

BEFORE THE PUBLIC SERVICE COMMISSION

Civil No. 17-035-61

PUBLIC HEARING

DAY 2

September 30, 2020

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BEFORE THE PUBLIC SERVICE COMMISSION

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Application of Rocky)
Mountain Power to Establish)
Export Credits for Customer)
Generated Electricity)
Civil No. 17-035-61
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PHASE II VIRTUAL PUBLIC HEARING, DAY 2
TAKEN THROUGH ADVANCED REPORTING SOLUTIONS

Taken on September 30, 2020

at 9:04 a.m. to 4:49 p.m.

Reported by: Michelle Mallonee, RPR, CCR

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P R O C E E D I N G S

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CHAIRMAN LEVAR: Good morning. We're here for Day 2 of Utah Public Service Commission Docket 17-035-61 Phase II hearing in the application of Rocky Mountain Power to establish export credits for customer generated electricity.

We were continuing cross-examination of Mr. Rob Davis, but I'm going to interrupt that briefly. I have a follow-up question that I would like to ask to a Rocky Mountain Power witness, and it seemed like at the beginning of the hearing might be as good of time as any. So if you'll indulge a very brief interruption.

Is Mr. Meredith available for a quick question?

MR. MCDERMOTT: Yeah. Give him a moment, I think to sign into the video session, and we'll make him available.

CHAIRMAN LEVAR: I see him on, but his video and audio are not turned on.

MR. MCDERMOTT: I think he's throwing on a tie quickly, too, for you.

CHAIRMAN LEVAR: Oh, it's not necessary. I understand he wasn't planning to testify. There's no need to change his --

MR. MCDERMOTT: You get a pass.

1 We're talking to him via a video link in the
2 office, so.

3 CHAIRMAN LEVAR: It's just one brief question.

4 MR. MEREDITH: Okay. I'm here, Chairman.

5 CHAIRMAN LEVAR: Thank you, Mr. Meredith. And
6 you're still under oath from yesterday.

7 MR. MEREDITH: Okay.

8
9 RECROSS EXAMINATION

10 BY CHAIRMAN LEVAR:

11 Q. I failed to ask this. It's a hypothetical. And
12 again, like I said several times, please don't read
13 anything into this hypothetical.

14 A. Okay.

15 Q. It is with respect to the meter fee.

16 And if the final rate approved by this
17 Commission did not include peak and off peak, if it were
18 just straight summer/winter rates with no peak and off
19 peak, and if there were no 15-minute or hourly netting,
20 is there still a need for a meter fee under those
21 conditions?

22 A. I think that there may still be a need for a
23 meter fee. It might be something different than what
24 we've calculated. But I do believe that just a standard,
25 regular meter that we have right now, at least most of

1 them are not capable of measuring bidirectional flows of
2 energy. Some of them may be, and they may be able to
3 just be reprogrammed. That may require a truck to roll
4 and a meter man to go out and reprogram that meter.

5 So I don't know that I know exactly what that
6 fee would be, but I believe that there would still be a
7 fee associated with that.

8 **Q. Okay. Well, let me just ask one follow-up,**
9 **then.**

10 **Would the bidirectional needs under that**
11 **scenario, that hypothetical I described, be similar to**
12 **the needs that existed previously under Schedule 135?**

13 A. Yes, it would be exactly the same metering needs
14 as those that were under Schedule 135, that's correct.

15 **Q. Okay. Thank you for indulging my question that**
16 **I didn't ask yesterday. That's all.**

17 A. Sure, no problem.

18 CHAIRMAN LEVAR: Mr. Margolin, I apologize for
19 the interruption, but why don't we proceed with your
20 cross-examination of Mr. Davis.

21 Mr. Davis, you are still under oath from
22 yesterday.

23 THE WITNESS: Okay.

1 ROBERT A. DAVIS,
2 was called as a witness, and having been first duly
3 sworn to tell the truth, the whole truth, and nothing
4 but the truth, testified as follows:
5

6 CROSS-EXAMINATION (RESUMED)

7 BY MR. MARGOLIN:

8 Q. Going morning, Mr. Davis. I'm sorry that you
9 had to go over days. I know that's not pleasant in any
10 circumstances. I just have a few questions for you this
11 morning.

12 A. Okay. I just want to make sure. I tried a
13 whole different setup. Can everybody hear me okay today,
14 or better, anyway?

15 Q. It's much better today, sir.

16 A. Okay. Great, thanks.

17 Q. So, Mr. Davis, you understand that RMP seeks to
18 allow export credits to expire at the end of the fiscal
19 year, right?

20 A. Yeah, it's the end of March.

21 Q. Right. And in your rebuttal testimony, you
22 state that the RMP's ability to manage expired excess
23 credits created by overbuilt customer generation is
24 already problematic, right? That's your statement?

25 A. Correct.

1 Q. And you don't present any evidence in your
2 testimony that this is actually happening, right?

3 A. I do, actually. I believe it's in rebuttal,
4 along -- around line 330.

5 Q. Okay. Give me one moment, please.

6 Okay. I see the chart of expired credits by
7 year.

8 A. Yes.

9 Q. And that demonstrates that there's already a
10 problem from overbuilt customer generation?

11 A. Well, I don't know if it's a problem. It's just
12 increasing. Year over year, the expired credits continue
13 to increase.

14 Q. Well, you describe it as problematic.

15 A. Well, it can be problematic because Rocky
16 Mountain Power has to manage that.

17 Q. And are you involved in how Rocky Mountain Power
18 manages that?

19 A. I'm not involved with -- well, yeah, to a
20 degree. It depends. Last year, we had a docket where we
21 used some of those expired credits for other reasons than
22 just low income.

23 Q. So you can't quantify for me right now what the
24 cost of expired credits is -- or rather what the cost of
25 the overbuilt systems is, if that even exists, right?

1 A. Well, it's just something that Rocky Mountain
2 Power has to address with these expired credits at the
3 end of the year. And they have a value to them. So at
4 some point in time, do you zero out every low-income
5 customer's bill, or what do you do with those expired
6 credits?

7 **Q. So the problem that you're talking about is that**
8 **because RMP gets to seize the forfeited credits, it's a**
9 **problem for them to figure out what to do with them?**

10 A. You know, maybe I misspoke in my testimony about
11 it being a problem. But it is something that has to be
12 addressed every year.

13 **Q. And when it's addressed, those credits -- those**
14 **credits are earned by CG customers, correct?**

15 A. Correct.

16 **Q. And in the current Schedule 137 proposal, the**
17 **expired credits will go into the energy balancing**
18 **account; isn't that right?**

19 A. That's my understanding. It offsets the energy
20 balance in the account.

21 **Q. And so in that way, all RMP customers will**
22 **receive a benefit from the expired CG exports, correct?**

23 A. I believe that's correct.

24 **Q. And so in that way, CG customers would actually**
25 **be subsidizing all rate payers through their expired**

1 credits, right?

2 A. Yes.

3 Q. Mr. Davis, in your written testimony and during
4 your opening yesterday, you referenced potential wear and
5 tearing costs caused by CG exports, right?

6 A. Correct.

7 Q. And you don't quantify that potential wear and
8 tear in your testimony, do you?

9 A. I don't.

10 Q. I have no further questions at this time. Thank
11 you for your time, Mr. Davis.

12 A. Thank you.

13 CHAIRMAN LEVAR: Thank you, Mr. Margolin.

14 Why don't we go to Mr. Holman next.

15 Do you have any questions for Mr. Davis?

16 MR. HOLMAN: I do. I just have a few questions.

17
18 CROSS-EXAMINATION

19 BY MR. HOLMAN:

20 Q. Good morning, Mr. Davis.

21 A. Good morning.

22 Q. I'd like to ask you a couple questions about a
23 comment that you make in your rebuttal testimony where
24 you say: "Navigant's report illustrates that simple
25 payback for private generation occurs at 10 years."

1 Are you familiar with that statement that you
2 made in your rebuttal testimony? It's on line 4
3 (inaudible) 7?

4 A. I'm sorry, what was the number?

5 Q. 437.

6 A. Yeah, I'm familiar with that.

7 Q. Okay. And in the footnote at the end of that
8 sentence, Footnote 47, you reference -- the footnote on
9 this page says: "See super note 24, page 10." But that
10 references the Navigant private generation study from the
11 2019 IRP; is that correct?

12 A. Yes.

13 Q. And specifically page 10. So I'm going to share
14 my screen with you so we can take a look at page 10
15 together.

16 A. Great. I won't have to look it up.

17 Q. Let's see if this is it. Can you see this page,
18 Mr. Davis?

19 A. Yes, I can.

20 Q. All right. And so we can see this is page 10.
21 I'd like to ask you to point out to me where on page 10
22 Navigant asserts that the payback period for private
23 generation is 10 years.

24 A. It doesn't actually say that. The way I looked
25 at that graph is if they didn't get payback within 10

1 years, they probably wouldn't be interested in the
2 project.

3 Q. Okay. So it's not that Navigant asserts that
4 private generation systems have a payback period of 10
5 years in Utah generally, it's that if the payback period
6 wasn't 10 years or less, it wouldn't be worth it to
7 customers to purchase a rooftop solar system; is that
8 what you're saying?

9 A. I'm sorry, you kind of cut out at the first part
10 of that, so I didn't hear all of that.

11 Q. Sure. I'm happy to repeat myself.

12 Your testimony is not that Navigant in its
13 report on this page is saying that the payback period for
14 private generation systems in Utah is 10 years. They're
15 not saying that the payback period is 10 years.

16 You're saying that based on this Navigant
17 report, unless the payback period is 10 years or less, it
18 wouldn't be worth it for customers to install a solar
19 system; is that right?

20 A. That's correct.

21 Q. Okay. That's the only thing I wanted to clarify
22 with you, Mr. Davis. So thanks very much.

23 A. Thanks.

24 CHAIRMAN LEVAR: Thank you, Mr. Holman.

25 Mr. Mecham, do you have any questions for

1 Mr. Davis?

2 MR. MECHAM: Yes, just a couple.

3
4 CROSS-EXAMINATION

5 BY MR. MECHAM:

6 Q. Good morning, Mr. Davis.

7 A. Good morning.

8 Q. Is it your testimony that this proceeding, if
9 the Commission adopts Rocky Mountain Power's position
10 will have no impact on the rooftop solar market?

11 A. I believe it will have some sort of impact. I
12 don't know to what degree that impact will be.

13 Q. Would you expect it -- well, you just had a
14 discussion with Mr. Holman about paybacks and the
15 expected paybacks on a solar system.

16 If Rocky Mountain Power's and your position are
17 adopted, that will increase the payback on rooftop solar
18 systems, will it not?

19 A. Depending on the system and the customer's
20 usage, that's correct.

21 Q. So it would then, as a result, have a depressing
22 effect on the solar market, would it not?

23 A. I don't know if it would be a depressing effect.

24 Q. Well, if it increases the payback period, and
25 you just noted that the payback at 10 years or less is

1 required to make it worth their economic while, it's
2 going beyond that, wouldn't that depress the market and
3 the outcome and discharge people from investing in solar
4 systems?

5 A. I would say that your logic is correct. But I
6 don't know what the severity of that would be, and it
7 could be acceptable, not acceptable.

8 Q. Okay.

9 MR. MECHAM: I think I'll go no further,
10 Mr. Chair, thank you.

11 CHAIRMAN LEVAR: Thank you, Mr. Mecham.

12 We'll go back to Mr. Jetter.

13 Do you have any redirect for Mr. Davis?

14 MR. JETTER: There we go. I'd like to
15 address -- yes I do, thank you, Mr. Chair.

16
17 REDIRECT EXAMINATION

18 BY MR. JETTER:

19 Q. I'd like to maybe address a little bit of this
20 on a few different issues. So you just had a discussion
21 or answered some questions, Mr. Davis, about a payback
22 period.

