, 15:13 amongst - 59:8 amount [4] 18:2, 18:14, 71:1, 79:12 amounts [4] 19:22, 61:13, 63:1, 77:23 Analyst - 1:14</p>	<p>and-a-half - 32:18 and/or - 67:19 Annette [17] 2:8, 7:2, 7:3, 16:22, 20:9, 21:12, 22:6, 22:12, 23:16, 25:25, 39:2, 39:11, 65:1, 74:21, 74:22, 75:18, 82:2 Annette's - 39:18 annual [2] 40:13, 85:4 answered - 63:24 answers - 73:2 Anthony - 1:13 anticipated [2] 17:18, 84:1 anticipating - 84:5 anticipation - 17:2 anyone's - 3:17 anyway [3] 25:20, 38:24, 44:25 apologize [2] 4:15, 7:8 appear [2] 4:14, 79:25 appeared - 10:24 applicable - 36:11 applied [3] 15:2, 31:4, 42:13 apply - 44:15 appreciate [6] 34:13, 34:13, 44:17, 57:13, 84:16, 91:12 appreciated - 89:15 approach [5] 10:19, 15:21, 53:23, 55:4, 87:13 appropriate [4] 54:11, 54:12, 61:12, 65:4 approval - 60:10 approved - 21:11 Apryl [3] 2:13, 8:15, 8:17 Ardington [2] 2:15, 9:12 areas [3] 33:13, 76:11, 76:20 aren't [2] 50:14, 73:25 arrangement - 86:19 asking [3] 17:8, 23:16, 39:15 assign - 38:5 assigned - 40:21 assigning [2] 86:21, 86:22 associated - 11:20 Association [7] 2:12, 9:4, 9:5, 10:8, 54:7, 90:17, 90:18 assume [3] 57:5, 86:15, 86:17 assuming - 78:17</p>	<p>assumption [5] 18:13, 53:4, 84:18, 84:22, 84:25 ASTM - 66:2 asymmetrical - 80:3 attainment - 50:11 attempting - 7:5 attendance - 3:8 attendees - 4:8 attending - 91:6 attention - 55:6 attorney - 7:13 attribute - 60:23 attributes [5] 40:6, 40:11, 40:16, 45:6, 62:2 attribution - 38:23 audio - 7:6 Austin [2] 2:11, 7:24 automatically - 62:9 availability - 76:6 available [4] 4:3, 23:2, 37:4, 76:7 average - 21:15 avoid [5] 20:22, 21:5, 21:6, 45:7, 51:3 avoided - 31:3 avoiding [2] 35:9, 44:20 awarded - 17:4 awarding - 78:7 awareness [3] 47:9, 50:7, 52:12 awhile - 71:20</p> <hr/> <p style="text-align: center;">B</p> <p>B100 [2] 68:25, 69:3 B20 - 69:16 background [2] 3:19, 74:2 bad - 45:1 Bailey [10] 2:10, 7:14, 7:19, 25:2, 28:7, 30:6, 30:22, 37:24, 42:20, 44:9 balance - 23:6 Barbecue [3] 2:12, 9:4, 90:17 basically - 36:6 baton - 63:24 battle - 34:20 battles - 46:22 bear [4] 14:14, 16:12, 19:1, 72:21 becomes [3] 58:20, 80:3, 86:23 BED [4] 2:14, 8:22, 16:15, 26:15</p>
---	---	--	--	---	---

<p>BED's - 11:8 begin [5] 3:15, 4:8, 11:3, 19:18, 81:20 beginning [2] 1:11, 92:6 behalf [4] 32:8, 88:6, 88:13, 90:15 behooves - 35:8 belong - 69:14 Ben [2] 2:9, 7:14 benefit [3] 55:3, 64:21, 64:22 benefits - 71:14 best [4] 47:13, 51:9, 60:11, 92:11 bet - 87:7 better [5] 31:16, 55:21, 55:25, 81:6, 87:12 beyond [3] 25:19, 25:22, 74:10 bid - 86:11 bigger - 43:20 bilateral - 47:7 bill - 69:3 bins - 62:10 biodiesel [10] 43:8, 62:11, 65:20, 66:1, 68:24, 68:25, 69:3, 69:9, 69:12, 69:19 biofuel [2] 61:22, 62:10 biofuels [7] 43:8, 44:5, 47:17, 48:24, 56:20, 67:14, 70:22 biomass - 43:8 biotype - 57:2 bit [7] 26:20, 48:18, 49:3, 56:19, 59:14, 78:1, 81:17 blend [3] 65:20, 65:25, 66:14 blended [2] 67:3, 67:4 board - 4:23 Bolaski [2] 2:9, 7:14 borrow - 27:20 Bouchard [2] 2:3, 4:24 BOX - 1:22 Braese [5] 2:14, 9:8, 9:9, 9:10, 28:23 break [2] 48:22, 56:13 Brian [2] 2:10, 7:14 bring [7] 19:1, 30:7, 33:2, 42:23, 45:10, 66:23, 72:9 bringing [2] 44:18, 68:6 brings [2] 71:16,</p>	<p>79:6 brought [4] 14:13, 16:12, 22:12, 72:21 budget [8] 17:22, 17:25, 29:5, 30:2, 78:25, 79:1, 80:6, 80:24 building [2] 34:4, 65:20 built [2] 12:15, 80:17 bundled - 60:23 burden - 66:7 Burlington [4] 1:22, 10:5, 26:14, 82:7 burning [6] 59:1, 61:21, 66:9, 66:22, 68:24, 68:25 businesses - 20:4 but-for [3] 35:20, 36:8, 41:16 buyers - 78:17 buying [2] 43:14, 62:8 by-utility - 30:4</p> <p style="text-align: center;">C</p> <p>California - 76:12 calling - 57:2 can't [9] 8:7, 9:13, 18:25, 50:22, 55:15, 64:17, 74:17, 87:9, 87:14 capabilities - 85:21 capacity [2] 40:14, 49:25 CAPITOL - 1:21 carbon [4] 49:23, 59:2, 70:15, 76:16 care - 82:10 carried - 16:15 carrying - 61:2 case [18] 1:2, 3:2, 11:2, 12:5, 16:10, 39:23, 41:20, 59:25, 64:8, 69:7, 70:12, 72:2, 72:24, 73:8, 80:4, 82:22, 88:14, 92:4 cases [3] 42:5, 62:10, 72:7 causality - 38:5 causation [2] 26:16, 27:13 cause [3] 26:17, 48:5, 92:14 caused - 38:4 cautioned - 71:4 cautioning - 37:24 Center - 82:10 centralized - 53:18</p>	<p>certain - 38:8 certainly [4] 30:25, 48:13, 73:24, 82:20 certify [3] 92:3, 92:7, 92:12 cetera [3] 34:9, 56:20, 83:13 chain [4] 58:6, 58:18, 59:3, 68:13 Chair - 3:9 Chairman - 1:13 challenge - 54:5 challenges - 31:8 chance - 5:20 change [12] 9:16, 11:22, 12:4, 13:21, 14:18, 29:23, 33:24, 45:16, 48:1, 48:6, 56:18, 76:24 changed [2] 11:17, 37:16 changes [3] 13:2, 48:1, 84:11 changing - 30:23 channel - 53:12 characteristic - 36:15 characteristics - 17:25 characterization [4] 27:22, 28:3, 29:3, 47:19 characterized [2] 23:19, 25:11 characterizing - 66:18 charge [4] 45:24, 69:1, 69:12, 73:16 charged [4] 23:22, 24:6, 61:2, 69:13 charges - 88:16 charging - 69:4 chat [2] 3:25, 9:14 check [3] 5:1, 86:10, 87:21 choose [5] 64:4, 64:8, 65:17, 65:19, 70:3 choosing - 66:21 Chris [5] 2:12, 8:3, 8:5, 81:16, 82:1 CHS [3] 9:7, 31:25, 43:1 citizen - 6:14 claim [23] 11:19, 12:21, 13:7, 17:11, 17:24, 23:13, 28:10, 29:16, 34:17, 34:18, 34:23, 35:12, 38:12, 38:16, 40:12, 40:13, 40:16, 46:9, 67:7,</p>	<p>71:25, 72:16, 73:19, 74:9 claimed [3] 21:20, 27:15, 59:7 claiming [9] 28:14, 28:16, 31:5, 32:15, 35:1, 42:6, 58:16, 70:14, 73:25 claims [4] 28:1, 29:18, 37:6, 38:15 clarification [2] 18:17, 47:4 clarifies - 52:9 clarify [9] 19:6, 25:3, 26:10, 28:8, 28:11, 34:8, 35:4, 35:7, 35:13 clarity [2] 47:12, 47:22 clean [87] 1:4, 2:8, 3:4, 3:10, 3:13, 7:4, 9:23, 9:25, 12:20, 12:20, 13:5, 14:3, 14:9, 14:12, 14:14, 16:2, 16:13, 16:19, 17:4, 17:21, 18:5, 18:6, 18:20, 19:3, 19:11, 19:12, 19:17, 19:19, 20:1, 21:3, 21:19, 22:3, 22:14, 22:15, 22:21, 24:16, 24:23, 25:7, 25:8, 25:15, 26:7, 32:5, 33:22, 34:9, 34:16, 36:12, 38:15, 40:20, 43:16, 43:25, 44:3, 46:24, 48:4, 48:8, 48:11, 49:7, 49:20, 50:12, 50:17, 51:23, 53:13, 54:22, 56:21, 58:8, 58:11, 60:1, 61:10, 62:7, 67:15, 71:25, 72:16, 72:21, 73:1, 73:19, 74:7, 76:11, 77:25, 78:7, 78:18, 79:24, 81:1, 84:4, 84:9, 84:19, 84:24, 85:14, 86:25 cleaner [2] 59:16, 64:19 clear [6] 4:4, 28:21, 34:1, 41:1, 78:1, 86:12</p>	<p>clearly [4] 23:9, 39:3, 49:23, 64:23 close - 7:11 closely - 60:15 cluster - 68:3 Co-op [3] 10:5, 11:1, 11:7 collaborations - 12:16 colleagues [3] 7:13, 10:13, 75:12 collect - 67:18 collected - 67:20 comes [6] 13:5, 16:3, 17:13, 18:1, 68:11, 86:3 comfortable - 55:4 coming - 72:18 comment [15] 6:25, 11:8, 12:11, 18:4, 18:12, 26:24, 31:19, 34:2, 46:18, 50:14, 52:9, 66:15, 71:6, 84:17, 90:11 commenters [3] 18:21, 46:6, 52:23 comments [29] 10:3, 10:4, 10:24, 11:1, 14:7, 18:12, 19:9, 20:11, 33:18, 33:19, 35:17, 35:19, 39:20, 46:2, 46:14, 47:5, 47:15, 48:2, 49:2, 54:24, 70:1, 71:6, 72:6, 78:10, 81:5, 81:14, 88:2, 89:1, 89:17 commission [24] 1:1, 1:10, 1:13, 3:2, 3:7, 3:9, 10:2, 10:14, 15:14, 23:21, 26:20, 45:25, 46:11, 49:4, 52:4, 60:14, 60:15, 63:18, 73:23, 78:14, 83:21, 89:6, 90:24, 91:6 Commission's - 3:4 Commissioner - 3:9 commissioners [3] 83:21, 89:6, 90:25 common - 36:3 companies [5] 21:4, 33:2, 54:13, 58:11, 76:22</p>	<p>company [6] 9:5, 32:11, 41:11, 58:23, 66:23, 67:2 compared [3] 65:9, 70:18, 70:21 comparing - 81:16 compel [2] 29:8, 49:22 complete - 50:9 completed [3] 35:14, 36:17, 36:17 completely [5] 28:13, 36:21, 36:22, 43:9, 66:3 complex [7] 45:23, 47:7, 55:11, 55:12, 55:18, 79:20, 81:7 complexities - 31:12 complexity [2] 30:23, 37:25 compliance [2] 20:23, 21:6 complicated [2] 18:1, 30:14 comply - 44:3 conceived - 15:10 Conceptually - 25:8 concerned [2] 30:22, 80:10 conflict - 47:20 confused - 26:9 confusing [2] 21:17, 26:4 confusion [3] 27:6, 44:21, 86:17 consider - 63:17 consideration - 49:19 considered - 56:11 considering - 89:1 construct [3] 12:4, 30:8, 33:25 constructs [3] 11:16, 11:19, 14:18 consultation - 45:25 consume - 65:21 consumer [11] 23:11, 39:13, 39:14, 39:25, 40:1, 50:7, 67:8, 67:10, 67:23, 68:14, 87:23 consumer's [2] 32:10, 36:9 consumers [3] 67:18, 87:16, 87:19 content - 66:5 context [3] 24:6,</p>
---	--	---	--	--	--