23 Do you think that the same payback calculations
24 might apply to energy efficient appliances in general?

25 A. Yes.

1 Q. The faster the payback, the more likely a
2 customer would be to purchase an energy-efficient
3 refrigerator?

4 A. Yes, I do.

5 Q. And would it also be accurate that if
6 electricity rates were five times what they are today
7 that would increase -- excuse me, that would decrease the
8 payback period for an energy-efficient appliance?

9 A. Yes.

10 Q. But you wouldn't recommend increasing
11 electricity rates in order to artificially accelerate the
12 payback of an energy-efficient refrigerator, would you?

13 A. No, I would not.

14 Q. I'd like to shift gears just a little bit to the
15 issue of the expired credits.

16 Is it your understanding that if Rocky Mountain
17 Power were to -- let me lay a little foundation before I
18 do this.

19 Have you been involved at all in the expired
20 credit discussions and proceedings in past dockets?

21 A. Not all of them, but several years, yes.

22 Q. And if -- I believe it was mentioned earlier, at
23 least referenced as Rocky Mountain Power's seizing those
24 credits.

25 Do you know if Rocky Mountain Power increases

1 any sort of profit margin or has -- takes any ownership
2 rights to those credits?

3 A. No. Those credits are passed to low-income
4 customers.

5 Q. And, similarly, if those credits were passed
6 back through the energy balancing account as a decrement
7 or reduction to the net power cost calculation, would
8 Rocky Mountain Power profit or benefit from those?

9 A. No.

10 Q. If Rocky Mountain Power were to pay a rate
11 higher than the net power cost that it otherwise would
12 have paid for those same credits, would that benefit
13 customers or would that harm customers?

14 A. So if they paid -- can you repeat that, please?

15 Q. Absolutely. If Rocky Mountain Power were to pay
16 for the energy that was generated to create those export
17 credits at a rate higher than it otherwise would have
18 paid for the same energy from another source, and that
19 were to -- the payments and the energy were to flow back
20 through the energy balancing account, would that harm or
21 benefit other customers?

22 A. I think it would harm them.

23 Q. Thank you. And is it your understanding that if
24 Rocky Mountain Power were to pay out a check, to write a
25 check or make another payment to the 30- or 40- or 50,000

1 customers, each might have a small amount of expiring
2 credits, that would also include tax consequences, and
3 that would require something along the lines of tax
4 filings for each one of those customers as a, I guess, a
5 payout from the utility?

6 A. Yeah, that's exactly right. And that would be
7 very expensive for the Company to generate that number of
8 1099 forms.

9 Q. And is it your understanding that that's why
10 those credits are not refunded to customers?

11 A. Yeah. That, and it's also put in there to try
12 to limit the size of the systems.

13 Q. I'd just like to -- thank you for that. I'd
14 like to address the issue of strata weights. There was a
15 lot of discussion about the strata weighting and the
16 method that you used and how that differs from -- or is
17 the same as the method used by Rocky Mountain Power.

18 And so what I'd like to ask you is, is it your
19 understanding that Rocky Mountain Power generated its
20 proposed export credit that was adopted by the
21 Division -- or I should say supported by the Division
22 using the sample 136 customer as the entire population
23 without strata weights?

24 A. That's my understanding. Better represents what
25 will be going forward.

1 Q. And to the extent that you were to alternatively
2 adopt Dr. Lee's study and export profiles, would that
3 have a material difference on the calculation of the
4 export credit rate?

5 A. Will you repeat that for me, please?

6 Q. To the extent that if you were to adopt
7 Dr. Lee's export credit profile, would that change the
8 export credit rate calculation in a material way?

9 A. No, I don't believe so.

10 Q. And that's because the profiles are practically
11 identical; is that correct?

12 A. That's correct.

13 Q. And finally, with respect to the net metering
14 versus an export credit rate.

15 Is it accurate that an export credit rate that
16 is equal to the current residential retail rate on the
17 same -- if it's measured on a kilowatt hour basis, and so
18 if those two are the same, a customer would be
19 indifferent to that metering versus an export credit rate
20 set at 10.2 cents?

21 A. Yes, that's correct.

22 Q. And is it also correct that if you determine
23 that 10.2 cents was above the value of the export credits
24 that that would also mean that a -- the costs of a net
25 metering, a return to net metering would exceed the

1 **benefits?**

2 A. Yeah, that's correct.

3 **Q. And that's not a difficult conclusion to reach,**
4 **is it, from the evidence that's been presented in this**
5 **docket?**

6 MR. MARGOLIN: I would just like to object to
7 this series of questions. This has been extremely
8 leading, and I think we've held back on doing it. But
9 you are just putting testimony right in Mr. Davis's mouth
10 here. I think it's inappropriate.

11 CHAIRMAN LEVAR: Rather than going back and
12 forth on this objection, Mr. Jetter, would you just like
13 to rephrase that last question?

14 And then, Mr. Margolin, if you still want to
15 keep your objection going, feel free to let us know.

16 Why don't you rephrase that last question,
17 Mr. Jetter.

18 **Q. (BY MR. JETTER:) Mr. Davis, is there evidence**
19 **on the record to support a conclusion that -- well, let**
20 **me ask you just a direct question.**

21 **Based on the evidence in the record, would a net**
22 **metering, return to a full net metering in this docket,**
23 **would the costs of that exceed the benefits?**

24 A. I believe it would because -- the reason why I
25 say that is, is if you're net metering and trading a

1 kilowatt hour for a kilowatt hour because of the current
2 rate structures, there's other things besides just energy
3 built in those rates. So the Company is not allowed to
4 recover their fixed costs. So I believe there could be a
5 greater cost than there are benefits.

6 **Q. Thank you.**

7 MR. JETTER: And that is all of my redirect.

8 CHAIRMAN LEVAR: Thank you, Mr. Jetter.

9 Mr. Snarr, do you have any recross questions for
10 Mr. Davis?

11 MR. SNARR: No, we don't, thank you.

12 CHAIRMAN LEVAR: Thank you, Mr. Snarr.

13 Mr. McDermott, do you have any recross questions
14 for Mr. Davis?

15 MR. MCDERMOTT: Just a few short ones.

16
17 **RECROSS EXAMINATION**

18 **BY MR. MCDERMOTT:**

19 **Q. Good morning, Mr. Davis.**

20 **A. Good morning.**

21 **Q. So I just want to talk a little bit about rate**
22 **design kind of in a general sense.**

23 **Is one principle of good rate design to assign**
24 **costs to those who (inaudible)?**

25 (Court reporter interruption.)

1 Q. (BY MR. MCDERMOTT:) So, Mr. Davis, I'll repeat
2 my question.

3 Is one good principle of good rate design that
4 those who cause costs should be assigned those costs
5 whenever possible?

6 A. Yes.

7 Q. So similar to the meter fee and the application
8 fee that the Company has proposed in this export credit
9 rate docket, do you know of any other circumstances where
10 customers have to pay for discreet costs that they cause
11 because of a customer preference?

12 A. For example, if they wanted a, instead of a
13 100-amp service they wanted a 200-amp service? Is that
14 kind of what you're asking? Yes.

15 Q. Certainly. And would those customers have to
16 pay for their election to move up to the 200-amp service?

17 A. Yes.

18 Q. Are you familiar with the Company's Schedule 300
19 tariff?

20 A. Yes, I am.

21 Q. Would another example that fits into this cost
22 causers -- get assigned their costs be the 7R.2 portion
23 of Schedule 300, where a customer can elect not to have
24 an AMI meter and, instead, have a non AMI meter, and they
25 pay the full cost consequences for that election?

1 MR. MARGOLIN: I'm just going to object again.
2 I believe that this is really, kind of, friendly
3 redirect. And again, I think you're putting an awful lot
4 of testimony on the record by way of these questions and
5 into Mr. Davis's mouth. I think it's inappropriate.

6 MR. MCDERMOTT: I'm not putting any testimony
7 into Mr. Davis's mouth. I'm directing him to a tariff
8 and describing what I'm directing him towards. I
9 understand the principle of not asking leading questions
10 of friendly witnesses, and I have not done so.

11 MR. MARGOLIN: I respectfully beg to differ.
12 You asked him what he could recall. He gave you a
13 program. And now you are offering him another answer
14 that he couldn't recall. So I think you are leading him
15 very clearly here. But I defer to whatever the
16 Commissioner --

17 MR. MCDERMOTT: I asked him whether he was
18 familiar with Schedule 300, he said he was.

19 Now I'm asking if he's familiar with a
20 particular part of Schedule 300. I think that's not
21 leading in any way whatsoever.

22 CHAIRMAN LEVAR: Let me address a different
23 issue first before I go right to Mr. Margolin's specific
24 objection.

25 Is this questioning within the scope of

1 Mr. Jetter's redirect?

2 MR. MCDERMOTT: I suppose not. It's more in the
3 scope of some of the cross-examination that Mr. Davis was
4 put towards. And if the Commission has issues with that,
5 I'm happy to move on.

6 CHAIRMAN LEVAR: Well, I'm going to state
7 generally that at this point of the recross, it needs to
8 be within the scope of Mr. Jetter's redirect. Original
9 cross was -- you know, we put the order of
10 cross-examination where parties who have similar
11 positions are first, despite my one deviation from that
12 accidently yesterday.

13 So I think it would be appropriate to keep
14 recross within the scope of Mr. Jetter's redirect.

15 MR. MCDERMOTT: Certainly. I'm happy to move
16 on. I have no further questions for Mr. Davis, then.
17 Thank you, Commissioner -- or Chairman, sorry.

18 CHAIRMAN LEVAR: Thank you, Mr. McDermott.

19 I'll going to Mr. Margolin next.

20 Do you have any recross for Mr. Davis?

21 MR. MARGOLIN: Just a few short questions,
22 Commissioner.

23 CHAIRMAN LEVAR: Okay.
24
25

RE CROSS EXAMINATION

BY MR. MARGOLIN:

Q. Mr. Davis, in response to Mr. Jetter's questions, I believe you just testified that it's your view that the costs of the NEM program exceed its benefits.

Am I remembering that correctly?

A. Yes, that's what I said.

Q. And I just want to clarify: Yesterday, you had testified that you had not done any analysis of the costs or the benefits of the NEM program, right?

A. That's correct.

Q. And that to understand the costs or benefits of that -- excuse me.

To understand if there -- if the costs exceed the benefits, you have to do that analysis, correct?

A. Yes and no.

Q. Okay.

A. I say yes if you want to zero in on it, yeah, you need to do analysis. But just intuitively when a kilowatt hour is exchanged for a kilowatt hour based on how the current rates are structured, there has to be some sort of cost to the Company and -- so they can recover their fixed costs.

Now, the benefits at the current penetration

1 level probably does not exceed those costs. It's just an
2 intuitive, high-level look.

3 Q. Intuitive high-level, you don't have any data to
4 show your findings, right, your conclusion?

5 A. No.

6 Q. And then final question is you suggested that CG
7 customers will negatively impact the Company's ability to
8 collect on its fixed costs; isn't that right?

9 A. Can you repeat that, please?

10 Q. I believe you testified that CG customers would
11 have a negative impact on RMP's ability to collect on its
12 fixed costs; is that correct?

13 A. At the net metering rate?

14 Q. I believe you just said that CG customers would
15 have that -- would have that impact. If I'm
16 misremembering that, we can move on, sir.

17 A. I think that was in the context of the
18 questioning from Mr. Jetter about the net metering. So
19 I'm just trying to get you to clarify what you're asking
20 me.

21 Q. Is it your view that a CG customer, because
22 of -- you know what? Strike that. I have no further
23 questions, sir. Thank you again for your time.

24 A. Thanks.

25 CHAIRMAN LEVAR: Thank you, Mr. Margolin.

1 Mr. Holman, do you have any recross for
2 Mr. Davis?

3 RE CROSS EXAMINATION

4 BY MR. HOLMAN:

5 Q. I just have one quick question for you,
6 Mr. Davis.

7 In Mr. Jetter's redirect, he asked you a
8 question about whether artificially increasing incentives
9 to make those incentives worthwhile to customers would be
10 inappropriate. And your answer to that was yes, that
11 would be inappropriate, correct?

12 A. Yes.

13 Q. On the flip side, if you artificially decreased
14 the incentive to dissuade customers from participating in
15 something that would otherwise be cost-effective, that
16 would also be inappropriate, do you agree?

17 A. Yes.

18 Q. Thank you.

19 MR. HOLMAN: That's all my questions.

20 CHAIRMAN LEVAR: Okay. Thank you, Mr. Holman.

21 Mr. Mecham, do you have any recross?

22 MR. MECHAM: I do not, thank you.

23 CHAIRMAN LEVAR: I've taken a moment to rethink
24 on the way I addressed Mr. McDermott's issue of whether
25 his recross, which really could be characterized as a

1 type of friendly redirect, and whether it needed to be
2 within the scope of Mr. Jetter's redirect, or whether
3 similar parties should be able to respond to previous
4 cross-examination.

5 So I don't want to drag this out too much, but
6 I've been rethinking the way I addressed that issue. I
7 just want to ask if any of the attorneys want to address
8 that issue and whether we should reopen that, and then
9 deal with Mr. Margolin's leading objection.

10 So I'm somewhat reconsidering the way I handled
11 it. I just want to see if any attorneys have any
12 thoughts on whether a similar party's recross should be
13 limited to the scope of the original witness's redirect.

14 Why don't I start with Mr. Jetter. Do you have
15 any position on that? Since this is a general issue that
16 could affect other dockets, and I don't want to set
17 precedent here without making sure everyone has a chance
18 to weigh in on this procedural issue. I also don't want
19 to make more of it and drag this out more than we need
20 to.

21 MR. JETTER: Sure. You know, I can imagine a
22 scenario where parties are partially aligned on some
23 matters and not aligned on others. And in that scenario,
24 a party who is pursuing some interest that's not aligned
25 with the sponsor of the witness would want to redirect or

1 re-friendly direct in part on a matter that wouldn't be
2 covered by the attorney sponsoring that witness. And so
3 I think there is a time and place for that.

4 In the instant case, I don't have a strong
5 opinion. In McDermott's testimony, of course, given that
6 our parties are roughly similarly aligned, my general
7 intuition would be to say allow him to ask the questions.

8 CHAIRMAN LEVAR: Okay. And I'll be honest.
9 That's where I'm leaning, to do that and then go back and
10 deal with Mr. Margolin's objection to it being leading.

11 Let me just ask Mr. Margolin if you want to
12 weigh in on this or if you feel like we should move that
13 way. And if we do, then I'll give everyone a chance for
14 recross after we return to Mr. McDermott.

15 Mr. Margolin, do you want to weigh in on this?

16 MR. MARGOLIN: Yes. We think that, of course,
17 re-friendly direct should be contained to the scope
18 within whatever the recross or redirect was. That's how
19 it is sort of across the land. I don't see why we would
20 do anything different here. And if we don't have that
21 limitation, then there's really no bounds to anyone's
22 examination.

23 MR. MECHAM: And Mr. Chair, I agree with that.
24 I know that friendly cross is discouraged, but you allow
25 it from time to time. And if Mr. McDermott wanted to get

1 in on offering some friendly cross, that's one thing.
2 But then to do it after the redirect as friendly
3 redirect, that doesn't make any sense to me and seems to
4 prolong the hearing.

5 CHAIRMAN LEVAR: Well, let me just ask the two
6 of you this question a different way. I'd like to ask
7 Mr. Margolin and Mr. Mecham to respond to this rephrasing
8 of the question.

9 So if one of you raises an issue in
10 cross-examination that Mr. McDermott wants to address
11 further, is he limited to he can address that only if
12 Mr. Jetter addresses it first in redirect? Is that your
13 position? I just want to make sure because this will go
14 both ways throughout the hearing.

15 MR. MECHAM: Go ahead, Mr. Margolin.

16 MR. MARGOLIN: I was just going to say I don't
17 think that's our position because I don't think that's
18 the scenario that we're addressing now. I think the
19 scenario that we're addressing now is Mr. Jetter did his
20 redirect, and at that point, counsel started asking
21 questions that were outside the scope of that redirect.

22 Of course, if there are questions within that
23 scope, certainly counsel can ask those questions.

24 MR. MECHAM: And is there any reason why, if
25 those questions were percolating during the time of

1 cross-examination, Mr. McDermott or anyone couldn't say
2 or ask your permission to do a couple of additional cross
3 questions before it went to redirect?

4 CHAIRMAN LEVAR: Well, I think that wouldn't be
5 typical, though, Mr. Mecham. I think if -- you know,
6 because Mr. McDermott had his chance for cross before the
7 parties that were more adverse to this witness, and so
8 his next chance was recross.

9 So you're suggesting that if he wants to address
10 something that, say, you or Mr. Margolin or Mr. Holman
11 addressed in cross, he should make a motion before we go
12 to redirect. Is that what you're saying he should do?
13 Because I don't think that's typical.

14 MR. MECHAM: Well, you wouldn't stop it, would
15 you? You'd allow him to do it, wouldn't you?

16 CHAIRMAN LEVAR: Well, is it more orderly to
17 just allow it in recross, though? That's what I'm
18 asking.

19 MR. MECHAM: Well, I think -- I agree with
20 Mr. Margolin that it should be -- that that should be
21 within the scope of redirect and not expand out.

22 CHAIRMAN LEVAR: Okay. So the witness's
23 attorney should be the one that has the chance to bring
24 it up, and if that doesn't happen, then -- okay.

25 Well, I think I understand both of your

1 positions, then. Let me just ask Mr. McDermott to weigh
2 in. I think we need to just -- at least for this
3 hearing. We're not establishing any precedent that goes
4 beyond this. But we need to be consistent with all the
5 witnesses in this hearing. So however we handle this, I
6 would expect we handle it the same way throughout this
7 hearing.

8 So Mr. McDermott.

9 MR. MCDERMOTT: Sure. Happy to respond a little
10 bit.

11 You know, I think I'm -- I find myself in the
12 position that I believe Mr. Jetter described. There were
13 some questions on cross-examination after we had waived
14 our initial opportunity to cross-examine Mr. Davis that
15 we felt some follow-up was necessary for.

16 I'm sympathetic to Mr. Mecham's point that
17 perhaps it would have been more appropriate for me to
18 move more directly to the Commission to ask leave to ask
19 those questions. It's a little bit out of order as far
20 as, you know, the typical ordering of cross, recross,
21 redirect, et cetera.

22 I guess I'm ambivalent as to when the Commission
23 would like us to move if we have additional issues that
24 come up on cross that happens after our turn in the
25 order. But I'm happy to more directly move to the

1 Commission so the Commission can weigh whether getting --
2 or allowing additional questioning will add to the
3 record.

4 So I guess, when it particularly occurs is less
5 important to me. I think we were trying to honor the
6 order of the proceeding and take our turn when it came
7 up. But I'm happy to either do that at the end of cross,
8 at the beginning of recross, wherever the Commission
9 thinks it's most appropriate and to make a more overt
10 motion in the future if it comes up.

11 CHAIRMAN LEVAR: Okay. Thank you,
12 Mr. McDermott.

13 I think all the attorneys who were directly
14 involved in this issue have spoken; however, I think the
15 way we deal with this will at least impact the rest of
16 this hearing. So if anyone else has -- if any of the
17 other attorneys have any comments, please interject them
18 now.

19 I'm not hearing any.

20 And so I'll ask the other two Commissioners if
21 they want to interject. Because at this point, after
22 listening to Mr. McDermott's comments, I think I'm
23 probably inclined to say that for the rest of this
24 hearing, we'll stick to that procedure, that recross
25 needs to be within the scope of the original attorney's

1 redirect.

2 And with that, we would move forward to
3 Commissioner questions for Mr. Davis. But if
4 Commissioner Allen or Commissioner Clark have anything to
5 ask or add, you can do that at this point.

6 I'm not hearing anything from either of you, so
7 I think we'll move forward.

8 COMMISSIONER CLARK: Chair Levar.

9 CHAIRMAN LEVAR: Commissioner Clark?

10 COMMISSIONER CLARK: Pardon me. I just wanted
11 to say I support your ruling, and I think it will produce
12 the orderly process that will best serve us.

13 COMMISSIONER ALLEN: And I also agree with your
14 approach, Chairman Levar, so thank you.

15 CHAIRMAN LEVAR: Well, thank you.

16 Thank you for taking a little more time to
17 discuss it. I initially felt like I had made maybe too
18 quick of a judgment on it. But after listening to
19 everyone, I think we'll move forward that way.

20 So with that, Commissioner Allen, do you have
21 any questions for Mr. Davis?

22 COMMISSIONER ALLEN: I have no questions. Thank
23 you.

24 CHAIRMAN LEVAR: Commissioner Clark, do you have
25 any questions for Mr. Davis?

1 COMMISSIONER CLARK: I have no questions. Thank
2 you very much.

3 CHAIRMAN LEVAR: I don't have, either.

4 So thank you for your testimony, this morning,
5 Mr. Davis.

6 THE WITNESS: Thank you.

7 CHAIRMAN LEVAR: Mr. Jetter, your next witness.

8 MR. JETTER: The Division would like to call and
9 have sworn in Abdinasir Abdulle.

10 CHAIRMAN LEVAR: Dr. Abdulle, are you with us?

11 THE WITNESS: Yes, I'm here. I don't know if
12 you can see me or hear me.

13 CHAIRMAN LEVAR: I can see you and hear you.
14 Thank you.

15 THE WITNESS: Thank you.

16 CHAIRMAN LEVAR: Do you swear to tell the truth?
17 I'll repeat that. There was a little bit of noise. I'll
18 repeat that.

19 Dr. Abdulle, do you swear to tell the truth?

20 THE WITNESS: Yes, I do.

21 CHAIRMAN LEVAR: Okay. Thank you.

22 Mr. Jetter, go ahead.

23
24 ABDINASIR ABDULLE,
25 was called as a witness, and having been first duly

1 sworn to tell the truth, the whole truth, and nothing
2 but the truth, testified as follows:

4 DIRECT EXAMINATION

5 BY MR. JETTER:

6 Q. Mr. Abdulle, do you -- would you please state
7 your name and occupation for the record.

8 A. My name is Abdinasir Abdulle. I am a technical
9 consultant for the Division of Public Utilities.

10 Q. Thank you. And in the course of your employment
11 with the Division, have you had an opportunity to review
12 the filings in this docket?

13 A. Yes, I did.

14 Q. And did you create and cause to be filed -- I'm
15 sorry. I'm having a little bit of a technical difficulty
16 on my end here. If you'll bear with me for just a moment
17 here.

18 Can I ask the Commission for just a five-minute
19 recess? I'm having some brief technical issues that I
20 think I can resolve quickly.

21 CHAIRMAN LEVAR: Yes. We'll take a five-minute
22 recess. Thank you.

23 MR. JETTER: Thank you.

24 (A break was taken from 9:48 a.m. to 9:54 a.m.)

25 CHAIRMAN LEVAR: Okay. We'll begin. We'll go

1 back to you, Mr. Jetter.

2 MR. JETTER: Thank you. I'd just like to give
3 it just a minute for Dr. Abdulle to hopefully join us
4 again by video. Excellent.