73:4, 78:11 contexts - 78:16 contingent - 40:10 continue [5] 11:10, 18:13, 19:1, 61:8, 66:11 continued [2] 18:18, 26:8 continues [3] 17:3, 17:19, 38:16 continuity - 47:22 contract [2] 84:3, 87:11 contractor [2] 23:4, 87:7 contractors [6] 9:3, 10:9, 32:8, 34:15, 54:6, 90:16 contractual - 60:25 contributed [2] 16:16, 74:10 control [2] 61:3, 71:2 conventional - 65:17 conversation [3] 48:17, 57:19, 81:5 conversations - 56:10 conversions - 29:25 cooling [3] 9:2, 10:9, 23:4 correct - 29:3 correctly - 18:18 cost [10] 22:24, 41:17, 60:12, 60:17, 61:13, 62:13, 64:12, 76:2, 76:18, 79:13 costs [2] 53:25, 77:20 Cota [35] 2:11, 8:1, 8:25, 9:1, 9:1, 20:16, 22:11, 31:20, 31:22, 34:12, 37:15, 39:3, 42:19, 42:22, 54:3, 54:4, 55:1, 57:12, 57:13, 62:6, 65:22, 65:24, 66:19, 67:1, 68:2, 75:18, 76:4, 84:14, 84:16, 85:12, 86:21, 89:9, 89:10, 90:15, 90:15 Cota's - 73:6 Cotterill [2] 2:10, 7:14 counsel - 92:13 count [4] 22:16, 24:10, 25:5,	32:3 counted - 58:19 counting [6] 21:23, 22:16, 23:10, 25:4, 32:19, 42:25 couple [8] 20:11, 29:22, 45:23, 55:5, 69:2, 73:22, 78:15, 82:12 course [2] 56:18, 59:1 court [2] 1:21, 4:2 covered [2] 4:7, 77:22 covers - 88:2 create [7] 20:24, 20:25, 42:4, 45:18, 46:24, 78:20, 80:20 created [2] 58:20, 67:5 creates [2] 11:15, 13:12 creating [3] 53:8, 55:11, 59:17 creation [5] 10:1, 11:3, 46:1, 46:3, 57:24 credit [105] 9:23, 9:25, 11:3, 11:5, 11:10, 11:19, 12:20, 13:18, 13:19, 13:22, 14:4, 14:5, 14:12, 14:14, 16:13, 16:20, 17:4, 21:19, 22:19, 22:20, 22:21, 22:23, 23:13, 27:3, 29:17, 30:12, 30:13, 30:16, 30:20, 31:1, 31:1, 31:2, 31:4, 31:6, 31:7, 32:10, 32:11, 32:13, 32:17, 34:4, 36:19, 38:12, 38:15, 38:17, 39:6, 39:15, 40:21, 41:12, 41:14, 41:15, 41:24, 41:25, 42:7, 43:12, 43:25, 44:5, 44:12, 46:1, 46:3, 46:9, 46:12, 48:8, 49:8, 49:15, 49:19, 50:12, 51:17, 51:24, 52:6, 52:17, 52:21, 53:13, 58:13, 58:16, 58:19, 64:23, 65:6, 65:13, 67:7, 67:23, 68:5, 69:14, 71:1, 71:7, 74:7,	74:9, 76:11, 77:12, 78:1, 78:7, 78:19, 79:24, 80:20, 81:20, 82:10, 82:17, 83:13, 83:25, 84:24, 86:19, 88:5, 88:22, 88:23, 89:3, 89:17 creditable [2] 27:25, 54:25 credited - 58:23 credits [87] 12:18, 14:9, 16:1, 16:5, 16:5, 18:20, 20:18, 22:3, 23:22, 23:24, 23:25, 24:12, 24:17, 24:24, 25:5, 25:22, 27:14, 31:3, 31:13, 31:18, 32:1, 32:4, 32:5, 32:16, 32:19, 33:6, 33:22, 34:10, 34:19, 34:21, 34:24, 35:1, 37:6, 40:1, 45:6, 45:9, 46:23, 47:11, 47:16, 48:5, 48:11, 53:3, 54:11, 55:8, 55:10, 55:14, 56:8, 56:21, 58:9, 59:7, 59:10, 61:6, 61:15, 63:16, 64:6, 65:3, 65:9, 67:15, 67:18, 69:10, 70:7, 70:18, 70:21, 70:24, 71:2, 71:3, 72:1, 72:17, 73:1, 73:5, 73:11, 73:12, 75:4, 75:24, 78:12, 78:12, 78:18, 78:20, 79:18, 80:10, 84:1, 85:7, 87:4, 87:15, 87:16, 87:23, 88:19 criteria - 17:24 critical - 58:20 current [11] 12:17, 12:22, 12:24, 13:2, 13:8, 24:13, 47:1, 48:3, 50:3, 52:1, 70:11 currently [9] 24:9, 27:1, 33:15, 34:23, 43:23, 62:22, 78:25, 79:12, 89:17 customer [44] 11:2, 11:4, 29:8, 29:12, 29:13,	33:25, 34:3, 34:8, 35:5, 38:4, 39:21, 40:2, 40:5, 40:17, 44:18, 44:21, 44:24, 45:2, 45:2, 45:5, 45:11, 45:16, 46:4, 46:15, 47:25, 48:3, 48:5, 52:12, 57:2, 57:5, 59:1, 59:25, 61:24, 62:1, 65:5, 65:12, 66:16, 66:21, 66:24, 69:15, 73:9, 81:22, 88:16, 88:17 customer's [3] 38:7, 81:21, 88:18 customers [25] 40:8, 43:20, 47:13, 56:6, 60:10, 60:17, 61:11, 61:14, 61:20, 61:21, 63:3, 63:4, 63:6, 63:7, 63:9, 64:22, 66:8, 71:23, 72:19, 73:15, 74:5, 77:20, 77:21, 77:23, 88:9	88:21, 88:23, 89:2 DDA's - 84:10 deadline [4] 89:16, 89:20, 90:3, 91:3 dealer [10] 23:4, 69:1, 69:10, 69:11, 75:3, 75:23, 75:24, 88:11, 88:14, 88:15 dealers [9] 7:23, 9:4, 10:8, 33:1, 54:7, 62:6, 65:16, 86:14, 90:18 dealing - 24:21 deals - 75:23 dealt [3] 29:11, 43:23, 83:9 December [5] 1:6, 1:10, 10:3, 92:5, 92:16 decide [2] 31:12, 38:3 decided [2] 23:8, 69:11 decides - 63:19 decision [3] 38:10, 67:2, 81:21 defined - 78:13 definitely - 52:23 Deirdre [2] 2:16, 3:11 delay - 90:9 deliver [2] 21:9, 88:13 deliverable - 58:12 delivered [18] 56:19, 56:25, 57:3, 58:17, 59:6, 59:6, 59:21, 59:25, 60:24, 61:21, 62:9, 62:9, 63:19, 65:19, 65:20, 69:25, 71:7, 84:5 delivering [4] 58:11, 60:5, 60:5, 60:8 delivery [3] 21:7, 60:25, 84:2 demand [2] 74:5, 76:10 department [11] 3:14, 7:8, 7:12, 7:17, 10:6, 10:6, 26:21, 30:11, 60:14, 60:16, 89:19 Department's [2] 25:18, 30:19 dependent - 75:1 depends [4] 62:17, 72:4, 72:4, 76:13 derive - 73:16 describe - 27:12	design [2] 1:4, 3:4 designated - 84:2 designed [2] 25:15, 86:1 desirable - 30:11 desk [2] 68:7, 68:8 determine [7] 14:14, 16:13, 26:22, 32:20, 46:1, 68:10, 73:1 determined [8] 13:18, 46:7, 49:9, 50:3, 83:6, 83:13, 83:19, 87:22 determines [2] 16:19, 41:24 determining [5] 9:25, 26:22, 36:1, 46:12, 68:8 develop - 13:17 developer - 70:14 development [9] 50:6, 50:19, 51:21, 52:2, 52:7, 53:7, 53:9, 53:15, 54:20 dialogue [2] 15:13, 15:19 diesel [3] 43:9, 66:1, 76:8 differentiation [2] 29:13, 29:14 difficultly - 59:22 difficult - 55:13 dig - 26:19 direct [3] 36:3, 49:5, 55:8 directed - 78:21 directing - 15:14 direction [2] 48:18, 48:19 directly [5] 14:17, 15:11, 27:18, 55:15, 59:21 director - 3:7 disagree [4] 23:18, 52:13, 54:19, 54:24 disagreement - 62:3 disagreements - 46:22 disclose - 66:5 disclosure - 66:4 discount - 62:16 discuss [2] 9:22, 72:6 discussed [2] 33:10, 46:3 discussing - 16:7 discussion [12] 10:17, 12:6, 30:8, 45:22, 56:19, 57:4, 57:14, 63:23, 74:1, 83:15, 88:25, 91:4
---	---	---	--	--	--

D

Dan - 2:15

Dated - 92:15

Dave [31] 5:19,
5:23, 5:24, 12:7,
16:21, 17:7,
20:18, 25:3,
25:10, 29:1,
35:15, 38:1,
38:25, 39:12,
39:16, 39:17,
46:14, 46:18,
48:16, 49:2,
49:12, 74:13,
74:16, 74:17,
74:17, 74:21,
75:9, 77:2,
81:10, 82:2,
91:14

Dave's - 37:15

David [3] 2:5,
2:6, 6:4

DDA [30] 20:23,
21:10, 43:22,
52:2, 83:24,
84:4, 84:8,
84:19, 84:23,
85:3, 86:6, 86:8,
86:16, 86:18,
86:23, 86:23,
87:3, 87:4, 87:6,
87:8, 87:11,
87:23, 88:5,
88:5, 88:12,
88:12, 88:16,