5 Q. (BY MR. JETTER:) Thank you, Abdinasir. We can
6 see you now.

7 So I believe you were sworn in, and you have
8 stated your name and occupation for the record; is that
9 correct?

10 A. Yes.

11 Q. And in the course of your employment with the
12 Division, I believe I started to ask this question, and
13 that's when I ran into a little bit of a difficulty.

14 Did you have the opportunity to review the
15 filings and testimony by the various parties in this
16 docket?

17 A. Yes, I did.

18 Q. And did you create and cause to be filed with
19 the Commission direct, rebuttal, and surrebuttal
20 testimony in this case?

21 A. Yes, I did.

22 Q. Do you have corrections, edits, or changes you
23 would like to make to that testimony?

24 A. No.

25 Q. And do you have a brief summary of the testimony

1 that you've submitted?

2 A. Yes, I do.

3 Q. Please go ahead.

4 A. Thank you, Commissioners, for giving me the
5 opportunity to speak for you.

6 In this proceeding, I have filed direct and
7 rebuttal testimonies that were focused on the avoided
8 cost method and assumptions that Rocky Mountain Power
9 used to determine its Schedule 137 export credit rates
10 for customer generated electricity. I also filed
11 surrebuttal testimony addressing Dr. Lee's critique
12 (inaudible) of Division witness Mr. Davis's analysis of
13 Rocky Mountain Power's load research study data.

14 To calculate the export credit for generation in
15 excess of the customer's load, Rocky Mountain Power
16 proposed the use of same method used to calculate the
17 avoided costs for Schedule 37. This method is the
18 proxy/partial displacement (inaudible) --

19 (Court reporter interruption.)

20 THE WITNESS: Should I start over?

21 CHAIRMAN LEVAR: Could I interject?

22 THE WITNESS: I will send whatever I am reading
23 afterwards.

24 CHAIRMAN LEVAR: Dr. Abdulle, if you could email
25 that to PSC@Utah.gov, we can distribute it to the

1 attorneys and to Ms. Mallonee, not as a submission but
2 just as a courtesy copy of what you're reading. That
3 would be -- we can distribute it that way. Thank you.

4 THE WITNESS: So should I do it now or later?

5 CHAIRMAN LEVAR: Well, Ms. Mallonee, would it be
6 better for the transcript if we took another 5-minute
7 break and did that? Or would it be acceptable to do that
8 later?

9 THE COURT REPORTER: We can do that later.

10 THE WITNESS: I will start over again.

11 In this proceeding, I have filed direct and
12 rebuttal testimonies that were focused on the avoided
13 cost method and assumptions that Rocky Mountain Power
14 uses to determine its Schedule 137 export credit rates
15 for customer generated electricity. I also filed
16 surrebuttal testimony addressing Dr. Lee's critique of
17 Division, Mr. Davis's, analysis of Rocky Mountain Power's
18 load research study data.

19 To calculate the export credit for generation in
20 excess of the customer's load, Rocky Mountain Power
21 proposed the use of the same method used to calculate the
22 avoided costs for Schedule 37. This method is the
23 Proxy/Partial Displacement Differential Revenue
24 Requirement, PDDRR.

25 The PDDRR method uses PacifiCorp's GRID model to

1 calculate the avoided energy cost. The value of the
2 generation is calculated by comparing the production
3 costs of two GRID runs, one with the customer generation
4 and the other without.

5 The customer generation is modeled by adding
6 hypothetical generation representing customer solar
7 generation out into the grid that has been scaled up in
8 size to represent the class.

9 The difference in production cost between the --
10 with the customer exports and without customer exports
11 GRID runs is the avoided energy cost. This value
12 represents how much Rocky Mountain Power can pay for the
13 exported energy without raising rates for other
14 customers.

15 Since customers are not obligated to deliver any
16 amount of energy to the utility and may discontinue their
17 generation at any time, the export energy is considered
18 as non-firm and would not defer any future capacity.

19 The calculated avoided energy cost is then given
20 an hourly value using the results of the energy imbalance
21 market operations and adjusted for line losses.

22 Rocky Mountain Power also proposed, and the
23 Division does not oppose, to include solar integration
24 cost in the calculation of the export credit. The
25 Division concurs with Rocky Mountain Power that the same

1 method used in the calculation of the avoided costs for
2 Schedule 37 with some modifications should be used to
3 determine the value of the export credit and update the
4 rates annually.

5 The purpose of the load research study was to
6 design a sample, including residential and
7 non-residential solar customers to collect data from to
8 determine when and how much energy is exported to the
9 grid over the 1-year study period.

10 The load research study provided 15-minute
11 interval raw data of deliveries, export, and production
12 for Schedule 135 new samples, residential and
13 non-residential, and original 36 net metering customers.
14 A stratified sample -- sampling was used to select the
15 samples. The sample sizes were 45 for residential, 60
16 for non-residential, plus the 36 original customers.

17 Rocky Mountain Power also provided a census for
18 Schedule 136 residential and non-residential deliveries
19 and exports. The Division analyzed the monthly interval
20 data by developing graphs for all the sample sets for
21 each month. The graphs show the amount and the timing of
22 energy exported to the grid, which is the essence of the
23 load research study. Further, the graphs illustrate
24 delivery, production, and full requirement over the
25 15-minute intervals for every day of each of the 12

1 months in the study period. The graphs also illustrate
2 the timing of the total exports of customer generation in
3 relation to Utah peak load and system peak load.

4 The data used to develop the graphs are the mean
5 of the data average, which is calculated as the interval
6 data. The interval data for each meter is reached daily,
7 and then the days of the month averaged to arrive at the
8 average export or deliveries or the production, depending
9 on what value we're dealing with.

10 The total export was calculated then as the sum
11 of exports for all the meters, days, and intervals, so a
12 sum made across the meters and across the days and across
13 the intervals to come up with the total production
14 export.

15 To illustrate the export amount and timing of
16 the Schedule 136, residential and non-residential exports
17 were plotted by daily time points. The analysis first
18 finds the mean of the daily average as before, but then
19 plots these time points for each day of the month. The
20 total exports were plotted the same way as those of the
21 sample residential and non-residential data.

22 Based on its analysis, the Division concludes
23 that the current level of customer generation exports
24 offsets little of the system or Utah morning or evening
25 peak loads.

1 At the current penetration levels and timing of
2 customer generation compared to Utah coincident peak --
3 coincident load and system load, respectively,
4 demonstrates that customer generation provides limited
5 benefits during peak periods.

6 Dr. Lee criticized Mr. Davis's analysis and
7 conclusions about the Rocky Mountain Power load research
8 study. Specifically, Dr. Lee criticized the calculation
9 of the full requirement, the sampling weight used to
10 calculate the total export, the resulting total export,
11 and the sample size. However, the Division could not
12 review the basis for his criticism and considers it as
13 mischaracterization of Mr. Davis's conclusions.

14 The Division attempted to review Dr. Lee's load
15 research study and its conclusions and his analysis that
16 led to his criticisms of Mr. Davis's analysis and
17 conclusions. But the Division was not able to open
18 Dr. Lee's exhibits because the Division does not have a
19 license for the software Dr. Lee used in his analysis.
20 The Division requested Vote Solar in a number of data
21 requests to provide those exhibits in a reasonable -- in
22 a readable format with formulas intact. Vote Solar never
23 provided such information in the requested format -- and
24 I highly emphasize "in the requested format."

25 Despite all debate regarding the proper

1 calculation method for use of the sampling data and the
2 competing convenience sample based load research study
3 analysis of Dr. Lee, the results are quite similar to
4 those of Mr. Davis. Regardless of whether the Commission
5 relies on the Division's or Rocky Mountain Power's use of
6 the stratified sampling data or Vote Solar's convenience
7 sample, the resulting export volumes and times are
8 similar.

9 The Division supports Mr. Davis's use of this
10 stratified random sample over the use of a convenience
11 sampling method and Dr. Davis's [sic] calculations of the
12 timing and volumes.

13 That concludes my summary.

14 **Q. Thank you, Dr. Abdulle.**

15 I'd like to ask a follow-up question regarding
16 Dr. Lee's criticism of the sample weightings used by
17 Mr. Davis.

18 Do you agree that Dr. Lee's criticisms of the
19 sample weighting are valid?

20 A. What we could see is what he wrote in the text
21 of his testimony where he said whatever he said there.
22 But we could not verify what he did and could not compare
23 his weights to our weights, so we do not know the impact
24 that it will have, how his weights differ from ours.

25 But what we know is that the results that are

1 derived from it when it was used to calculate the
2 exports -- what do you call -- the total export was quite
3 similar to with ours and Rocky Mountain Power's.

4 **Q. Okay. Thank you.**

5 MR. JETTER: I have no further questions, and
6 Dr. Abdulle is available for cross-examination and
7 Commission questions.

8 CHAIRMAN LEVAR: Thank you, Mr. Jetter.

9 Did you want to make a motion with respect to
10 the testimony that Dr. Abdulle filed with the PSC in this
11 docket?

12 MR. JETTER: Yes. Thank you, Mr. Chairman.

13 The Division would like to move for the entry
14 into the record the direct, rebuttal, and surrebuttal
15 testimony identified earlier in testimony by Dr. Abdulle.

16 CHAIRMAN LEVAR: Okay. Thank you.

17 If any party has any objection to that motion,
18 please unmute yourself and state the objection.

19 I'm not seeing or hearing any objection, so the
20 motion is granted. Thank you, Mr. Jetter.

21 MR. JETTER: Thank you.

22 CHAIRMAN LEVAR: I'll go to Mr. Snarr next.

23 Do you have any questions for Mr. Abdulle?

24 MR. SNARR: Thank you. We have no questions at
25 this time.

1 CHAIRMAN LEVAR: Thank you.

2 Mr. McDermott, do you have any questions for
3 Dr. Abdulle?

4 MR. MCDERMOTT: Yes. Thank you, Chairman. Just
5 a few.

6
7 CROSS-EXAMINATION

8 BY MR. MCDERMOTT:

9 Q. Dr. Abdulle, good morning.

10 A. Good morning.

11 Q. To retrace very quickly, I think Mr. Jetter just
12 asked you a question, and I want to see if I heard that
13 correctly.

14 Was it your testimony just a moment ago that the
15 differences between what studies Rocky Mountain Power,
16 Dr. Lee for Vote Solar, and the DPU produced, the
17 differences between those are minimal? Is that what you
18 said?

19 A. Yes.

20 Q. Okay. And I just want to ask -- I think -- were
21 you present for Mr. Davis's questioning this morning?

22 A. Yes.

23 Q. Okay. So this question may sound familiar to
24 you.

25 But given what we just spoke about, did the

1 Schedule 135 strata weightings have any bearing on the
2 profile that RMP used to develop its export credit rate?

3 A. Can you rephrase the question, please?

4 Q. Sure. Do the Schedule 135 strata weightings,
5 which was a subject of questioning of Mr. Davis
6 yesterday, did those have any bearing on the profile that
7 RMP used, the Company used, to develop the proposed
8 export credit rate?

9 A. I'm not quite understanding what you mean by the
10 "profile." But are you trying to -- does that mean the
11 calculation of the -- I didn't quite get the question.

12 Q. I suppose I could ask it differently.

13 Is it your understanding that the Company used
14 the entire population of Schedule 136 to develop the
15 profile that it used to create the proposed ECR for this
16 proceeding?

17 A. To my understanding, no.

18 Q. Okay. Let's move on.

19 So I just wanted to ask some high-level
20 questions focused on avoided costs. So to start out
21 with, I just want to make sure that you are familiar with
22 a couple of recent dockets. Those dockets are 19-035-18
23 and 20-035-T04. These are Utah Commission dockets, and
24 they involve the Company's avoided cost quarterly
25 compliance filing and the tariff updates for its Schedule

1 37.