<p>discussions - 91:16</p> <p>disincentive - 20:22</p> <p>disrupt - 14:4</p> <p>disruptive - 3:19</p> <p>distillate [2] 76:6, 76:25</p> <p>distinct - 57:20</p> <p>distinction - 64:1</p> <p>distinguish - 27:3</p> <p>distribution [6] 12:12, 27:22, 29:7, 29:16, 47:6, 86:2</p> <p>distributor - 41:11</p> <p>district - 82:7</p> <p>diverse - 86:5</p> <p>diversified - 85:20</p> <p>documenting [2] 27:1, 27:8</p> <p>dollars [9] 17:15, 17:16, 17:17, 30:9, 30:17, 30:21, 72:21, 78:5, 78:6</p> <p>dominant [2] 70:25, 70:25</p> <p>Dominic [2] 2:16, 3:12</p> <p>double [5] 21:22, 22:16, 23:9, 25:4, 42:24</p> <p>doubt - 48:4</p> <p>downstream - 81:24</p> <p>DPS [4] 2:9, 2:9, 2:10, 2:10</p> <p>draws - 55:5</p> <p>drive [4] 78:19, 79:4, 79:18, 80:18</p> <p>driven - 81:1</p> <p>driving - 41:18</p> <p>drop - 3:25</p> <p>drove - 80:5</p> <p>DU [4] 12:21, 24:16, 28:9, 38:16</p> <p>dueling - 45:1</p> <p>dummy - 21:15</p> <p>dumping - 68:7</p> <p>DUs [2] 28:10, 28:14</p> <p>Dylan [3] 2:3, 2:17, 4:21</p> <hr/> <p style="text-align: center;">E</p> <hr/> <p>earlier [5] 16:6, 54:18, 59:23, 72:6, 73:6</p> <p>earn [3] 67:14, 75:4, 75:24</p> <p>earns - 87:11</p> <p>easily - 80:2</p> <p>easy - 59:18</p> <p>echo - 59:14</p> <p>education - 50:7</p> <p>EEC - 29:5</p> <p>EEU [16] 12:11, 12:21, 18:8,</p>	<p>18:19, 19:2, 19:24, 19:24, 20:20, 24:15, 28:9, 36:7, 38:16, 42:25, 43:5, 43:22, 77:11</p> <p>EEUs [4] 18:13, 18:25, 28:9, 34:20</p> <p>effect [2] 57:14, 80:6</p> <p>effective [2] 60:17, 61:13</p> <p>effectively [2] 24:12, 24:23</p> <p>effectiveness - 60:12</p> <p>efficiency [73] 5:19, 5:25, 6:2, 10:7, 12:12, 13:7, 16:4, 17:9, 17:11, 17:12, 17:18, 18:23, 19:11, 20:11, 22:19, 22:23, 27:16, 27:23, 28:12, 28:15, 29:4, 29:6, 29:10, 29:18, 29:19, 29:20, 30:1, 32:7, 33:17, 34:5, 35:20, 35:23, 36:5, 36:10, 37:5, 37:6, 37:7, 37:18, 38:13, 39:19, 40:7, 40:11, 40:12, 40:13, 45:4, 48:20, 49:4, 49:10, 49:13, 49:22, 50:13, 50:24, 50:25, 52:1, 53:19, 55:25, 57:22, 64:18, 72:8, 72:14, 72:15, 72:18, 72:20, 73:14, 73:16, 73:18, 74:3, 74:11, 77:14, 78:22, 80:17, 87:5, 90:19</p> <p>efficient - 37:8</p> <p>effort - 72:15</p> <p>efforts [2] 72:11, 72:14</p> <p>eight - 41:9</p> <p>either [6] 13:6, 27:16, 38:16, 47:11, 53:6, 59:9</p> <p>elect - 66:14</p> <p>election - 63:6</p> <p>electric [19] 10:5, 10:5, 10:25, 11:7, 28:15, 28:16, 29:5, 29:6, 29:18, 32:2, 33:16, 34:5, 34:20,</p>	<p>37:7, 37:19, 43:5, 54:10, 57:22, 82:8</p> <p>Electric's - 26:14</p> <p>electricians - 85:23</p> <p>electrification - 43:2</p> <p>electrify - 57:21</p> <p>electrons - 43:19</p> <p>element - 49:18</p> <p>eligible - 13:13</p> <p>else's - 27:20</p> <p>EMAIL - 1:23</p> <p>Emily [2] 2:5, 5:16</p> <p>emission [5] 23:24, 24:7, 24:10, 55:16, 55:21</p> <p>emissions [12] 21:8, 25:14, 33:7, 43:4, 51:10, 53:24, 55:7, 55:9, 58:18, 58:22, 59:16, 79:10</p> <p>emitting - 59:2</p> <p>Emma [4] 2:15, 9:12, 9:13, 9:13</p> <p>enacted - 67:16</p> <p>encourage - 70:7</p> <p>encouraging - 47:13</p> <p>ended - 23:6</p> <p>ends - 87:6</p> <p>energy [15] 3:13, 3:14, 12:12, 16:4, 17:12, 18:23, 40:6, 40:10, 57:24, 72:8, 72:14, 72:15, 72:18, 72:20, 87:18</p> <p>enforce - 68:4</p> <p>enormous - 71:1</p> <p>ensued - 45:22</p> <p>ensure [3] 11:9, 60:16, 68:5</p> <p>enter - 64:5</p> <p>entire - 85:13</p> <p>entirety - 84:23</p> <p>entities [13] 11:5, 31:5, 33:20, 38:1, 38:12, 43:6, 44:2, 49:14, 54:15, 58:16, 59:8, 67:21, 82:12</p> <p>entitle - 14:12</p> <p>entitled - 40:6</p> <p>entity [16] 17:3, 26:16, 27:24, 38:4, 38:7, 38:15, 43:22, 51:25, 60:4, 71:16, 77:12, 79:25, 80:11, 82:18, 86:10, 87:4</p> <p>entity's - 80:12</p> <p>environment [3]</p>	<p>2:8, 7:4, 47:2</p> <p>environmental [3] 40:6, 40:11, 62:2</p> <p>ePUC [2] 4:3, 10:24</p> <p>equal [2] 11:23, 24:16</p> <p>equally [2] 28:1, 63:5</p> <p>equipment [3] 11:6, 22:22, 39:5</p> <p>Equity - 9:6</p> <p>Erin [2] 2:17, 3:11</p> <p>error - 57:11</p> <p>especially [2] 33:10, 70:18</p> <p>essentially [8] 28:1, 30:9, 30:16, 31:2, 31:5, 45:10, 79:23, 80:11</p> <p>establish - 4:4</p> <p>established [2] 60:9, 67:17</p> <p>establishing [2] 27:13, 44:22</p> <p>establishment - 9:24</p> <p>et [3] 34:8, 56:20, 83:13</p> <p>evaluate - 49:6</p> <p>evaluation [2] 17:24, 78:3</p> <p>eventual [2] 33:22, 42:11</p> <p>eventually - 44:6</p> <p>everyone [12] 5:10, 7:24, 8:4, 9:18, 32:22, 34:10, 48:13, 56:16, 77:8, 77:16, 78:9, 91:17</p> <p>everyone's [2] 47:9, 56:5</p> <p>everything - 65:9</p> <p>evidence - 92:11</p> <p>EVT [3] 2:5, 2:5, 2:6</p> <p>exact - 22:22</p> <p>exactly - 35:7</p> <p>example [5] 11:18, 16:14, 27:25, 56:4, 72:12</p> <p>examples - 51:11</p> <p>Excellence [2] 50:25, 53:19</p> <p>excellent - 22:5</p> <p>except - 10:23</p> <p>exchange - 11:5</p> <p>existence - 16:3</p> <p>existential - 31:25</p> <p>existing [28] 11:16, 11:18, 12:11, 12:13, 14:5, 14:10, 14:18, 16:3, 16:5, 16:8, 17:1,</p>	<p>17:10, 25:6, 25:23, 38:17, 44:11, 44:16, 45:19, 47:22, 57:20, 71:22, 72:17, 80:8, 80:12, 80:18, 80:23, 80:24, 80:25</p> <p>exists - 27:12</p> <p>expanded - 21:1</p> <p>expectation [2] 11:16, 11:23</p> <p>experience [7] 41:8, 42:5, 42:18, 45:11, 53:17, 68:24, 69:19</p> <p>experienced - 51:12</p> <p>expertise [2] 27:20, 73:25</p> <p>explain [2] 14:25, 48:3</p> <p>explanation - 25:4</p> <p>explicit [2] 25:5, 28:17</p> <p>explore - 82:10</p> <p>express - 13:4</p> <p>extend [2] 89:20, 90:7</p> <p>extended - 90:3</p> <p>extension [5] 89:23, 90:14, 90:18, 90:20, 90:23</p> <p>extent [4] 16:2, 50:13, 51:4, 55:10</p> <p>extra - 78:4</p> <p>extremely - 55:11</p> <hr/> <p style="text-align: center;">F</p> <hr/> <p>face - 31:8</p> <p>facilities - 69:17</p> <p>factor - 42:13</p> <p>factored - 41:22</p> <p>failed - 22:14</p> <p>fair [2] 27:21, 28:2</p> <p>fall - 78:3</p> <p>false - 84:18</p> <p>familiar [2] 35:22, 43:6</p> <p>family - 75:3</p> <p>fantastic - 70:17</p> <p>farm - 70:13</p> <p>federally - 25:24</p> <p>fee [4] 88:5, 88:7, 88:12, 88:22</p> <p>feedback - 56:1</p> <p>feel [4] 3:24, 4:15, 55:4, 61:23</p> <p>fellow - 3:13</p> <p>field [2] 27:11, 54:8</p> <p>fight [2] 35:10, 47:10</p> <p>fighting - 45:9</p>	<p>figure [3] 22:6, 31:17, 84:10</p> <p>figured - 74:23</p> <p>file - 10:3</p> <p>filed [2] 39:20, 47:4</p> <p>filing [6] 14:21, 15:18, 26:14, 32:16, 48:20, 91:3</p> <p>filings [3] 10:13, 33:19, 84:17</p> <p>fill - 74:23</p> <p>filled - 47:7</p> <p>final [2] 29:15, 91:8</p> <p>financial [10] 17:2, 17:5, 19:15, 35:6, 36:2, 36:8, 40:2, 40:25, 76:22, 80:1</p> <p>fine [2] 5:22, 40:19</p> <p>finite - 79:11</p> <p>fixed - 62:13</p> <p>fleshed - 58:14</p> <p>flier - 69:2</p> <p>floor - 82:22</p> <p>flow [2] 55:14, 73:12</p> <p>flowing [3] 30:9, 55:10, 62:22</p> <p>flows - 51:24</p> <p>focus [2] 44:1, 55:6</p> <p>focused [3] 43:12, 44:11, 55:20</p> <p>folks [2] 5:10, 48:18</p> <p>follow [2] 20:14, 35:24</p> <p>follow-up - 16:25</p> <p>followed [4] 57:8, 57:9, 63:22, 74:13</p> <p>follows - 64:12</p> <p>for-profit - 68:6</p> <p>force [16] 41:18, 49:25, 50:5, 50:19, 51:14, 51:21, 52:1, 52:6, 52:8, 52:12, 53:7, 53:9, 53:15, 54:4, 54:14, 54:20</p> <p>foregoing [2] 92:7, 92:9</p> <p>foremost - 13:5</p> <p>forget - 35:2</p> <p>formal - 15:20</p> <p>formation [2] 12:20, 77:25</p> <p>formed [2] 47:17, 48:12</p> <p>forming - 77:12</p> <p>forms - 32:18</p> <p>forward [6] 32:15, 32:21, 40:14, 40:18, 67:11,</p>
--	---	---	--	---	--