2 Are you familiar with those two Commission
3 dockets?

4 A. Yes, I am familiar, and I was involved. But I
5 don't know how much I will remember about them.

6 Q. Okay. Well, we'll see. So those dockets were
7 for avoided cost pricing pursuant to PURPA.

8 Are you familiar with PURPA, the law that -- the
9 federal law that creates the need to create those avoided
10 costs pricing?

11 A. Yeah, I'm somewhat familiar to it.

12 Q. Okay. Are you familiar with the principle
13 behind avoided costs?

14 A. I think so.

15 Q. Can you describe that principle to me? What
16 does "avoided cost" mean?

17 A. Well, we're talking about qualifying facilities.
18 When a qualifying price -- when the Company gets
19 something from a qualified facility, they have to pay the
20 cost that they would avoid if they had to produce on
21 their own. And that's the cost that they would incur had
22 that qualifying facility wasn't there.

23 Q. Thank you. And do you know what the customer
24 indifference principle is?

25 A. Yes.

1 Q. Could you describe that for me?

2 A. From an economic point of view, it is the -- you
3 are indifferent to buy from here or there, considered an
4 opportunity cost.

5 Q. And do you believe that that customer
6 indifference principle applies similarly in the case of
7 this export credit proceeding, as it would in the avoided
8 cost and PURPA context?

9 A. I think so. But I'm not sure what (inaudible).

10 (Court reporter interruption.)

11 MR. MCDERMOTT: I'm happy to ask it again.

12 Q. (BY MR. MCDERMOTT:) So Mr. Abdulle, do you
13 believe that the customer indifference principle applies
14 similarly to the export credit rate proceeding as it
15 does in the avoided cost PURPA context?

16 A. I think so.

17 Q. Okay. Thank you. Just a couple of data points
18 I'd like to ask. The Division supported the Company's
19 most recent routine and nonroutine updates to avoided
20 costs in the two dockets that I mentioned, didn't it?

21 A. Yes.

22 Q. Does the Division believe that the current
23 Commission-approved avoided cost rates for qualifying
24 facilities are anticompetitive in any way?

25 A. No. We think that whatever the Commission

1 approves is what they think is just and reasonable.

2 Q. And just -- I think it's clear, but let's make
3 it even clearer. The Company's proposed export credit
4 rate essentially uses the same methodology that the
5 Company used to develop its avoided cost pricing in those
6 recently concluded dockets before the Commission, subject
7 to some minor adjustments; is that correct?

8 A. Yes.

9 Q. Okay. I have no further questions. Thank you,
10 Mr. Abdulle.

11 A. Thank you.

12 CHAIRMAN LEVAR: Thank you, Mr. McDermott.

13 Does someone from the Vote Solar team have any
14 questions for this witness?

15 MR. MARGOLIN: Yes, we have a few, Chairman.

16 CHAIRMAN LEVAR: Okay. Go ahead, Mr. Margolin.

17
18 CROSS-EXAMINATION

19 BY MR. MARGOLIN:

20 Q. Good morning, Mr. Abdulle. I just want to start
21 with your views of Dr. Lee's criticisms of Mr. Davis's
22 work. And I just want to make sure I understand.

23 You've testified that you were not able to
24 access any of the models or data that Dr. Lee relied
25 upon; is that right?

1 A. Yes.

2 Q. And you're aware that Dr. Lee provided that data
3 in -- not just in Stata format but also in text files?

4 A. I'm not sure if I have seen those. I don't
5 remember. I don't recall that.

6 Q. Okay. So in your testimony when we're speaking
7 about sampling weights, you state that you -- that
8 Dr. Lee's criticism was baseless, right?

9 A. I don't remember saying that, but subject to
10 check.

11 Q. Oh, well, we can put it up right now for you.
12 It's at Line 78 of your surrebuttal, and we'll put it up
13 on the screen. Bear with me one moment, please.

14 Sir, do you see that now on your screen, Line
15 78?

16 A. I'm trying to read it.

17 Q. Okay.

18 A. Yes, I see it.

19 Q. Okay. So you now see that you said that
20 Dr. Lee's criticisms were baseless, right?

21 A. I just read the yellow highlighted thing.

22 Q. Why don't -- if you could read line 78, please.

23 A. I don't remember what the question was.

24 Q. We'll go back a page and show you the question.
25 Sorry, video is a little clunky sometimes. There. Spoke

1 too soon.

2 A. Okay. I saw it. I see it from my file.

3 Q. Okay. So you'll agree with me that you
4 testified that Dr. Lee's criticism about sampling weights
5 was baseless, right?

6 A. Yes, I saw there, but I can qualify what I
7 meant.

8 Q. Well can I ask you a question? Did you draft
9 this language, sir?

10 A. Yes.

11 Q. You did? And do you want to --

12 Are you going to change it right now?

13 A. No. I think I could put it into context rather
14 than just strike it.

15 Q. Well, I think -- I mean, you've said it's
16 baseless, and you said it's baseless having not looked at
17 any of the data.

18 Am I understanding that correctly?

19 A. It's baseless -- I said it's baseless because I
20 did not look at the data, so I don't have basis for it.

21 Q. So shouldn't you say, I'm neutral, I don't have
22 an opinion because I can't look at it? "Baseless"
23 implies that there's something wrong there.

24 A. If you read the answer to that question further
25 down, that's exactly what I said.

1 Q. Okay. So your view is you have no view on
2 Dr. Lee's criticisms because you could not -- you could
3 not assess his work papers, right?

4 A. Yes. We could not respond to it.

5 Q. And if Mr. Jetter were to ask you again if you
6 would change any language in your written testimony,
7 would you revise that line to be a little more clear?

8 A. Probably I would just make it that when I'm
9 saying "baseless" I mean there's no basis that I could
10 support his idea.

11 Q. Okay. And --

12 A. Go ahead.

13 Q. Sorry, no. I don't want to cut you off.

14 A. What I was trying to say here is when I'm saying
15 "baseless" is -- the question was what I think of his
16 criticism about Mr. Davis's calculations. Given the fact
17 that I could not review what he did to formulate his
18 opinion, then it's -- I have no basis to say anything
19 about it.

20 Q. So in terms of sampling weights, you're aware
21 that what Mr. Lee bases his criticism on is actually
22 Mr. Davis's work papers, right?

23 A. Yes, I understand that.

24 Q. And, yet, in responding to Mr. Lee's criticism,
25 you say you couldn't access Mr. Lee's work papers. You

1 **don't say anything about having looked at Mr. Davis's.**

2 A. I looked at Mr. Davis's, and I have reviewed it.

3 **Q. And you specifically checked the sampling**
4 **weights that Mr. Davis applied to create the export**
5 **totals that the DPU's findings rest on?**

6 A. I looked at how Mr. Davis calculated his
7 weights, and I looked at the criticism, the text that was
8 written by Dr. Lee. There is a disparity there. And I
9 couldn't -- when I could not open the files of Dr. Lee to
10 see how he's calculating -- in his text, he had an
11 example where he said, Using Dr. Lee's weights and using
12 Mr. Davis's weights, here are the results we are deriving
13 from those two. And I could not verify that. And the
14 fact that we saw that the difference in the results was
15 not that much, we didn't think that we needed to spend
16 too much time on digging into that.

17 **Q. So you didn't think it was important to spend**
18 **too much time correcting a potential error that would**
19 **impact nearly every table and graphic in Mr. Davis's**
20 **testimony?**

21 A. Well, because we were not convinced that
22 Mr. Davis was wrong. We were not able to follow what
23 Dr. Lee was saying. And therefore, we left it the way it
24 is. And we did not want to spend that much time, given
25 the fact that the final results, which was the export,

1 the essence of the whole load research study was not that
2 much different from one another.

3 Q. But you'd agree, certainly, that if Mr. Davis's
4 sampling weights were off, then DPU's study was off as
5 well, right? If they were undercounted, then DPU's study
6 undercounted.

7 A. Yes, if they were off, then it will have an
8 impact.

9 Q. And did you listen to Mr. Davis's testimony
10 yesterday?

11 A. Yes.

12 Q. And you heard that Mr. Davis said he actually
13 did not create the sampling weights himself, right?

14 A. Yes.

15 Q. And in fact, he didn't really even know how to
16 generate them; isn't that right?

17 A. I think that's what he testified.

18 Q. I'm sorry, can you repeat that?

19 A. I think that's how he testified.

20 Q. Right. So you don't know how these weights were
21 created, right?

22 A. Well, we see the formulas in there.

23 Q. Well, how did the formula get there?

24 A. Do you mean who developed the formula?

25 Q. Yeah. Who was it that decided how Mr. Davis was

1 going to weight each strata sample for the DPU's export
2 total calculations? It wasn't Mr. Davis. Was it you?

3 A. No.

4 Q. Okay. Do you know who it was?

5 A. I don't. But this thing was going on -- I think
6 it has a history from Phase I. We had another expert
7 that was in that phase working with us. But to tell you
8 afterwards, I do not know how it was developed. It
9 was -- the whole design was litigated in the first phase,
10 and I think that's where it was. But I'm not sure.
11 Don't quote me on that.

12 Q. Well, unfortunately, you're on the record, so I
13 can't help that.

14 So is it your testimony today that when RMP
15 provided the load research study data to DPU that DPU ran
16 no checks on how the samples were pulled on any of the
17 statistical analysis? It just took the data and ran with
18 it?

19 A. No. We did those things internally, but we do
20 not have the habit of reproducing everything they did.
21 We calculate some of the things for reasonableness and
22 move on with it.

23 Q. Okay. So I'd like to direct you, and we're
24 going to put it up on the screen in a moment, to
25 Dr. Lee's rebuttal testimony at lines -- you know what?

1 I'm not sure if this is confidential, so maybe we won't
2 put it up on the screen.

3 But do you have access to that, sir?

4 A. Yeah. Let me grab it.

5 Q. Okay. Thank you.

6 A. It's the rebuttal?

7 Q. Yes, the rebuttal?

8 A. Rebuttal or surrebuttal?

9 Q. The rebuttal.

10 A. Okay. I have it.

11 Q. Okay. Thank you. If you could turn to Lines
12 230 through 235, please.

13 A. Okay.

14 Q. Let me know when you're there.

15 A. I'm there.

16 Q. So you see right here that Dr. Lee is providing
17 the correct formula for how to calculate a sampling
18 weight when using a stratified sample, right? The
19 formula is right here, right?

20 A. Yes, I see it.

21 Q. And do you disagree that that's the right
22 formula?

23 A. I don't agree or disagree. I want to see the
24 impact that it has simply because the formula is there
25 and does not make that much of a difference whether it's

1 right or wrong -- hello? Am I there?

2 Q. Yes, you are here.

3 A. Okay. I don't have any problems with the
4 formula he has here, but I could not see how he used it
5 to produce results.

6 Q. Well, he provides -- do you know how to apply a
7 sampling weight to a stratified sample?

8 A. Yeah.

9 Q. So it's just a matter of taking that number in
10 Line 235 and multiplying it by the sample for that
11 particular strata, and then you understand what that
12 strata represents, no?

13 A. Yes. But what I am reviewing is not my work.
14 It is his work. And I could not review his work, given
15 the fact that his work was not available for me. So it
16 was not my work that I'm reviewing, it's his work.

17 Q. Well, but all of the numbers that he's pulling
18 are from Mr. Davis's work papers and from other data in
19 this proceeding. All he's looking at is the strata size
20 and then the number of individuals that that strata
21 represents. And all he's doing is a simple calculation.

22 You don't need Dr. Lee's work papers to assess
23 that, do you?

24 A. To assess the impact of this formulation, I will
25 need his work because he came up with a comparison of the

1 results that Mr. Davis drew and the results that he -- he
2 compared the results based on the two weights, Davis's
3 and his. That's the portion I could not see.