<p>91:11 fossil [4] 21:4, 28:15, 59:2, 65:18 frame [2] 26:1, 78:10 framework - 23:17 free [4] 3:24, 4:15, 61:23, 78:12 front - 55:17 fuel [43] 7:22, 9:4, 10:8, 21:1, 21:4, 23:4, 28:15, 29:9, 49:23, 54:7, 56:25, 57:2, 58:20, 58:21, 58:22, 59:2, 59:2, 59:5, 59:21, 62:3, 65:16, 65:18, 65:21, 66:1, 66:9, 66:23, 67:2, 68:11, 69:1, 69:10, 69:10, 75:22, 76:7, 76:8, 76:16, 86:2, 86:13, 88:8, 88:11, 88:14, 88:15, 90:16, 90:17 fuels [13] 21:5, 43:8, 56:19, 58:11, 58:17, 59:17, 60:1, 61:21, 63:20, 64:19, 69:25, 71:7, 77:18 fulfilling - 85:4 full [3] 11:10, 11:19, 78:7 fully - 82:14 function - 3:22 functionality - 9:14 fundamental [4] 32:20, 55:6, 59:5, 67:1 funded [5] 24:9, 25:20, 25:23, 25:24, 25:24 funding [5] 72:17, 72:18, 77:25, 79:2, 80:21 funds [4] 18:9, 29:25, 73:15, 87:8 future [2] 52:3, 59:10</p> <hr/> <p style="text-align: center;">G</p> <hr/> <p>gain - 85:20 Gardner [11] 2:7, 6:12, 6:13, 6:14, 63:22, 64:1, 64:25, 70:9, 70:10, 74:13, 74:14</p>	<p>gas [40] 4:17, 4:19, 4:20, 10:10, 14:1, 14:21, 20:11, 21:8, 33:7, 33:11, 43:4, 48:24, 54:9, 54:9, 55:7, 55:15, 55:21, 56:20, 57:18, 58:13, 58:18, 58:22, 60:2, 60:11, 60:21, 61:9, 61:20, 61:22, 62:21, 63:2, 63:10, 65:5, 70:4, 70:13, 70:15, 70:19, 71:12, 73:14, 73:18, 82:12 Gas's [3] 19:7, 71:15, 71:24 gaseous [3] 43:8, 60:1, 61:10 gather [2] 21:21, 65:2 gathering - 89:12 Gatti [2] 2:16, 3:12 gave [2] 28:23, 83:16 gears - 71:8 general [3] 28:5, 35:25, 56:23 generally [2] 35:21, 35:24 generate [2] 24:8, 24:14 generated [9] 20:19, 21:19, 23:23, 24:1, 52:6, 53:2, 58:14, 70:22, 84:1 generating [2] 25:21, 74:7 generation [2] 70:12, 81:22 generous [2] 37:3, 37:16 gently [2] 6:22, 20:17 Geoffrey [7] 2:7, 6:11, 6:13, 63:22, 63:25, 70:8, 74:13 geothermal - 56:7 gets [11] 13:13, 22:22, 30:14, 31:18, 34:21, 36:18, 43:12, 58:13, 58:18, 71:2, 86:11 Giambatista [2] 2:3, 4:21 giant - 76:22 Gillen - 2:15 given [2] 23:23, 38:9 giving - 43:13 Global [6] 10:9, 24:1, 25:13, 58:5, 64:20, 79:9 GMP [3] 2:12, 22:18, 39:20 GMP's - 11:2 goal [4] 50:16, 51:15, 55:6, 55:20 goals [7] 44:21, 55:23, 59:19, 64:20, 70:5, 72:20, 78:14 goes [8] 16:6, 44:25, 54:12, 63:3, 64:2, 67:10, 73:3, 73:8 gone [2] 75:10, 89:13 GoToMeeting [3] 3:22, 9:17, 74:20 gotten - 24:19 grants - 79:1 greater - 20:3 greatest - 51:3 Green [3] 8:5, 10:7, 81:14 greenhouse [9] 21:8, 33:7, 43:3, 55:7, 55:15, 55:21, 57:18, 58:17, 58:22 Greg [3] 2:2, 4:17, 4:18 grid - 74:25 gross - 42:13 ground - 90:9 Group [9] 5:4, 5:13, 6:10, 9:6, 9:7, 42:11, 49:5, 57:16, 76:14 grow [2] 50:16, 52:11 growth - 50:6 guess [17] 4:13, 6:19, 13:12, 26:5, 26:9, 38:11, 38:13, 41:22, 45:13, 57:4, 57:6, 62:4, 63:21, 73:21, 78:9, 82:9, 82:11 guidance - 73:24 guideline - 35:25</p> <hr/> <p style="text-align: center;">H</p> <hr/> <p>Haley [4] 2:6, 5:19, 5:23, 6:1 handed - 23:21 handled - 65:10 handling - 69:6 hands [3] 32:17, 57:7, 74:13 happen [2] 67:11, 67:22 happened [3] 24:22, 36:4, 68:1</p>	<p>happening [2] 25:22, 66:8 happens - 30:4 happy [2] 5:13, 40:19 harder - 90:10 harm - 12:24 harp - 42:23 hasn't - 59:8 haven't [6] 24:5, 24:19, 74:24, 75:21, 82:6, 83:24 having [9] 4:7, 30:10, 30:16, 33:7, 42:3, 45:1, 51:7, 65:3, 70:12 hear [12] 8:7, 9:13, 36:13, 51:5, 52:23, 56:1, 74:17, 75:16, 77:5, 84:14, 86:12, 86:16 heard [5] 33:18, 47:15, 74:24, 81:13, 81:14 hearing - 21:23 hearings - 15:20 Hearth [3] 2:11, 9:3, 90:16 heat [111] 1:4, 3:4, 3:10, 9:23, 9:25, 11:21, 12:20, 12:20, 13:6, 13:16, 13:18, 13:24, 14:4, 14:9, 14:12, 14:14, 16:2, 16:13, 16:20, 17:4, 17:21, 18:5, 18:6, 18:20, 19:3, 19:11, 19:12, 19:17, 19:19, 20:1, 21:3, 21:19, 22:3, 22:14, 22:15, 22:18, 22:21, 22:24, 24:17, 24:23, 25:7, 25:8, 25:15, 26:7, 29:6, 32:5, 33:22, 34:9, 34:16, 36:12, 37:1, 37:2, 37:7, 38:15, 39:23, 39:24, 40:21, 41:8, 41:18, 41:20, 42:18, 43:1, 43:2, 43:13, 43:14, 43:14, 43:16, 43:25, 44:3, 46:24, 48:4, 48:8, 48:11, 49:7, 49:20, 49:21, 50:12, 50:17, 51:23, 53:13, 54:9,</p>	<p>54:22, 56:7, 56:21, 58:8, 60:1, 61:10, 62:7, 64:18, 67:15, 71:25, 72:16, 72:22, 73:1, 73:19, 74:7, 77:25, 78:7, 78:18, 79:24, 81:2, 82:9, 82:14, 82:16, 82:18, 84:4, 84:9, 84:19, 84:24, 85:14, 86:25 heater - 42:18 heating [15] 9:2, 10:8, 21:1, 23:3, 32:11, 34:15, 57:21, 65:18, 65:18, 68:25, 69:5, 76:8, 82:7, 86:2, 90:16 heating/cooling [2] 32:8, 54:6 held - 1:10 helpful [2] 79:25, 81:4 Henry [3] 2:9, 7:7, 7:11 Henry's - 7:18 here's [2] 11:12, 28:4 hereby - 92:3 hi [7] 5:3, 6:5, 6:9, 9:1, 56:4, 77:8, 82:24 Hicks-tibbles [2] 2:17, 3:11 higher [4] 19:22, 76:9, 77:23, 79:15 highlighting - 32:22 highly - 80:3 Hill [4] 2:11, 9:2, 9:6, 38:14 Hillman [19] 2:4, 2:6, 5:2, 5:3, 5:4, 6:4, 6:5, 32:24, 32:25, 56:3, 56:4, 57:8, 57:10, 70:1, 70:3, 81:11, 81:12, 90:22, 90:22 historically - 17:20 holdover - 82:3 holiday - 90:4 homeowner - 84:6 homes [3] 20:4, 34:16, 86:2 honest - 76:9 honestly - 36:2 hope [4] 10:16, 38:24, 52:9, 91:2 Hopefully - 77:3 hospitals - 33:4 hot - 41:8 hours - 71:13</p>	<p>How's - 8:9 however [2] 60:1, 63:16 huge - 55:2 hundred [5] 17:15, 37:1, 42:7, 78:4, 78:6 hundreds [2] 34:17, 36:25 HVAC - 54:6 hypothetical - 85:5</p> <hr/> <p style="text-align: center;">I</p> <hr/> <p>idea [11] 15:24, 16:8, 21:23, 24:11, 49:20, 54:24, 67:8, 71:14, 77:24, 79:21, 80:10 ideal - 53:16 identified - 7:22 identify [2] 4:16, 7:17 identifying - 23:22 III [35] 11:9, 11:10, 11:17, 11:20, 12:13, 13:14, 13:14, 13:19, 13:22, 14:5, 14:11, 16:4, 16:14, 19:25, 20:20, 21:1, 21:20, 22:3, 25:6, 26:7, 27:2, 27:16, 27:19, 28:9, 28:11, 28:14, 29:17, 29:25, 30:8, 31:3, 32:4, 33:16, 43:10, 57:24, 72:8 imagine - 85:3 impact [6] 33:6, 33:13, 36:9, 49:6, 58:3, 78:2 impair - 12:21 implement [2] 33:24, 81:21 implemented [3] 12:14, 18:10, 85:15 implementing - 33:20 implements - 11:9 implicating - 52:20 importers [2] 21:4, 88:8 improved - 29:5 inappropriate - 42:8 incentive [46] 11:21, 16:11, 16:16, 17:2, 17:3, 17:5, 17:10, 17:14, 17:16, 17:16, 17:19, 17:20, 18:2, 18:8, 18:14, 18:15,</p>
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19:22, 29:5, 29:8, 29:12, 30:21, 30:23, 35:6, 36:9, 37:3, 37:9, 37:16, 38:8, 39:7, 40:8, 40:18, 40:19, 40:20, 40:25, 41:16, 41:17, 42:3, 42:4, 42:7, 54:1, 61:7, 76:17, 78:5, 79:22, 79:23, 84:7 incentives [20] 11:6, 14:10, 17:23, 19:1, 19:15, 19:25, 19:25, 20:1, 20:19, 21:9, 23:7, 36:2, 37:7, 40:9, 71:23, 80:2, 80:5, 80:8, 80:18, 87:1 incentivize [2] 78:25, 87:4 incentivized [3] 21:5, 61:8, 72:14 incentivizing [2] 59:16, 72:15 include [2] 21:1, 48:11 including - 3:10 income - 77:21 incorporate - 63:1 increase [8] 18:5, 19:13, 19:20, 49:24, 61:9, 62:14, 64:12, 64:16 increased - 76:18 increasing [2] 61:12, 63:1 increment [2] 25:12, 25:16 incremental [19] 14:8, 14:13, 14:25, 15:24, 17:5, 18:15, 51:16, 53:2, 71:17, 72:1, 72:10, 73:20, 77:24, 78:21, 79:4, 80:5, 80:13, 80:14, 80:22 indirect [7] 49:3, 49:6, 49:11, 49:14, 52:19, 54:20, 55:14 individual [3] 23:3, 36:18, 56:5 individuals - 58:10 industry - 66:12 ineligible - 73:18 info@capitolcour - 1:23 informed - 41:13 initial [3] 26:15,	26:18, 73:3 innovator - 3:13 input [2] 74:2, 91:7 insert - 61:16 inspired - 5:15 inspires - 76:19 install [7] 34:16, 36:3, 37:1, 39:23, 39:24, 71:22, 88:22 installation [6] 22:20, 41:24, 50:20, 51:8, 51:9, 71:17 installed [18] 13:13, 18:7, 19:14, 20:4, 22:18, 26:18, 37:3, 39:5, 41:8, 42:6, 46:2, 46:16, 56:25, 59:22, 59:24, 73:10, 84:4, 88:17 installer [6] 23:12, 36:24, 39:21, 39:23, 39:24, 45:3 installers [3] 32:17, 37:1, 40:8 installing [8] 32:9, 32:12, 38:5, 41:18, 43:14, 73:10, 87:17, 88:5 instead [2] 21:3, 59:2 institutions - 56:6 instructive - 26:25 intend [3] 4:9, 7:25, 75:10 intended [2] 20:25, 24:8 intends - 4:10 intensive - 70:16 intent [2] 19:12, 59:15 intention - 85:25 interaction [4] 21:21, 22:2, 26:4, 28:9 interest - 23:17 interested [2] 19:23, 92:14 interesting [4] 66:10, 81:15, 81:18, 91:16 interfere - 13:6 internally - 41:3 interrelated - 24:18 interrupt [3] 3:25, 6:22, 65:24 intervention [2] 35:23, 36:4 introduce [4] 4:9, 4:12, 5:20, 8:25 introduction - 7:18 invested - 30:17	investing - 54:14 investment [19] 14:8, 14:13, 15:1, 15:24, 16:18, 16:18, 18:18, 31:18, 50:5, 50:11, 52:15, 55:8, 71:17, 72:1, 72:5, 72:10, 72:22, 72:25, 73:20 investments [2] 31:14, 50:19 invisible - 52:8 invoices - 68:7 involve - 43:7 involved [7] 40:1, 57:23, 58:11, 82:12, 85:3, 89:3, 89:3 involvement [4] 83:24, 84:2, 84:10, 84:11 irrelevant [2] 18:19, 84:20 Irving [2] 2:13, 8:13 ISO - 40:14 issue [4] 41:1, 51:5, 72:7, 73:8 issues [2] 46:25, 91:11 itself [3] 15:25, 19:2, 19:2	6:11, 6:17, 6:24, 7:7, 7:16, 7:21, 8:3, 8:6, 8:10, 8:15, 8:20, 8:24, 9:8, 9:12, 9:21, 10:21, 12:1, 12:7, 13:9, 13:25, 14:19, 14:23, 15:3, 15:12, 16:21, 19:5, 20:8, 20:15, 21:12, 22:4, 24:25, 25:25, 26:12, 27:10, 27:21, 28:4, 28:22, 30:18, 31:10, 31:20, 32:24, 33:14, 35:3, 37:13, 37:22, 39:1, 39:11, 39:16, 41:6, 42:9, 44:4, 45:12, 46:17, 48:16, 52:10, 54:2, 54:16, 55:24, 56:12, 56:16, 57:12, 59:11, 61:16, 62:19, 63:8, 63:21, 64:25, 65:14, 65:23, 66:10, 66:20, 67:25, 68:21, 69:21, 70:8, 71:5, 71:10, 73:13, 74:12, 74:16, 75:5, 75:8, 77:2, 77:6, 81:10, 82:1, 82:20, 83:16, 84:12, 85:1, 85:10, 86:12, 87:24, 89:5, 89:9, 89:11, 90:1, 90:12, 90:21, 90:24, 91:14 knows [2] 77:16, 85:2	41:25, 42:18 leaks - 51:4 learn [2] 50:22, 66:11 least [2] 36:6, 46:16 leave [3] 26:10, 49:16, 74:18 legal - 34:9 legions - 34:25 legislation [4] 21:22, 22:2, 36:21, 36:23 legislative - 22:13 legislature [8] 21:11, 23:10, 25:5, 26:5, 42:24, 67:16, 84:18, 85:15 less [5] 26:24, 37:8, 39:6, 41:17, 76:24 lesser [2] 50:14, 79:12 let's [12] 16:15, 17:12, 17:14, 35:12, 56:14, 57:5, 71:21, 85:3, 85:10, 86:15, 86:17, 87:24 level [3] 27:11, 68:14, 80:25 levels - 30:23 licenses - 54:9 lie [3] 55:8, 59:25, 60:3 lifetime [3] 41:25, 42:1, 42:16 lights - 85:17 likely [5] 44:12, 70:17, 70:21, 70:23, 83:8 listed - 6:19 listen - 9:10 listening [2] 8:14, 8:18 listing - 6:20 lit - 22:10 living [2] 34:14, 34:14 load - 68:7 long-term [3] 50:18, 53:8, 53:20 looking [2] 12:25, 62:4 looks [5] 13:9, 39:17, 54:3, 56:17, 57:8 lose - 43:24 loud - 86:12 love [2] 54:10, 58:9 low - 49:23 lower [3] 24:23, 58:21, 76:16 Luce [9] 2:4, 5:2, 5:4, 32:24, 56:2, 57:8, 70:1, 81:10, 90:22 Luce's - 34:2	M
		J			
		January [2] 59:6, 89:18 Jill [17] 2:2, 4:20, 4:22, 13:25, 15:3, 16:25, 16:25, 19:4, 42:20, 45:12, 54:16, 57:9, 59:11, 62:5, 62:19, 77:9, 82:25 Jill's [2] 47:24, 83:18 jobs - 51:3 joined [2] 3:12, 7:13 jump [5] 10:15, 10:18, 10:21, 12:2, 83:1 justified - 64:16	L		
		K			
		keeping - 23:17 Keller [4] 2:4, 5:11, 5:12, 5:13 kerosene - 76:8 Kim [2] 91:18, 92:3 Knauer [110] 1:14, 3:1, 3:6, 4:25, 5:8, 5:16, 5:22, 6:3, 6:7,			
					market-based [3] 53:5, 53:23, 87:12 marketplace [5] 37:17, 58:3, 65:15, 76:19, 76:23 markets - 78:16 Mary [4] 2:3, 4:22, 4:22, 4:23 Massachusetts - 67:12 Matt [41] 2:11, 8:1, 8:24, 9:1, 20:8, 20:13, 21:12, 22:10, 23:18, 31:20, 33:1, 34:11, 36:25, 37:13, 38:1, 38:25,

39:1, 39:17, 42:19, 44:9, 47:15, 50:21, 54:3, 55:1, 57:8, 57:12, 59:14, 60:7, 62:4, 65:16, 69:16, 70:22, 73:6, 75:6, 75:15, 75:17, 77:2, 84:12, 85:10, 86:13, 90:15 Matt's [3] 25:3, 36:20, 47:15 matter [2] 19:10, 52:3 mature - 76:24 Mauck [4] 2:9, 7:8, 7:10, 7:11 maximum - 50:2 maybe [6] 26:20, 66:20, 69:1, 71:13, 75:15, 83:1 McCoy [4] 2:13, 8:16, 8:17, 8:17 McNeil - 82:8 Meadow [4] 2:11, 9:2, 9:5, 38:14 meaning - 60:23 meaningless - 48:9 means [5] 3:17, 19:14, 20:2, 20:5, 92:4 meant [5] 14:25, 26:25, 72:19, 79:18, 81:1 measure [23] 11:10, 11:11, 11:21, 13:13, 13:15, 13:16, 16:3, 16:14, 22:16, 26:17, 27:25, 36:4, 36:10, 49:7, 71:18, 73:10, 74:4, 81:21, 84:4, 84:9, 88:13, 88:17, 88:22 measured - 35:25 measurement - 36:11 measures [28] 14:11, 18:7, 18:10, 19:11, 19:11, 19:13, 19:16, 19:23, 20:3, 26:7, 28:19, 34:16, 38:6, 42:14, 42:15, 43:3, 46:2, 46:16, 46:24, 59:23, 59:24, 60:2, 61:10, 64:18, 71:22, 73:10, 87:17, 88:6 mechanism - 37:11	mechanisms - 79:21 Medical - 82:9 meet [14] 24:17, 25:13, 55:23, 58:4, 60:20, 66:2, 70:5, 79:2, 79:9, 84:8, 86:5, 86:9, 86:18, 87:9 meeting [2] 64:20, 86:24 megawatthour - 29:19 Melissa [9] 2:10, 7:14, 24:25, 28:6, 37:14, 37:22, 42:20, 44:7, 46:21 Melissa's [3] 29:3, 45:15, 47:18 member - 4:22 members [5] 1:13, 3:10, 4:20, 7:17, 50:21 message - 86:16 met - 87:14 methodologies - 68:10 methodology [5] 9:24, 11:8, 30:16, 44:14, 44:22 metric - 86:25 Michelle [3] 2:4, 5:11, 5:12 microphone [4] 3:17, 5:1, 9:16, 74:20 midstream - 40:8 mind [3] 15:15, 23:18, 38:20 minimize - 3:19 minus - 70:16 minute [3] 27:12, 34:2, 89:21 minutes - 45:23 miss - 4:14 missed [2] 9:18, 71:11 mix - 76:1 mixed - 76:7 MMBTU - 17:12 Mock - 7:11 model - 31:8 Moderate - 77:21 modifications - 48:14 modified - 48:10 molecule - 60:23 monetary - 32:5 monetize - 23:13 money [8] 16:11, 19:15, 32:3, 52:18, 67:19, 68:17, 74:9, 88:21 months [2] 32:18, 69:2 Montpellier - 6:20 morning [21] 3:1, 4:18, 4:24, 5:3,	5:12, 5:18, 5:24, 6:1, 6:3, 6:11, 6:13, 6:18, 7:24, 8:4, 8:6, 8:12, 8:17, 8:21, 9:9, 14:2, 83:23 Morris [2] 2:16, 3:11 Morse [4] 2:2, 4:17, 4:18, 4:19 Mountain [3] 8:5, 10:7, 81:14 MOUs - 47:5 move [3] 7:19, 26:13, 56:19 moving [3] 9:21, 64:19, 66:15 multilateral - 47:7 multiple [6] 3:10, 31:13, 31:15, 31:16, 44:19, 65:3 mute [2] 3:17, 3:18 Myers [4] 2:18, 3:12, 83:23, 84:15 myself - 61:17	non-profit [2] 82:13, 82:17 none [4] 10:21, 54:18, 71:10, 85:2 nonfinancial - 50:8 Northeast [3] 2:11, 9:3, 90:16 northern - 70:13 note [2] 3:25, 14:3 noted - 18:22 notes - 92:10 nothing [2] 43:4, 43:22 notice - 3:24 noting - 29:24	opinion [3] 11:13, 44:2, 67:25 opportunity [6] 76:21, 81:6, 81:23, 85:19, 85:24, 89:21 opposed [2] 15:19, 48:1 option - 85:17 order [23] 3:23, 4:4, 4:14, 10:23, 10:23, 14:14, 16:10, 16:12, 16:23, 18:7, 19:21, 33:24, 42:21, 47:21, 49:22, 50:8, 62:5, 70:5, 72:25, 74:9, 78:14, 85:19, 85:20 orderly - 5:9 original [2] 45:14, 49:20 originates - 46:12 ostensibly [2] 59:1, 87:1 others [6] 12:10, 49:13, 56:1, 85:18, 85:21, 86:8 otherwise [4] 9:16, 13:2, 36:14, 73:12 ought [2] 13:6, 69:14 outcome [6] 30:12, 45:1, 45:7, 53:16, 68:1, 92:14 outnumbered - 34:24 outside - 43:10 overall [4] 60:11, 61:11, 63:2, 74:6 overlap [2] 44:15, 47:20 owned - 70:24 owner [9] 14:12, 23:5, 26:18, 31:13, 57:5, 73:11, 84:6, 88:11, 88:23 owners [8] 31:15, 31:17, 63:16, 64:6, 65:3, 82:16, 82:17, 82:19 ownership [54] 9:23, 11:16, 11:18, 11:23, 12:18, 13:17, 13:19, 13:22, 13:23, 14:15, 14:18, 16:13, 24:5, 26:15, 27:4, 27:13, 30:16, 33:21, 33:24, 35:12, 38:23, 41:14, 43:25, 44:5,	44:13, 44:14, 46:9, 46:22, 48:25, 49:8, 49:16, 49:19, 51:22, 52:17, 52:21, 53:22, 53:22, 56:21, 56:24, 59:24, 60:3, 63:19, 66:25, 69:19, 71:7, 71:15, 73:1, 82:11, 83:13, 83:25, 86:19, 87:19, 89:4, 89:17 owning - 85:6 owns [4] 31:25, 32:19, 46:1, 87:23
		N	O	P	
		narrow - 46:10 natural [12] 48:24, 54:9, 56:20, 58:13, 60:2, 60:21, 61:9, 61:21, 62:21, 63:1, 70:4, 70:13 navigate - 47:3 necessarily [3] 14:11, 58:12, 72:16 necessary [4] 8:2, 8:23, 48:14, 50:8 needed [8] 14:9, 19:15, 19:17, 24:12, 24:17, 24:24, 47:21, 53:10 needing - 30:23 needs [10] 18:8, 23:7, 25:15, 32:14, 33:9, 49:24, 53:5, 53:25, 56:11, 71:4 negates - 76:17 neglected - 74:14 negotiation [3] 39:4, 39:10, 83:15 net-to - 42:12 Network [2] 50:25, 53:19 nightmare - 68:15 nine - 41:9 nobody [2] 46:21, 71:25 nodding - 66:17 noises - 3:19	objects - 89:22 obligated [26] 20:22, 25:21, 32:6, 38:7, 38:15, 44:2, 51:24, 53:14, 58:15, 58:16, 59:9, 59:17, 67:21, 78:18, 84:3, 84:7, 85:4, 85:14, 86:14, 86:22, 87:2, 87:8, 87:14, 88:4, 88:7, 88:12 obligation [8] 74:6, 86:6, 86:9, 86:18, 86:22, 86:23, 87:9, 87:14 obligations - 84:8 observation - 70:11 obtain [4] 61:6, 87:3, 87:15, 87:15 obtained - 60:9 obvious - 78:9 offer [11] 11:4, 17:19, 18:3, 18:8, 18:14, 19:15, 22:8, 67:19, 79:22, 81:25, 87:2 offered [3] 23:2, 40:9, 48:2 offering [6] 17:2, 17:15, 17:23, 35:6, 60:17, 87:1 offers - 17:14 oil [5] 2:13, 8:13, 54:9, 69:5, 76:8 ones [5] 34:18, 34:19, 61:7, 63:14, 88:8 open [4] 15:19, 38:20, 82:22, 83:5 operates - 18:22 opine - 86:13	P.O - 1:22 package - 78:5 packages - 37:3 pages - 92:9 paid [4] 39:22, 39:23, 40:17, 87:8 par - 62:17 paradigm - 38:17 parallel [5] 13:12, 13:21, 13:23, 18:21, 81:18 Pardon - 57:11 participant [5] 6:5, 15:17, 83:22, 89:7, 89:22 participants [10] 10:2, 10:15, 10:17, 11:13, 11:13, 15:8, 15:11, 15:13, 20:6, 91:5 participate [4] 9:15, 47:14, 64:19, 85:24 participating [2] 74:1, 91:17 participation - 89:14 particular [5] 10:23, 41:20, 60:22, 69:20, 83:14 particularly - 32:15 parties [15] 20:22, 25:21, 30:24, 31:14, 36:13, 59:18, 73:12, 78:18, 85:4, 85:14, 86:14, 87:9, 87:14, 90:8, 92:13 partners [3] 10:9, 29:21, 48:14 party [17] 6:19, 6:20, 17:13, 18:1, 32:6, 33:8,	