4 But I have no problems with his formulation at
5 all.

6 Q. Okay. So there's a right way to calculate
7 sampling weight, and there's a wrong way, right?

8 A. Yeah.

9 Q. And you have no problem with Dr. Lee's formula
10 here for calculating a sampling weight?

11 A. Yeah, I don't have a problem with it. But I do
12 not know how it would differ from ours --

13 Q. Well, he says --

14 A. -- in terms of the results it produces.

15 Q. So what you're saying is whether or not you are
16 willing to make a correction to the tables in Mr. Davis's
17 testimony depends on the results of how the correct
18 formula is applied?

19 A. No. What I'm reviewing is his work. It's his
20 work that I'm reviewing.

21 Q. Umm-hmm.

22 A. So I don't have any problem with what's written
23 on the paper. But I need to take it, apply it, and see
24 the results. And his portion of it, I could not see it.
25 But regardless of whether he's right or wrong -- which I

1 said I don't have any problems with -- the results were
2 not much different, so it's not going to make -- whether
3 we go this way or that way does not make that much of a
4 difference.

5 Q. Well, that's where --

6 A. In our view. Go ahead.

7 Q. That's where I think we might disagree.

8 You've told me that you agree that Dr. Lee's
9 formula that he shows here is the correct way to
10 calculate a sampling weight. And the implication of that
11 is that Mr. Davis, or whomever it was that created the
12 sampling weight in Mr. Davis's work papers, did it the
13 wrong way. And the wrong way led to a dramatic
14 undercounting of exports.

15 So whatever your findings may be, they're based
16 on an undercounting of exports due to this error which
17 you've just conceded, right?

18 A. No. I disagree with the premise. A dramatic
19 undercounting did not happen. The results were similar.

20 Q. They were similar based upon Mr. Davis's
21 application of an incorrect sampling weight, right?

22 A. And also the application of Dr. Lee because I'm
23 comparing the two results they got.

24 Q. So Dr. Lee's correct method and Mr. Davis's
25 incorrect method, they were both pretty close, and so

1 **that excuses Mr. Davis's error?**

2 A. It's not saying it excuses. I was just
3 disagreeing with the premise that there is a dramatic
4 difference.

5 **Q. But you'd agree with me that there's an error in**
6 **Mr. Davis's testimony and in some of those tables in a**
7 **way that undercounts the exports, right?**

8 A. All I can say --

9 MR. JETTER: Let me make an object here to a
10 question that's assuming a fact that I don't believe is
11 in the record. I believe the testimony shows Mr. Davis's
12 export calculation was, in fact, higher than Dr. Lee's.

13 CHAIRMAN LEVAR: Mr. Margolin, do you want to
14 respond to that objection?

15 MR. MARGOLIN: I'm not even sure the basis of
16 the objection. I think Mr. Davis's testimony speaks for
17 itself. And I'd like to understand what the witness has
18 to say if he's still relying upon Mr. Davis's bad math.

19 MR. JETTER: The claim includes that Mr. Davis's
20 calculation results in a lower calculated net export.
21 The question is based on an assumption that -- on a fact
22 that's not in the record.

23 MR. MARGOLIN: Well, with all due respect, I
24 think your witness just agreed with Dr. Lee's formula,
25 agreed that Dr. Lee's formula results in a higher amount

1 of export when it's properly extrapolated. If he wants
2 to differ with the fact that when that's done for each
3 strata, that's not undercounted, I suppose. But I
4 haven't heard that. But I'm happy to go down that route,
5 if that's where we need to go.

6 CHAIRMAN LEVAR: Mr. Margolin, would you repeat
7 the question, the last question that you posed to
8 Dr. Abdulle before the objection?

9 MR. MARGOLIN: To be perfectly honest,
10 Commissioner, I don't recall, and I'm happy to move on.

11 CHAIRMAN LEVAR: Well, why don't you pose the
12 question you'd like to ask next, then. And then if you
13 need me to rule on this objection, I can do it that way.
14 If you'd rather just move on, that's fine also.

15 MR. MARGOLIN: I think I'll move on. I think
16 we've made the point. And thank you very much, Chair.

17 **Q. (BY MR. MARGOLIN:) Dr. Abdulle, you simply have**
18 **not made any correction to any of the export figures in**
19 **the DPU's analysis, correct?**

20 A. Correct.

21 **Q. Okay. You also criticize Dr. Lee's precision**
22 **calculations, right?**

23 A. I did not criticize his precision calculation.
24 I just said I could not review them. I could not -- what
25 do you call -- respond to it.

1 **Q. Okay. So, do you know what precision the load**
2 **research study has?**

3 A. Plus or minus 10 percent with a 95 percent
4 confidence level.

5 **Q. And you did that calculation yourself?**

6 A. No, the Company did, I think.

7 **Q. RMP did?**

8 A. Yeah.

9 **Q. And you haven't checked it?**

10 A. It has a long history. It started from Phase I.
11 The proposed 90 percent instead of the 95 percent with
12 certain sample levels. And the parties requested that
13 they try to (inaudible) the samples. And with that
14 history of going back and forth and reviewing, it came to
15 the 95 percent and 10 percent plus or minus 10 percent.
16 So it was going through the review and the calculations
17 for all the parties.

18 **Q. You're just referencing RMP's testimony from the**
19 **prior phase. You have not looked in any way at the**
20 **precision of the actual load research study they did,**
21 **right?**

22 A. No. The Division did not do that calculation.

23 **Q. And you have no basis to agree or disagree with**
24 **Dr. Lee's findings on that point, right?**

25 A. I have no basis. I tried to follow what he was

1 doing, but I could not.

2 Q. Well, he just calculated a precision statistic,
3 which, I mean, you either checked it or you didn't. And
4 so you said you didn't. So you have no basis to agree or
5 disagree; isn't that fair?

6 A. Yes.

7 Q. Okay.

8 MR. MARGOLIN: Chair, if we could take maybe
9 just a five-minute break. I think I can wrap up very
10 quickly.

11 CHAIRMAN LEVAR: Why don't we make it 10. It's
12 about time to give our court reporter a short break,
13 anyway. So why don't we recess and reconvene in 10
14 minutes.

15 MR. MARGOLIN: Of course. Thank you.

16 CHAIRMAN LEVAR: Thank you.

17 (A break was taken from 10:40 a.m. to 10:50 a.m.)

18 CHAIRMAN LEVAR: We will resume the transcript,
19 and we will continue with Mr. Margolin's
20 cross-examination of Dr. Abdulle. Thank you.

21 MR. MARGOLIN: We actually have no further
22 questions at this time.

23 CHAIRMAN LEVAR: Thank you, Mr. Margolin.

24 Mr. Holman, do you have any questions for
25 Dr. Abdulle?

1 MR. HOLMAN: I do. I just have a couple quick
2 questions for Dr. Abdulle. Thank you, Mr. Chair.

3
4 CROSS-EXAMINATION

5 BY MR. HOLMAN:

6 Q. Good morning, Mr. Abdulle.

7 A. Good morning.

8 Q. In your testimony, you say that the Division
9 agrees with Rocky Mountain Power that the method that you
10 use that we (inaudible).

11 (Court reporter interruption.)

12 MR. HOLMAN: I'm happy to repeat it. Thanks for
13 letting me know.

14 Q. (BY MR. HOLMAN:) Mr. Abdulle, in your
15 testimony, you said that the Division agrees with Rocky
16 Mountain Power that the avoided cost calculation method
17 under Schedule 37 is the method that we should use in
18 the export credit proceeding to calculate the value of
19 the export credit.

20 Do you agree with that?

21 A. Yes.

22 Q. Okay. And just a moment ago in Mr. McDermott's
23 cross-examination, he brought up the customer
24 indifference standard under PURPA.

25 Are you familiar generally with that customer

1 indifference standard?

2 A. I think so.

3 Q. Okay. Generally, as I understand the customer
4 difference standard, identifying a price for a QF
5 project, customers of the utility need to be held
6 indifferent, meaning they can't overpay for that QF
7 resource.

8 Would you agree with that?

9 A. Yes.

10 Q. So the purpose of that standard is to make sure
11 that all utility customers are held indifferent.

12 My question to you is: Are QF developers in
13 that context Rocky Mountain Power customers?

14 A. Yes, I think so.

15 Q. QF developers asking the utility to interconnect
16 and sell their power from a QF facility are Rocky
17 Mountain Power customers, is that your testimony; or are
18 they independent power producers asking to engage in a
19 contractual relationship with Rocky Mountain Power?

20 A. I'm not sure the legal implication or whatever
21 that means. Go ahead.

22 Q. What I'm trying to get here, Mr. Abdulle, is
23 that the customer indifference standard as it's applied
24 to QF contracts under PURPA is somewhat different to what
25 we're talking about here in this proceeding. We're

1 talking about two different categories of Rocky Mountain
2 Power customers.

3 So if we're using the customer indifference
4 standard under PURPA, would you agree with me that in
5 applying that customer indifference standard here, both
6 categories of Rocky Mountain Power customers need to be
7 held indifferent relative to one another? Another way of
8 saying that, Mr. Abdulle, would be to say neither
9 category of customers, generating customers or
10 nongenerating customers, should subsidize the other in
11 any way. Would you agree with that?

12 A. Yes, I would agree with that.

13 Q. Okay. So hypothetically, if generating
14 customers were to provide a -- let's say a capacity
15 benefit to the grid, and those generating customers were
16 not compensated for that capacity benefit, they would not
17 be indifferent. Would you agree with that?

18 A. Yes, subject to check.

19 Q. Okay. That's all the questions I have for you,
20 Mr. Abdulle. Thank you very much.

21 CHAIRMAN LEVAR: Thank you, Mr. Holman.

22 Mr. Mecham, do you have any questions for
23 Dr. Abdulle?

24 MR. MECHAM: I do not. Thank you.

25 CHAIRMAN LEVAR: Thank you.

1 Mr. Jetter, any redirect?

2 MR. JETTER: I have no questions for redirect.
3 Thanks.

4 CHAIRMAN LEVAR: Thank you, Mr. Jetter.

5 I'll go to Commissioner Allen. Do you have any
6 questions for Dr. Abdulle?

7 COMMISSIONER ALLEN: No questions here. Thank
8 you.

9 CHAIRMAN LEVAR: Thank you.

10 Commissioner Clark, do you have any questions.

11 COMMISSIONER CLARK: No questions. Thank you.

12 CHAIRMAN LEVAR: I don't, either.

13 Thank you for your testimony this morning,
14 Dr. Abdulle.

15 THE WITNESS: Thank you.

16 CHAIRMAN LEVAR: Mr. Jetter, anything else from
17 the Division of Public Utilities?

18 MR. JETTER: Thank you, Mr. Chair, no. The
19 Division of Public Utilities has presented all of its
20 witnesses in this hearing. And it will -- that concludes
21 our presentation.

22 CHAIRMAN LEVAR: Thank you.

23 We'll go to Mr. Snarr next for the Office of
24 Consumer Services.

25 Are you ready to call your first witness?

1 MR. SNARR: Yes, we are. Thank you.

2 The Office of Consumer Services would like to
3 call Ms. Michele Beck as our first witness.

4 CHAIRMAN LEVAR: Thank you.

5 Good morning Ms. Beck. Do you --

6 THE WITNESS: Good morning.

7 CHAIRMAN LEVAR: Good morning. Do you swear to
8 tell the truth?

9 THE WITNESS: Yes, I do.

10 CHAIRMAN LEVAR: Okay. Thank you.

11 Go ahead, Mr. Snarr.

12 MR. SNARR: Thank you.

13
14 MICHELE BECK,
15 was called as a witness, and having been first duly
16 sworn to tell the truth, the whole truth, and nothing
17 but the truth, testified as follows:

18
19 DIRECT EXAMINATION

20 BY MR. SNARR:

21 Q. Ms. Beck, would you please state your name and
22 your business association with the Office.

23 A. Yes. My name is Michele Beck. I'm the director
24 of the Office of Consumer Services.

25 Q. And in connection with your role in relationship

1 with the Office, did you oversee or cause some direct
2 testimony to be filed on behalf of the Office by one of
3 the personnel in the Office?

4 A. I did review and oversee the drafting and filing
5 of Cheryl Murray's direct testimony.

6 Q. And that testimony was filed by Cheryl Murray,
7 correct?

8 A. Yes.

9 Q. And she's no longer with the Office; is that
10 right?

11 A. That's correct. To be clear, she retired.

12 Q. Yeah. Right. And is it your intention, then,
13 to adopt the testimony that was previously filed as
14 direct testimony by Cheryl Murray?

15 A. Yes, I do adopt that testimony today.

16 Q. Okay. And did you also prepare rebuttal and
17 surrebuttal testimony in connection with this proceeding?

18 A. Yes, I did.

19 Q. And do you have any corrections you'd like to
20 make to any of those testimonies?

21 A. I do have one typo that I discovered. The
22 Footnote 7 in my surrebuttal testimony should reference
23 paragraph 34, not 33 of the stipulation referenced in
24 that footnote.

25 Q. All right. So with that correction and

1 understanding, if you were asked all the questions in the
2 adopted testimony and rebuttal and surrebuttal testimony
3 today, would your answers be the same as has been filed?

4 A. Yes.

5 Q. All right.

6 MR. SNARR: We would like to admit the
7 testimonies that have been identified, the direct
8 testimony of Cheryl Murray, now adopted by Ms. Beck, as
9 well as the rebuttal and surrebuttal filed by Ms. Beck,
10 and would move for their admission.

11 CHAIRMAN LEVAR: Thank you, Mr. Snarr.

12 If anyone has any objection to that motion,
13 please unmute yourself and state the objection.

14 I'm not seeing or hearing any objections, so the
15 motion is granted. Thank you, Mr. Snarr.

16 MR. SNARR: Thank you.

17 Q. (BY MR. SNARR:) Now, Ms. Beck, have you
18 prepared a summary of your testimony for purposes of this
19 hearing today?

20 A. Yes, I have.

21 Q. Would you please present that summary now?

22 THE WITNESS: Before I start, could I check with
23 the court reporter?

24 Are you hearing my background noise? I'm sorry.
25 I'm having some construction in my backyard and -- but I

1 have the option of putting some speakers in. But we'll
2 have to take a break to do it because it didn't
3 immediately connect when I tried earlier. So are you
4 okay as is?

5 THE COURT REPORTER: I am. I'll mute myself and
6 see if that helps, too.

7 THE WITNESS: Okay. Let me just inform the
8 Commission that if it becomes distracting, I'll just need
9 a 1-minute break to reconfigure my computer.

10 CHAIRMAN LEVAR: Ms. Beck, this is Thad Levar.
11 Maybe if you just turned your speaker volume down a
12 little bit, that might help things. It's workable as is,
13 but I think if you turned your speakers down just a small
14 amount, that might help.

15 THE WITNESS: Okay. How about now? Better or
16 not better?

17 CHAIRMAN LEVAR: To me, that's an improvement.
18 Thank you.

19 THE WITNESS: Okay. So let me try this. But
20 again, I will only need one minute to reconfigure if it
21 becomes necessary.

22 Good morning, Chairman Levar, Commissioner
23 Clark, especially to Commission Allen. This is the first
24 time I'm appearing in front of you after your recent
25 appointment back onto the PSC, and I just wanted to note

1 that it was nice to see you.

2 First, I, as stated earlier, I adopt the direct
3 testimony of Cheryl Murray. And that testimony
4 articulates two principles of the OCS with respect to
5 this proceeding: True cost-based rates, and bill
6 simplicity and transparency. It also noted Commission
7 guidance that would inform our analysis.

8 Specifically, from its July 1, 2015 order in
9 Docket No. 14-035-114, the PSC discussed relevant costs
10 and benefits as being those that accrue to the utility or
11 its non net metering customers in their capacity as
12 ratepayers of the utility. Costs or benefits that do not
13 directly affect the utility's cost of service will not be
14 included in the final framework to be established in this
15 phase of the docket. The OCS believes that this remains
16 useful guidance.

17 As I described in my rebuttal and surrebuttal
18 testimony, the OCS generally found Rocky Mountain Power's
19 proposal consistent with true cost-based rates. However,
20 the OCS identified some adjustments necessary to approve
21 the rate. We also carefully reviewed the proposals put
22 forward by other parties and, after rebuttal, agreed that
23 a second method for calculating avoided energy costs
24 would be reasonable. This technical analysis is
25 addressed by the second OCS witness, Phil Hayet.

1 He will also describe how the OCS has further
2 refined its position after reviewing surrebuttal
3 testimony and would now, consistent with the analysis
4 presented in our testimony, support a rate of 3.7 cents
5 per kilowatt hour.

6 My testimony further describes OCS's objections
7 to including externalities, hedging costs, CO2 compliance
8 costs, and economic development benefits in the export
9 credit rate. My concerns primarily include selective
10 application resulting in distorted outcomes,
11 discriminatory treatment of similar resources being
12 contrary to long-standing Utah regulatory policy, and any
13 alleged benefits accruing to a larger group than the
14 ratepayers who would be paying.

15 My testimony supports an annual update of the
16 rate to ensure that the rate reflects changing market and
17 technical conditions.

18 I also give my opinion that the Rocky Mountain
19 Power's netting proposal provides sufficient bill
20 simplicity and transparency. After reviewing and
21 considering multiple alternatives, I concluded that the
22 customer will be able to recalculate their bills simply
23 based on a monthly meter measurement for energy delivered
24 to the customer and an on-peak and off-peak measurement
25 of exported energy to the grid.

1 In my surrebuttal testimony, I address Vivint
2 Solar's concern about the meter fee. I agree that if AMI
3 meters were in base rates, it would be inappropriate to
4 separately charge CG customers for those meters.
5 However, at the time the Commission is anticipated to
6 rule on this case, no AMI meters for residential
7 customers will be in base rates. Further, it is not a
8 given that residential AMI meters will be included in
9 rates at the conclusion of the general rate case
10 currently underway.

11 My recommendation is that if and when AMI meters
12 are included in base rates, the Commission should address
13 a potential change to this aspect of the net billing
14 tariff.

15 I also raised concerns that Utah Clean Energy
16 took positions contrary to the settlement in Docket
17 14-035-114 to which they are a signatory and note that
18 Salt Lake City did so in surrebuttal as well. My
19 recommendation is that the Commission should disregard
20 those positions inconsistent with the settlement.

21 Finally, in response to rebuttal testimony
22 recommending that the Commission include placeholders for
23 future benefits, I recommend that some additional process
24 in this docket is necessary to address questions, such as
25 how new benefits or costs could be included in the export

1 credit rate.

2 I recommend a relatively simple process of a
3 compliance filing by Rocky Mountain Power after the
4 Commission has ruled on substantive issues. This filing
5 should incorporate all of the Commission rulings
6 regarding the tariff design and propose additional
7 specifics for ongoing process, followed by comments and
8 reply comments from any interested parties to give the
9 Commission a full set of input.

10 This concludes my summary.

11 MR. SNARR: Ms. Beck is now available for
12 cross-examination.

13 CHAIRMAN LEVAR: Thank you, Mr. Snarr.

14 Mr. Jetter, do you have any questions for
15 Ms. Beck?

16 MR. JETTER: Thank you, Mr. Chair. I do not
17 have any questions.

18 CHAIRMAN LEVAR: Thank you.

19 Mr. McDermott, do you have any questions for
20 Ms. Beck?

21 MR. MCDERMOTT: No questions from the Company.
22 Thank you.

23 CHAIRMAN LEVAR: Thank you.

24 Does anyone from the Vote Solar team have any
25 questions for Ms. Beck?

1 MS. SELENDY: Thank you, Chairman Levar.

2
3 CROSS-EXAMINATION

4 BY MS. SELENDY:

5 Q. Good morning, Ms. Beck.

6 CHAIRMAN LEVAR: If you would identify yourself.

7 MS. SELENDY: I will. My name is Jennifer
8 Selendy of the Selendy Gay firm, representing Vote Solar.

9 THE WITNESS: Good morning.

10 Q. (BY MS. SELENDY:) We've met before, but I want
11 to be clear on the record that I represent Vote Solar and
12 that I have a few questions for you this morning. So
13 thank you.

14 How many times have you testified before utility
15 commissions such as this one, Ms. Beck?

16 A. I have testified -- I guess -- I don't have that
17 in front of me, but I would say probably at least 20
18 times.

19 Q. Thank you. As the director of the Office of
20 Consumer Services, it's part of your job to represent the
21 interests of all Utah's residential and small commercial
22 electricity consumers; is that correct?

23 A. Yes.

24 Q. So the consumers you represent include CG solar
25 customers; is that right?

1 A. Yes, it is.

2 Q. And that would also include some Utah consumers
3 who want to be customer generators but may not be right
4 now, correct?

5 A. Yes.

6 Q. Now, OCS has a Committee of Consumer Services,
7 right?

8 A. So the Committee of Consumer Services is an
9 advisory body that is authorized to give advice on any
10 aspect of what we -- of what we do.

11 Q. So it's correct that you have -- the OCS has a
12 Committee of Consumer Services?

13 A. We have an advisory body called the "Committee."

14 Q. Okay. And that committee is, at least as it's
15 described on your website, a nine-person, lay-member
16 board that advises you regarding utility rate changes,
17 other regulatory actions, and establishing -- helping
18 establish policy objectives; is that right?

19 A. Well, I now must confess that we neglected to
20 update our website after the last legislative session,
21 although, in our defense, it was only a few days after
22 the legislative session that we went into unexpected
23 telework.

24 It is now a five-person body. But other than
25 that, I think that it remains correct.

1 Q. Okay. And is it correct that there's a Utah
2 statute that requires certain consumer interests to be
3 represented on your committee?

4 A. Yes.

5 Q. And in your view, does that legislation reflect
6 the importance that the Utah legislature has placed on
7 OCS hearing diverse customer perspectives as part of its
8 policymaking?

9 A. I think that's a fair statement.

10 Q. Okay. And you would agree that there are
11 benefits to OCS having their policy guided by the very
12 consumer constituents that you are supposed to represent,
13 right?

14 A. Well, I would not use the verb "guided." I
15 think that the legislature was very clear in earlier
16 changes that were made back in 2009. So it "informed,"
17 possibly. I mean, it's just an advisory committee. They
18 don't set the policy, so I think "guide" might be a
19 strong word.

20 But, that said, I would agree that we definitely
21 benefit from hearing from the folks who are serving on
22 our committee.

23 Q. So maybe let me ask the question a different
24 way.

25 You would agree that there are benefits to

1 having input from the consumer constituents that you were
2 supposed to represent in formulating OCS policy?

3 A. Yes.

4 Q. And is it permissible for OCS's committee to
5 have customers, for example, that represent solar
6 interests?

7 A. It's not addressed in the legislation, so that
8 would make it permissible.

9 Q. And are there any CG customers currently on the
10 Committee of Consumer Services today?

11 A. Today, there's not. There was one previously.
12 But there is somebody on the committee who represents --
13 has a history of representing solar interests at the
14 legislature.

15 Q. And is your five-person committee full at this
16 time?

17 A. Yes.

18 Q. You have all five members?

19 A. Yes, it is.

20 Q. Okay. And is there a reason that you're aware
21 of that the nine-person committee was reduced to a
22 five-person committee?