<p>36:18, 51:24, 53:14, 58:15, 68:6, 84:3, 84:7, 87:2, 88:4, 88:7, 88:12 pass - 63:24 passage - 11:14 passed [2] 49:21, 49:22 passes - 64:12 path [2] 13:23, 38:3 pathway - 60:25 Patio [3] 2:11, 9:3, 90:17 pay - 29:7 paying [14] 23:6, 39:21, 40:3, 40:5, 61:25, 62:7, 62:11, 64:7, 64:11, 64:23, 66:16, 66:23, 69:7, 77:19 payment [4] 20:23, 21:6, 21:6, 88:18 pays [5] 29:4, 39:14, 88:4, 88:11, 88:12 pellet - 87:10 pellets [4] 62:7, 62:8, 67:14, 87:13 pending - 90:14 people's - 20:4 per - 16:7 percent [6] 39:25, 42:7, 66:1, 77:20, 77:21, 79:13 perfect [2] 84:20, 84:21 perhaps [5] 55:3, 76:20, 76:24, 82:13, 87:1 persistence - 42:15 personally - 15:15 perspective [11] 12:19, 21:16, 44:18, 52:24, 61:7, 65:12, 69:22, 78:24, 79:19, 82:23, 90:13 perspectives - 38:21 pertains [3] 16:20, 48:20, 48:25 pertinent - 6:15 Pfenning [21] 2:2, 4:21, 13:25, 14:2, 15:5, 15:22, 17:6, 18:16, 45:12, 45:13, 54:17, 59:11, 59:13, 62:20, 63:12, 72:3, 73:21,</p>	<p>77:10, 82:24, 82:25, 83:4 physical - 60:25 pie - 43:20 pieces - 22:22 pipeline [2] 82:8, 82:13 plain - 22:1 plan [3] 6:6, 10:11, 62:25 planning [3] 5:14, 8:22, 9:10 plants - 70:20 play - 21:14 player - 71:1 players - 82:15 playing - 27:11 please [15] 3:16, 3:21, 3:24, 4:4, 4:6, 4:11, 4:15, 6:25, 9:15, 21:25, 22:9, 28:6, 68:21, 70:1, 90:1 plumbing - 54:10 plus - 80:25 point [44] 6:21, 9:15, 18:4, 19:10, 19:19, 20:10, 24:20, 25:4, 25:17, 27:2, 28:18, 30:5, 30:19, 36:11, 36:20, 36:24, 37:16, 38:23, 39:19, 40:4, 40:23, 41:15, 44:10, 44:13, 44:19, 45:15, 47:24, 51:17, 51:18, 53:21, 56:2, 59:5, 61:5, 66:10, 66:21, 67:1, 72:5, 72:9, 73:3, 73:4, 73:6, 78:20, 79:7, 81:22 pointing - 36:23 points [4] 42:10, 46:20, 52:23, 85:13 policy [2] 3:6, 32:21 portfolio [2] 60:13, 60:18 portion [7] 11:4, 49:15, 61:19, 63:10, 65:6, 65:13, 85:4 posit - 61:22 position [13] 14:8, 16:11, 19:7, 38:14, 55:22, 59:21, 60:12, 63:13, 71:15, 71:24, 71:25, 74:8, 81:20 positions - 91:1 possible - 20:25 possibly - 59:9</p>	<p>potential [7] 1:4, 3:4, 41:13, 47:20, 77:11, 80:12, 90:4 potentially [4] 25:21, 45:4, 49:15, 88:23 Power [3] 8:5, 10:7, 81:15 practicable - 51:4 practice - 30:5 practitioners - 34:7 preference [3] 30:15, 30:20, 30:25 preliminaries [2] 3:16, 4:7 premise [2] 52:14, 57:7 premium [14] 61:23, 62:2, 62:8, 62:11, 62:17, 63:5, 64:7, 64:11, 66:16, 69:2, 69:8, 69:12, 70:4, 76:9 prepared - 15:3 presented [2] 15:25, 88:25 presumably [5] 20:1, 49:9, 52:17, 61:20, 78:18 previous [2] 14:24, 66:14 price [10] 39:25, 41:10, 62:14, 63:4, 64:7, 64:11, 69:4, 71:3, 78:20, 79:11 principle [3] 12:24, 13:4, 88:10 principles - 57:1 private - 6:14 Pro [4] 2:6, 2:7, 2:8, 6:19 probably [17] 5:7, 6:20, 30:14, 30:25, 34:3, 44:10, 44:15, 44:25, 47:16, 47:17, 47:21, 47:25, 50:1, 50:14, 70:25, 78:8, 84:22 problem [2] 53:24, 57:12 problematic - 47:1 procedural - 15:7 proceeding [5] 1:4, 4:3, 12:10, 52:4, 91:19 proceedings - 92:11 process [7] 12:24, 18:1, 22:13, 24:19, 26:10, 50:23, 83:7</p>	<p>procurement - 61:3 procuring [2] 60:5, 63:14 produce - 70:17 produced [2] 70:15, 70:19 producer [2] 58:21, 67:5 product [8] 56:25, 61:23, 62:3, 66:17, 66:22, 66:24, 66:25, 86:3 products [5] 21:8, 56:22, 65:18, 65:18, 87:18 program [26] 13:16, 14:6, 16:4, 17:1, 19:1, 19:2, 19:3, 21:1, 27:19, 38:18, 41:23, 43:2, 45:18, 53:20, 54:22, 60:9, 62:23, 62:24, 62:24, 63:11, 64:2, 64:5, 64:9, 71:22, 72:20, 72:23 programs [21] 12:14, 12:15, 13:3, 16:9, 18:21, 22:17, 24:9, 25:6, 25:10, 25:23, 25:24, 28:14, 44:11, 44:16, 45:19, 47:23, 53:9, 57:20, 72:7, 73:14, 73:18 project [18] 34:4, 35:22, 36:16, 40:5, 40:17, 40:20, 42:4, 70:14, 72:4, 72:13, 72:17, 77:9, 77:16, 77:20, 77:22, 79:13, 83:7, 83:14 projects [28] 18:6, 19:20, 24:9, 24:13, 24:16, 24:22, 33:16, 33:17, 33:21, 35:13, 35:25, 49:23, 50:1, 50:9, 50:13, 54:1, 78:23, 79:1, 79:5, 79:8, 79:11, 79:12, 79:14, 80:14, 80:19, 80:22, 80:24, 83:10 prompt - 10:17 pronounced - 7:11 propane [16] 54:9, 62:12, 74:24, 74:25,</p>	<p>75:1, 75:3, 75:20, 75:22, 75:23, 75:25, 76:5, 76:9, 76:15, 76:16, 76:18, 76:22 proper - 51:9 proportion [2] 24:1, 24:2 proportional [4] 25:13, 30:9, 31:7, 49:8 proposal [3] 38:22, 49:18, 55:25 proposed - 82:7 proposing [2] 27:8, 65:8 provide [10] 17:3, 47:22, 49:14, 53:6, 54:15, 60:10, 69:11, 75:3, 82:23, 83:10 provided [3] 35:18, 35:19, 71:23 provider [4] 17:1, 45:4, 55:2, 60:3 providing [12] 11:20, 17:10, 19:22, 33:16, 49:10, 63:15, 69:3, 69:8, 74:1, 82:9, 82:18, 91:6 proxies - 23:24 Public [8] 1:1, 1:10, 3:2, 3:3, 7:12, 10:6, 23:20, 89:19 PUC [23] 2:16, 2:16, 2:17, 2:18, 24:6, 34:14, 43:6, 43:11, 43:23, 48:15, 57:17, 58:7, 58:19, 64:9, 64:16, 66:11, 67:17, 68:15, 70:12, 75:12, 76:15, 86:4, 90:8 pull - 12:17 pump [15] 11:21, 22:18, 22:24, 37:2, 37:2, 37:8, 39:24, 39:25, 41:8, 41:19, 41:21, 42:18, 43:13, 43:14, 43:15 pumps [5] 29:6, 43:1, 43:2, 56:7, 64:18 purchase [4] 19:23, 36:10, 67:13, 79:17 purchased [2] 67:3, 67:4 purchasing [2] 62:2, 66:25</p>	<p>purpose - 9:22 puruant - 10:1 push [2] 20:17, 61:23 pushing - 91:11 putting [6] 27:24, 29:25, 37:18, 47:8, 56:6, 80:1</p> <hr/> <p style="text-align: center;">Q</p> <p>qualify [3] 13:15, 17:11, 20:20 qualifying - 77:22 quantify - 55:13 quantifying - 24:7 quantity - 78:13 quarter - 86:10 questioning - 48:3 queue [3] 41:5, 68:20, 85:9 quickly [3] 30:6, 30:14, 80:7 quite [2] 45:23, 81:13</p> <hr/> <p style="text-align: center;">R</p> <p>raise [5] 3:21, 15:6, 46:25, 52:18, 82:22 raised [12] 3:22, 12:8, 16:22, 28:5, 31:21, 35:15, 39:2, 42:19, 57:8, 61:18, 65:1, 74:22 raises - 27:7 raising [3] 6:23, 36:23, 40:24 ramifications [2] 17:22, 81:8 rate [4] 50:3, 62:13, 64:11, 64:16 ratepayer [2] 25:23, 73:15 ratepayers - 64:3 rather [2] 31:17, 64:13 re - 92:4 react - 57:6 reaction - 77:9 real - 86:20 realize - 71:11 really [34] 12:13, 15:19, 17:25, 23:15, 24:20, 25:15, 28:20, 30:6, 30:14, 30:14, 31:24, 32:14, 32:20, 45:1, 45:7, 45:23, 47:20, 49:18, 51:2, 51:11, 52:16, 52:22, 53:21, 66:15, 66:20, 76:13, 76:20, 78:15, 81:5,</p>
---	---	---	---	---	--

81:7, 81:20, 83:24, 86:14, 91:11 reason [2] 60:19, 90:6 reasonable [2] 39:8, 69:9 reasons [2] 55:5, 64:15 rebate - 43:13 rebates - 23:7 REC - 81:22 receive [2] 11:10, 49:15 received [3] 10:4, 32:16, 89:18 Recess - 56:15 recharged - 42:2 recipient [2] 61:15, 82:16 recognition - 52:5 recognize [2] 36:16, 39:9 recognized - 52:7 Recognizing - 86:1 recommended - 38:8 recommending - 57:17 reconvene - 56:18 rendered [7] 4:4, 4:10, 4:11, 7:6, 28:22, 28:25, 83:16 recorded [2] 13:14, 92:4 recording - 7:6 records - 66:3 RECs - 81:16 reduce [9] 21:7, 33:6, 43:3, 55:7, 58:17, 59:16, 74:5, 80:7, 80:12 reduced [2] 41:10, 92:9 reduces - 58:22 reducing - 57:18 reduction [4] 17:13, 51:10, 55:16, 55:21 reductions [6] 23:25, 24:7, 24:10, 25:14, 55:9, 79:10 refer - 35:18 reference [2] 42:12, 74:25 reflect - 53:25 refrain - 4:6 refrigerant [5] 41:21, 42:1, 42:19, 51:4, 51:10 regard - 77:12 regarding - 3:3 regrettable [2] 51:6, 51:11 regulate - 68:3 regulated [6] 34:22, 34:23,	43:6, 52:25, 53:1, 62:14 regulates - 48:15 regulation [2] 47:21, 62:25 regulations [4] 12:22, 13:3, 13:8, 47:8 regulatory [3] 8:13, 22:17, 60:9 reiterate [2] 14:7, 85:12 reiterating - 31:22 rejoin [2] 74:18, 75:10 related [4] 16:7, 20:10, 33:15, 92:12 relates [8] 15:24, 34:2, 46:2, 46:16, 59:24, 60:21, 63:3, 63:19 relationship - 84:11 relatively - 64:5 release - 81:23 rely - 86:8 remain - 41:1 removing - 84:6 rendered - 39:22 renewable [28] 43:9, 48:24, 56:20, 57:2, 57:24, 60:2, 60:21, 61:9, 61:21, 62:12, 62:21, 63:1, 63:10, 66:1, 66:5, 66:9, 66:22, 66:23, 68:12, 70:4, 70:12, 70:19, 74:25, 75:25, 76:5, 76:6, 76:16, 76:18 repeatedly - 42:23 reply [4] 19:9, 81:5, 89:1, 89:16 report - 28:24 reporter - 4:2 REPORTERS - 1:21 reporting [2] 27:19, 29:16 represent [2] 8:1, 77:11 representation - 83:18 representing [2] 9:2, 21:15 request [4] 89:19, 89:23, 90:14, 90:25 requested - 10:2 require - 52:14 required [7] 22:1, 25:12, 54:22, 66:4, 78:13, 79:8, 84:8	requirement [2] 24:4, 24:17 requirements [9] 24:2, 38:18, 50:12, 57:18, 60:21, 61:1, 79:3, 79:9, 85:5 requires [3] 13:20, 60:22, 66:5 reselect - 74:19 resolved [2] 32:14, 91:2 resource - 53:18 resources [3] 23:1, 51:16, 68:17 respect [2] 14:20, 27:13 respond [5] 11:24, 15:4, 54:3, 62:5, 85:10 response [8] 9:20, 10:20, 19:6, 71:9, 75:7, 89:8, 91:9 responsibility [2] 23:20, 52:2 responsible [5] 60:4, 61:12, 63:14, 84:23, 86:24 rest - 59:4 restate - 17:7 rests - 46:3 result [2] 48:6, 50:17 results - 73:17 retail [3] 60:11, 63:2, 85:23 retailer [2] 58:24, 58:25 retain [4] 62:1, 66:24, 81:23, 87:19 retained [2] 58:19, 67:23 retaining - 70:6 return [3] 45:14, 48:22, 56:14 revenue [7] 53:2, 53:13, 78:21, 79:4, 79:23, 80:13, 80:21 revenues - 20:7 review [2] 10:12, 15:17 reviewed - 10:24 Rick [5] 2:7, 6:8, 6:9, 61:17, 63:22 rights - 33:21 Riley - 1:13 rise - 51:18 risks - 53:8 RNG [12] 60:8, 60:10, 60:16, 63:3, 63:7, 64:2, 64:8, 64:10, 64:13, 65:6, 65:12, 70:11	robust [2] 48:16, 89:14 Roe [4] 2:6, 5:19, 6:1, 6:1 Roisman [2] 1:13, 3:9 Roscoe [3] 2:5, 5:17, 5:18 round - 47:5 rule [4] 3:5, 13:6, 35:9, 56:24 rulemaking - 24:19 rules [2] 12:19, 67:16 run [2] 18:21, 80:6 runs - 73:14	S	sake - 57:4 Sarah [4] 2:14, 9:8, 9:9, 28:22 savings [23] 11:20, 12:12, 12:13, 12:22, 13:7, 17:12, 17:24, 27:16, 28:1, 28:10, 28:15, 28:16, 28:18, 28:19, 29:10, 29:17, 29:18, 30:9, 30:17, 40:12, 40:13, 40:13, 73:17 saying [6] 31:23, 33:1, 33:9, 44:25, 52:11, 79:3 says - 36:23 scaled - 80:21 scarcity - 76:10 scenario [5] 12:17, 82:5, 82:21, 82:23, 87:20 scenarios [2] 88:2, 88:24 scope - 34:8 score - 57:17 screen - 4:14 scrutiny - 60:14 se [4] 2:6, 2:7, 2:8, 6:19 Sears [2] 91:18, 92:3 seasons - 90:5 secondary [2] 80:20, 81:7 Section - 10:1 sector [9] 24:3, 24:8, 25:14, 51:7, 54:6, 57:21, 57:21, 65:5, 77:18 sectors - 65:4 secure - 51:9 Seeing [2] 10:21, 71:10 seem [2] 65:4,	70:6 seems [3] 61:11, 68:14, 72:8 select - 74:19 self-learned - 50:23 sellers [2] 21:2, 62:10 sells [2] 58:23, 58:25 sense [4] 48:18, 60:19, 61:7, 65:8 separate [4] 19:2, 57:20, 72:22, 72:22 separately [2] 13:18, 83:9 serve [3] 9:6, 61:11, 63:2 served [3] 63:7, 63:10, 75:22 serves - 4:25 service [9] 7:12, 10:6, 16:15, 52:25, 60:22, 61:14, 67:13, 67:19, 89:19 services [4] 11:5, 39:22, 67:17, 85:20 setting - 27:11 settings - 9:17 share [9] 28:1, 41:7, 44:20, 49:8, 51:23, 65:7, 68:23, 85:21, 88:18 shared [4] 28:18, 28:19, 42:17, 63:5 sharing [7] 30:13, 30:20, 31:1, 31:2, 31:4, 31:8, 66:12 short - 48:22 shorter - 42:1 shouldn't [3] 43:11, 52:7, 72:21 showing - 39:4 shut - 85:17 signal - 83:17 significant [4] 26:17, 26:23, 27:7, 50:5 signing [6] 40:10, 40:15, 45:2, 45:3, 45:5, 63:9 similar [3] 39:20, 81:21, 81:24 simpler - 55:19 simplify - 21:17 single [4] 22:16, 29:12, 31:12, 80:11 sits [2] 16:8, 25:9 sitting - 85:2 situation [3] 17:1, 41:16, 47:18 situations [3] 47:2, 73:5, 73:7	ski - 33:13 skirting - 38:11 slice [2] 43:16, 43:18 Smith [21] 2:8, 7:2, 7:3, 7:3, 16:22, 20:9, 20:13, 21:13, 21:14, 26:3, 29:2, 39:11, 39:13, 65:1, 65:2, 74:22, 74:23, 75:15, 75:20, 82:2, 82:5 Smith's - 44:17 sole [3] 38:3, 60:4, 61:3 solution [2] 53:5, 53:6 solutions [6] 24:2, 25:13, 55:2, 58:5, 64:20, 79:9 somebody - 27:20 somehow - 13:2 someone [12] 7:21, 15:15, 21:17, 21:25, 28:5, 40:22, 51:20, 65:17, 75:22, 79:21, 86:15, 86:18 someone's [3] 15:18, 35:10, 35:11 somewhat - 83:8 sorry [12] 4:23, 8:9, 8:11, 19:24, 35:18, 51:5, 51:11, 57:10, 65:24, 74:15, 75:18, 81:4 sort [27] 14:9, 15:6, 16:8, 18:3, 18:19, 21:15, 23:17, 26:3, 36:12, 36:24, 37:9, 40:24, 41:1, 46:10, 50:7, 53:12, 53:14, 56:10, 61:3, 70:22, 73:6, 79:6, 80:9, 80:15, 81:6, 83:5, 83:11 sorted [2] 43:15, 59:8 source [2] 56:7, 80:21 sourced [4] 43:7, 67:14, 68:12, 76:25 sources [2] 47:19, 79:1 space [3] 24:21, 46:24, 47:7 speak [9] 3:21, 4:5, 4:9, 5:14, 6:15, 6:23, 7:4, 18:24, 28:12 speaker - 14:25
--	---	--	---	----------	---	---	--

<p>speaking [11] 3:18, 6:6, 6:21, 8:1, 8:8, 8:14, 8:22, 9:13, 35:24, 47:5, 65:11</p> <p>spec - 66:2</p> <p>specific [6] 60:1, 60:20, 61:1, 72:4, 72:20, 83:10</p> <p>specifically [4] 9:23, 48:11, 50:15, 59:15</p> <p>spend - 32:3</p> <p>spent - 88:1</p> <p>split [2] 30:10, 30:10</p> <p>splits - 30:17</p> <p>splitting - 30:13</p> <p>spoken - 56:1</p> <p>sponsors - 50:25</p> <p>stab - 23:15</p> <p>stack [2] 16:5, 19:25</p> <p>stacking [3] 15:25, 71:14, 73:5</p> <p>staff [5] 1:14, 3:10, 83:21, 89:6, 90:25</p> <p>stand - 55:3</p> <p>standard [37] 1:4, 3:5, 3:11, 9:24, 12:20, 13:16, 13:24, 14:4, 17:21, 18:5, 19:12, 19:18, 19:19, 21:4, 22:14, 22:15, 22:21, 25:7, 25:9, 25:15, 26:22, 27:14, 36:7, 36:7, 36:12, 43:16, 44:3, 49:21, 50:17, 57:25, 58:8, 67:15, 73:19, 81:2, 84:19, 85:15, 86:25</p> <p>standards - 19:24</p> <p>stands [2] 86:7, 89:18</p> <p>start [2] 4:16, 55:10</p> <p>started [2] 29:23, 44:23</p> <p>starting - 25:17</p> <p>state [13] 1:1, 25:23, 33:3, 33:12, 37:1, 37:2, 37:4, 50:2, 53:17, 55:2, 58:4, 64:19, 70:19</p> <p>state-sponsored - 53:18</p> <p>stated [3] 54:23, 84:17, 91:1</p> <p>statute [2] 31:15, 88:6</p>	<p>stay - 43:20</p> <p>stenograph - 92:10</p> <p>stenographic - 92:4</p> <p>stenographically - 92:8</p> <p>step - 75:19</p> <p>Stephanie [3] 2:11, 7:22, 7:25</p> <p>stepping - 30:1</p> <p>straw - 38:22</p> <p>stream [2] 67:6, 68:9</p> <p>structure [2] 51:23, 76:17</p> <p>structure's - 80:17</p> <p>structured [2] 15:21, 83:12</p> <p>structures [4] 12:11, 12:16, 12:22, 14:5</p> <p>struggling [2] 18:4, 41:2</p> <p>subject - 35:21</p> <p>submitted - 88:7</p> <p>subsequent - 46:13</p> <p>subsequently [3] 46:5, 46:7, 49:7</p> <p>subsidization - 16:12</p> <p>substantial - 50:10</p> <p>substantially - 49:24</p> <p>success [3] 53:20, 54:22, 54:23</p> <p>successful [2] 22:14, 55:22</p> <p>succinct - 6:15</p> <p>sufficient - 7:18</p> <p>suggest [3] 13:1, 48:21, 56:13</p> <p>suggested [2] 49:4, 66:15</p> <p>suggesting - 33:19</p> <p>suggestion [2] 11:2, 26:19</p> <p>suggests - 26:15</p> <p>sum [2] 24:15, 24:22</p> <p>supplier [4] 22:25, 62:4, 69:5, 69:8</p> <p>supply [20] 58:6, 58:18, 59:3, 60:6, 60:11, 61:4, 61:9, 61:11, 63:2, 63:15, 64:10, 66:2, 66:6, 66:6, 67:3, 67:5, 67:6, 68:9, 68:13, 70:23</p> <p>support [13] 11:1, 18:9, 20:7, 49:6, 49:11, 49:15, 51:2, 51:20, 52:18, 52:19,</p>	<p>79:14, 80:25, 90:18</p> <p>supported - 11:8</p> <p>supporting - 79:12</p> <p>supports [3] 53:7, 90:20, 90:22</p> <p>suppose - 4:25</p> <p>supposed [3] 18:10, 23:25, 78:11</p> <p>suspect [2] 10:13, 83:12</p> <p>sustainability - 70:5</p> <p>sustainably [4] 43:7, 67:14, 68:12, 76:25</p> <p>switch [3] 29:9, 48:17, 71:7</p> <p>system [9] 13:21, 14:4, 27:8, 45:9, 59:17, 61:1, 62:22, 82:7, 82:11</p> <p>systems - 76:12</p> <hr/> <p style="text-align: center;">T</p> <hr/> <p>table - 40:25</p> <p>tact - 29:23</p> <p>TAG [8] 2:4, 2:4, 2:7, 45:25, 46:11, 83:9, 83:10, 90:8</p> <p>TAG's - 73:24</p> <p>taken [6] 39:19, 56:15, 71:4, 74:4, 92:8, 92:10</p> <p>targets - 29:19</p> <p>task - 55:17</p> <p>tasked - 57:16</p> <p>tax - 53:1</p> <p>team [4] 3:11, 4:20, 4:22, 49:2</p> <p>technical [10] 5:4, 5:13, 6:10, 9:7, 24:4, 42:11, 42:11, 49:5, 57:16, 76:14</p> <p>technology - 38:8</p> <p>tend - 69:13</p> <p>tends - 36:8</p> <p>tension - 44:12</p> <p>TEPF [2] 78:25, 79:1</p> <p>term - 21:22</p> <p>terminals - 85:22</p> <p>terms [5] 35:9, 74:6, 76:15, 79:17, 81:3</p> <p>territory [2] 16:16, 77:17</p> <p>test [2] 35:20, 36:8</p> <p>testimony - 92:8</p> <p>thank [42] 6:7, 6:17, 6:24, 7:6, 7:7, 8:10, 8:15, 8:24, 9:11, 14:19, 16:21,</p>	<p>20:15, 20:16, 21:12, 22:11, 22:11, 23:16, 25:25, 26:12, 31:20, 32:24, 42:9, 46:17, 54:2, 55:24, 56:12, 64:25, 66:12, 69:21, 70:8, 71:5, 77:2, 81:10, 81:19, 82:1, 88:1, 89:5, 90:12, 90:21, 91:5, 91:13, 91:18</p> <p>thanks [25] 5:15, 7:20, 8:19, 12:9, 14:2, 15:22, 16:24, 18:16, 19:4, 29:2, 35:16, 44:9, 45:11, 45:13, 46:21, 48:16, 54:17, 56:16, 59:13, 62:20, 74:16, 82:24, 91:10, 91:14, 91:17</p> <p>theirs - 64:24</p> <p>themselves [4] 4:10, 5:21, 7:18, 19:16</p> <p>thereafter - 92:8</p> <p>therefore - 53:24</p> <p>thereto - 92:13</p> <p>thermal [26] 11:21, 13:15, 13:18, 13:24, 24:3, 24:8, 24:10, 24:16, 25:14, 28:19, 29:9, 29:10, 29:17, 29:25, 30:2, 33:17, 43:3, 49:22, 50:1, 53:23, 55:2, 56:25, 57:18, 57:21, 71:22, 79:10</p> <p>thing - 30:4</p> <p>thinking [6] 32:23, 73:22, 77:15, 79:16, 79:19, 88:3</p> <p>thinks - 64:16</p> <p>third [5] 4:1, 18:1, 33:8, 68:5, 86:24</p> <p>third/one - 86:24</p> <p>Thomas [10] 1:14, 2:8, 6:17, 6:18, 14:22, 31:9, 41:4, 68:19, 85:8, 89:24</p> <p>though [2] 57:15, 66:21</p> <p>thoughts [5] 69:19, 89:2, 89:2, 90:13, 91:8</p> <p>thousand - 54:8</p>	<p>thread - 12:18</p> <p>thumbs [2] 28:23, 83:17</p> <p>tied [3] 52:17, 53:22, 55:15</p> <p>Tier [35] 11:9, 11:10, 11:17, 11:20, 12:13, 13:14, 13:14, 13:19, 13:22, 14:5, 14:11, 16:4, 16:14, 19:25, 20:20, 21:1, 21:20, 22:3, 25:6, 26:6, 27:2, 27:16, 27:19, 28:9, 28:11, 28:14, 29:17, 29:25, 30:8, 31:3, 32:4, 33:16, 43:10, 57:24, 72:8</p> <p>Title - 10:1</p> <p>today [21] 3:8, 4:19, 6:21, 7:5, 7:15, 8:1, 8:14, 9:10, 12:14, 15:17, 17:23, 24:13, 27:12, 27:14, 33:18, 48:7, 48:8, 75:21, 85:2, 91:7, 91:17</p> <p>today's [7] 3:8, 4:1, 4:3, 4:11, 9:22, 89:22, 91:1</p> <p>Tom [26] 3:6, 5:6, 5:15, 5:21, 7:19, 12:9, 15:9, 16:24, 20:17, 22:11, 28:7, 29:2, 34:12, 35:16, 44:23, 45:13, 46:21, 51:5, 54:18, 57:14, 73:2, 77:14, 81:12, 82:24, 83:23, 91:10</p> <p>tool - 80:20</p> <p>top [9] 16:5, 16:8, 16:18, 18:14, 29:8, 44:21, 45:18, 78:5, 79:22</p> <p>topic [5] 9:22, 10:3, 69:23, 69:25, 89:17</p> <p>total [8] 17:16, 18:5, 18:6, 19:13, 19:20, 23:22, 24:24, 78:5</p> <p>totally - 17:7</p> <p>toward - 64:19</p> <p>towards [3] 24:10, 29:19, 80:13</p> <p>track - 13:12</p> <p>tracking - 13:21</p> <p>Tracy [3] 2:18,</p>	<p>3:12, 84:16</p> <p>Tracy's - 85:6</p> <p>tradable - 27:4</p> <p>trade - 78:12</p> <p>trainer - 54:5</p> <p>training [7] 50:20, 51:1, 51:14, 53:9, 53:15, 54:15, 54:19</p> <p>trains - 54:7</p> <p>transaction - 40:2</p> <p>transactions - 50:8</p> <p>transcribed - 4:2</p> <p>transcript [3] 4:2, 28:24, 92:10</p> <p>transformation [2] 49:3, 52:19</p> <p>transportation - 76:11</p> <p>treated - 59:22</p> <p>treatment - 70:20</p> <p>tremendous [2] 54:5, 58:3</p> <p>trucker - 86:3</p> <p>trucks [2] 85:18, 85:23</p> <p>turn [3] 44:6, 85:17, 87:24</p> <p>turned - 41:13</p> <p>two - 42:3</p> <p>two-week - 90:9</p> <p>type [7] 51:12, 51:13, 51:14, 52:18, 66:22, 78:3, 91:15</p> <p>types [4] 50:20, 51:4, 53:8, 72:10</p> <p>typewriting - 92:9</p> <hr/> <p style="text-align: center;">U</p> <hr/> <p>U.S - 3:13</p> <p>ultimate - 55:20</p> <p>ultimately [4] 24:6, 63:18, 82:15, 83:7</p> <p>umbrella - 25:9</p> <p>unaware [2] 66:3, 66:8</p> <p>unbeknownst - 45:5</p> <p>Underhill [5] 2:13, 8:7, 8:9, 8:11, 8:12</p> <p>understand [19] 15:1, 15:2, 17:8, 17:22, 18:17, 19:5, 27:6, 30:19, 32:2, 36:20, 36:22, 37:15, 38:21, 55:25, 65:15, 65:17, 71:20, 71:24, 82:15</p> <p>understandably - 58:6</p> <p>understanding [5] 12:3, 16:17, 18:24, 28:8, 28:13</p>
--	---	---	---	---	---

<p>understood [2] 6:24, 42:16 undesirable - 45:8 unfamiliar [2] 58:7, 58:7 Unfortunately - 42:17 unique [2] 83:8, 83:11 universal - 30:3 universe [2] 43:10, 85:13 universities - 33:3 university [2] 33:3, 33:10 unless [4] 3:18, 8:22, 66:6, 72:1 unmuted [2] 13:10, 13:11 unnecessary - 84:21 unregulated [2] 77:18, 86:4 uplift - 54:19 upon [4] 9:25, 40:10, 46:1, 46:3 uptake - 49:7 usage - 49:23 useful [2] 53:20, 70:7 useless - 48:8 users [2] 33:5, 33:11 uses - 88:21 using [4] 11:17, 73:15, 78:25, 86:18 utilities [16] 1:14, 27:22, 27:23, 28:12, 28:16, 29:7, 29:16, 29:22, 29:24, 33:16, 33:17, 34:21, 35:20, 37:19, 47:6, 57:22 utility [29] 1:1, 1:10, 3:2, 3:3, 11:9, 12:12, 17:9, 17:11, 17:19, 18:23, 22:19, 22:20, 22:23, 22:25, 23:20, 29:4, 29:18, 29:21, 30:1, 32:3, 32:7, 33:2, 34:5, 34:6, 35:23, 36:5, 37:6, 43:5, 87:20 utility's - 80:17 UVM [2] 82:9, 82:9</p> <hr/> <p style="text-align: center;">V</p> <hr/> <p>valid [2] 68:5, 68:8 valuable [2] 56:9, 91:7 value [3] 23:11,</p>	<p>32:6, 70:16 vans [2] 34:15, 85:22 various [2] 65:4, 85:16 vastly - 34:24 Vaughn [6] 2:12, 8:3, 8:4, 8:5, 81:16, 81:19 VEC [2] 11:19, 14:17 verification - 26:21 verified - 36:1 Vermont [64] 1:1, 1:10, 1:22, 4:17, 4:19, 4:20, 5:20, 5:25, 6:2, 7:12, 7:22, 9:3, 9:4, 10:5, 10:7, 10:8, 10:9, 10:10, 10:25, 11:7, 13:7, 13:25, 14:21, 19:7, 20:11, 20:12, 29:20, 33:11, 33:11, 37:19, 38:13, 39:19, 40:11, 49:4, 49:10, 49:13, 50:17, 50:24, 51:19, 52:1, 53:18, 54:6, 54:7, 57:22, 58:4, 58:21, 61:20, 62:12, 66:4, 70:14, 71:12, 71:15, 71:24, 73:14, 73:18, 76:19, 77:14, 78:22, 82:11, 86:2, 87:5, 90:17, 90:19, 92:15 Vermont's [2] 48:20, 55:25 Vermont/consum - 21:16 Vermonters [2] 2:8, 7:3 versus [2] 27:4, 38:8 VFDA [4] 2:11, 2:12, 7:25, 8:2 VGS [17] 2:2, 2:2, 2:3, 2:3, 18:12, 18:22, 55:1, 60:3, 60:7, 61:1, 64:3, 64:10, 65:8, 70:24, 77:11, 77:17, 82:25 via [3] 1:8, 1:10, 92:5 Victoria [4] 2:13, 8:6, 8:7, 8:12 video - 50:22 videoconference [3] 1:8, 1:10, 92:5 view [5] 15:12, 15:18, 25:18,</p>	<p>40:4, 52:24 volume - 79:15 voluntarily [2] 61:24, 63:9 voluntary [5] 62:23, 62:24, 63:6, 64:2, 64:5 volunteering - 61:24 VPPSA [4] 2:13, 2:14, 8:18, 9:10</p> <hr/> <p style="text-align: center;">W</p> <hr/> <p>waiting [2] 74:21, 75:9 wanted [10] 12:4, 14:3, 20:16, 20:17, 26:19, 35:17, 35:18, 45:10, 45:14, 59:13 wanting - 38:20 wants [4] 32:7, 39:24, 40:21, 46:22 warm - 43:20 Warming [5] 24:1, 25:13, 58:5, 64:20, 79:9 warrant - 78:6 waters - 51:18 waving - 20:9 ways [4] 52:18, 73:22, 81:3, 85:16 weatherization [12] 11:22, 50:1, 50:16, 50:18, 72:13, 77:9, 77:15, 77:18, 77:22, 78:23, 87:7, 87:10 weeds - 28:20 week - 35:19 weeks - 89:20 Weiss [33] 2:8, 6:17, 6:18, 6:19, 10:7, 13:9, 13:11, 14:22, 14:22, 14:24, 31:9, 31:9, 31:10, 31:11, 41:4, 41:4, 41:6, 41:7, 42:9, 51:6, 68:19, 68:19, 68:22, 68:23, 85:8, 85:8, 85:11, 87:24, 88:1, 89:5, 89:24, 89:24, 90:2 welcome [5] 5:16, 6:8, 9:8, 73:23, 83:2 well-tested - 68:10 well-used - 68:10 wells - 56:7 Westman [28] 2:5, 5:19, 5:24, 5:24, 12:7, 12:9,</p>	<p>16:22, 16:24, 17:9, 19:4, 19:8, 20:18, 23:14, 29:2, 35:16, 39:12, 39:18, 46:18, 46:20, 49:17, 52:22, 74:13, 74:16, 77:3, 77:5, 77:7, 90:19, 91:10 Weston [7] 2:7, 6:8, 6:9, 6:9, 61:18, 63:22, 63:23 what's [5] 25:22, 27:8, 67:11, 67:22, 89:10 whatever [7] 44:14, 52:20, 62:14, 62:15, 69:18, 86:3, 86:10 whatnot - 48:24 Whereupon - 91:19 whether [13] 22:23, 23:3, 25:2, 32:20, 36:1, 45:15, 45:15, 51:25, 52:2, 68:8, 68:17, 87:22, 89:22 who's - 75:22 whoever - 72:15 whole [2] 53:6, 68:7 wholesale [2] 22:25, 85:22 wholesaler [3] 58:24, 58:25, 67:4 wholly - 40:21 whom - 16:20 whose - 57:7 Widmayer [9] 2:14, 8:20, 8:21, 8:22, 12:2, 26:24, 27:18, 28:2, 83:2 wildly - 86:5 willing [2] 63:17, 78:17 willingness [2] 36:10, 78:19 Williston - 92:15 winning - 86:11 wish [7] 4:5, 7:17, 8:25, 9:14, 11:24, 13:4, 56:2 within - 58:10 women [3] 34:25, 54:8, 54:12 won't [3] 8:13, 86:7, 86:7 wonder [2] 21:17, 38:13 wondered [2] 26:6, 81:12 wondering [2] 33:18, 33:23</p>	<p>wood [4] 62:7, 67:13, 87:10, 87:13 wordsmithing - 81:9 worker - 50:19 works - 71:21 workshop [21] 1:10, 3:2, 3:8, 3:20, 4:1, 4:9, 4:11, 9:22, 10:11, 10:15, 10:19, 15:19, 38:20, 45:20, 59:23, 83:22, 89:7, 89:22, 91:1, 91:6, 92:4 workshops - 91:15 worth [2] 29:24, 68:18 wouldn't [4] 19:17, 39:14, 62:1, 66:24 writing - 35:9 written [4] 10:3, 10:4, 10:12, 33:19 wrong [2] 7:9, 84:24</p> <hr/> <p style="text-align: center;">Y</p> <hr/> <p>yeah [22] 5:8, 9:1, 22:12, 29:2, 35:3, 35:16, 37:15, 39:1, 42:14, 42:22, 44:9, 46:20, 54:4, 63:12, 66:19, 67:1, 68:2, 70:10, 84:15, 85:5, 86:13, 89:11 yet - 24:19 yield - 63:21 you'll - 85:11 yours - 40:1 yourself [4] 3:18, 4:12, 4:16, 8:25 YouTube - 50:22</p> <hr/> <p style="text-align: center;">Z</p> <hr/> <p>Zwicky - 2:17</p>
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