23 A. There was a very extensive bill evaluating all
24 of the advisory boards and commissions in the State of
25 Utah that went through last session. And the Governor's

1 office indicated some concerns in keeping all of the
2 boards and commissions filled. And our nine-person
3 committee was extra large, I would say, compared to
4 similar committees. So I presume that that's part of the
5 reason. I don't know that that would be included in
6 legislative intent, but I would say that was certainly
7 something discussed behind the scenes.

8 Q. Now your office has a number of written policy
9 objectives that are informed or that are advised by that
10 committee, right?

11 A. Yes.

12 Q. And OCS communicates those policy objectives to
13 consumers in Utah, in part, by listing them on its
14 website, correct?

15 A. Correct.

16 Q. And Rocky Mountain Power is the only
17 rate-regulated public utility providing electric service
18 in the state of Utah, right?

19 A. Yes.

20 Q. And another term that one might use for
21 rate-regulated utility is investor-owned utility, right?

22 A. Yes.

23 Q. And that means that RMP is actually a
24 private-interest enterprise that functions as a public
25 utility in Utah, right?

1 A. Yes.

2 May I return to a previous question and refine
3 my answer, please?

4 Rocky Mountain Power is not the only -- it's the
5 only fully-regulated utility. In Utah, there are some
6 elements of regulation that apply to the cooperatives.
7 So it's just a small refinement.

8 **Q. But on your website, Rocky Mountain Power is**
9 **described as the "only rate-regulated public utility**
10 **providing electric service in the state of Utah."**

11 Would you agree that that's a statement on your
12 website?

13 A. And it is the only rate-regulated public
14 utility.

15 **Q. Okay. You understand that as an investor-owned**
16 **utility, that means that RMP has a duty to maximize**
17 **profits for its investors or shareholders, right?**

18 A. I'm well aware.

19 **Q. And RMP is ultimately owned by Berkshire**
20 **Hathaway, correct?**

21 A. Yes.

22 **Q. And RMP seeks to earn profits from its**
23 **activities in the state of Utah on behalf of those**
24 **shareholders, right?**

25 A. Yes.

1 Q. And in fact, RMP earns a rate of return that is
2 approved in advance in exchange for their willingness to
3 invest in transmission and generation assets that serve
4 Utah consumers, right?

5 A. Well, I would not say the rate of return is
6 approved. Rates are set based on an allowed rate of
7 return.

8 Q. But they are set in advance of the investments
9 that are being made by Rocky Mountain Power, correct?

10 A. Yes.

11 Q. And they are set by the Commission?

12 A. Yes.

13 Q. You used to work, in fact, for an investor-owned
14 utility in Minnesota; is that right?

15 A. Yes.

16 Q. And so you have some experience in how
17 investor-owned utilities work; is that fair?

18 A. Well, that's fair. I worked for an
19 investor-owned utility less than 1 year, so I feel like I
20 actually have more experience in how they work from my
21 regulatory experience than from nine months there.

22 Q. Rocky Mountain Power serves about 75 percent of
23 the geographic area of the state of Utah; is that right?

24 A. I've never done the calculation of the
25 geographic area, but I don't dispute that calculation.

1 Q. Okay. The OCS website, in fact, reports to
2 consumers that it serves about 3/4 of the geographic area
3 of the state; is that right?

4 A. That's correct.

5 Q. And RMP also serves over 800,000 consumers in
6 Utah; is that right?

7 A. Yes.

8 Q. Now, Rocky Mountain Power is also an integrated
9 electric utility, right?

10 A. Yes.

11 Q. And that means that RMP owns assets that provide
12 distribution, transmission, and generation of electricity
13 in Utah, correct?

14 A. Yes.

15 Q. And within its territory in the state of Utah,
16 is there any other public utility that competes with
17 Rocky Mountain Power to generate and sell electricity to
18 retail consumers?

19 A. We do not have retail choice here in Utah.

20 Q. Okay. So the answer to my question is that it
21 is, there is no other competitor in its territory; is
22 that right?

23 A. Right. That's the paradigm established by our
24 legislature, yes. Although there is one exception to
25 that for one large customer.

1 Q. Okay. And in deciding what positions the OCS
2 would take in this proceeding, did you consider the fact
3 that RMP is an investor-owned utility with duties to its
4 investors, not just duties to Utah customers?

5 A. Yes, of course. We always consider that.

6 Q. And is that consideration mentioned anywhere in
7 your testimony?

8 A. No.

9 Q. In deciding what positions the OCS would take in
10 this proceeding, did you consider the fact that CG
11 customers effectively compete with Rocky Mountain Power
12 in the generation of electricity in Utah?

13 A. Yes.

14 Q. And is that consideration mentioned anywhere in
15 the OCS testimony?

16 A. No. There's a lot of things that get
17 considered, and not everything gets written down. I
18 don't think we have the same resources that Vote Solar
19 has to file hundreds of pages of testimony.

20 Q. Now, OCS encourages Utah electricity consumers
21 to engage in energy efficiency and conservation, right?

22 A. Yes, we do.

23 Q. And energy efficiency is using less energy to
24 provide the same or similar results, correct?

25 A. Yes.

1 **Q. And conservation is simply using less energy,**
2 **right?**

3 A. I guess so. I feel like that's a distinction
4 without a difference, but I'm not going to challenge
5 that.

6 **Q. Well, those definitions are on the OCS website**
7 **for your consumers, aren't they?**

8 A. Well, obviously you've had a lot more time to
9 read my website recently. So that's fine. I accept it.

10 **Q. But your website is really intended to be for**
11 **consumers that you represent, right?**

12 A. Yeah. Well, we hope -- we hope it. It's a
13 little bit of a field of dreams. We built it and wish
14 that they would come. But I think mostly attorneys are
15 the only ones who are reading it based on the numbers.

16 **Q. So energy efficiency and conservation are**
17 **sometimes referred to as "demand-side management,"**
18 **correct?**

19 A. Yes, that is correct.

20 **Q. So OCS actively encourages demand-side**
21 **management among consumers, right?**

22 A. We do.

23 **Q. And RMP offers the consumers you represent a**
24 **portfolio of demand-side management programs, don't they?**

25 A. Yes, they do.

1 Q. And you understand that Rocky Mountain Power
2 offers these demand-side management programs because
3 those programs reduce costs for all ratepayers, not just
4 the ones who participate in demand-side management,
5 right?

6 A. Yes, they are required to meet those standards
7 by the Commission.

8 Q. And demand-side management programs in Utah
9 include things such as the Cool Keeper program and the
10 Wattsmart program, right?

11 A. Well, yes. I think Cool Keeper is a subset of
12 Wattsmart, but yes.

13 Q. Okay. Now, OCS feels it's important to let
14 consumers know that it, the Office, is an active
15 participant in the demand-side management advisory group
16 for Rocky Mountain Power and that you support demand-side
17 management programs that are offered by Rocky Mountain
18 Power; isn't that right?

19 A. That's right.

20 Q. Now, for some consumers, using rooftop solar is
21 a form of demand-side management, right?

22 A. Yes.

23 Q. And you would agree that the use of rooftop
24 solar decreases a consumer's demand for electricity from
25 the grid, right?

1 A. Yes.

2 Q. Now, OCS tells consumers that demand-side
3 management can help consumers lower their utility bills,
4 right?

5 A. Yes.

6 Q. And you believe that to be true, right?

7 A. Yes.

8 Q. And you wouldn't, consistent with time
9 permitting you to review the website, you wouldn't have
10 something on the OCS website that you disagreed with or
11 didn't believe was true, right?

12 A. No. And we do try to review it regularly. But
13 I would not say -- well, it's obvious it hasn't been
14 reviewed since this last legislative session. So I
15 certainly have a new list item.

16 Q. I appreciate that.

17 Now OCS also tells consumers in Utah that
18 demand-side management helps to minimize environmental
19 impacts from generating electricity with fossil fuels,
20 right?

21 A. Yes.

22 Q. And you believe that to be true?

23 A. Yes.

24 Q. And what are some of those environmental impacts
25 from fossil fuels that you refer to?

1 A. I would just say emissions and -- including
2 carbon and particulates. Probably also water use, which
3 doesn't even have an environmental impact, but it's in
4 the same category. Of course, how it impacts is going to
5 change over time as the portfolio of resources changes.

6 **Q. All right. And you would include pollution in**
7 **that, too, generally?**

8 A. I think the particulate emissions --

9 **Q. Yeah.**

10 A. -- leads to pollution. But -- but I always want
11 to be careful with that because here in the Wasatch
12 Front, that oftentimes is relating to something that's
13 not as much impacted by electric generating resources.

14 **Q. There are no such environmental impacts from**
15 **solar and wind generation; isn't that right?**

16 A. Well, I mean if we're getting really specific
17 and we want to look at the full life cycle, I think that
18 there are some impacts. But if we're looking at just the
19 operating costs, the day-in, day-out operation of them,
20 they do not have the same impact.

21 **Q. All right. In fact, any such impacts would be**
22 **dramatically less than what you find with fossil fuels,**
23 **right?**

24 A. Well, I haven't done a life cycle analysis, and
25 I think there are those who would probably dispute that.

1 But I would say certainly in the daily operations, the
2 impacts are dramatically less.

3 Q. And OCS also tells consumers that demand-side
4 management lowers everyone's long-term energy rates,
5 correct?

6 A. Yes, that is correct.

7 Q. Okay. And you believe that to be true, don't
8 you?

9 A. Well, I do believe that to be true because we're
10 involved in the evaluation. So programs that don't pass
11 that test, that don't meet that standard, are not
12 approved and are not in the portfolio.

13 Q. All right.

14 A. It's not inherently true for a DSM program, but
15 it's been reviewed and found to be true for the programs
16 that are in the current portfolio.

17 Q. Right. And in order for you to make that
18 determination that the demand-side management program at
19 issue would lower everyone's long-term energy rates, you
20 need to analyze the data regarding the specific costs and
21 benefits of that program, correct?

22 A. Yes.

23 Q. Based on your experience, you understand how
24 energy conservation by Utah consumers can lower
25 everyone's long-term energy rates, right?

1 A. Yes, I do.

2 Q. And energy conservation reduces demand on the
3 grid, including during times of peak demand, right?

4 A. Well, most conservation have a lot greater
5 impact on energy than on peak. For example, the Cool
6 Keeper and the Irrigator Load Control programs are
7 designed to look at peaks and high-cost times.

8 Q. Right. But they do conserve, they do reduce
9 demand on the grid and lower RMP's costs, correct?

10 A. Yes.

11 Q. And that decreased demand is what lowers
12 long-term costs for all ratepayers, not just those who
13 participate in the program, right?

14 A. Yes.

15 Q. I believe you said in your opening remarks that
16 OCS believes that RMP's proposal -- strike that.

17 I believe that you testified and stated in your
18 opening remarks that OCS believes that RMP's proposed ECR
19 is generally reasonable; is that fair?

20 A. Yes, it's generally reasonable, of course
21 amended by the adjustments that we proposed.

22 Q. Okay. And have you made any determination that
23 RMP's proposal is also fair to the subset of customers
24 that generate solar from rooftop installations?

25 A. Well, "fair" is a loaded word. What we've done

1 is try to make sure that it accurately captures costs and
2 benefits. And so when you accurately capture costs and
3 benefits, then it's setting the appropriate rate from
4 both the perspective of customers who participate and
5 customers who don't participate. But I think fairness,
6 you know, starts to bring in a lot of -- more subjective
7 questions.

8 **Q. Well, "fair" means not nondiscriminatory,**
9 **doesn't it?**

10 A. Well, if we're going to just go with
11 nondiscriminatory, then yes, we have evaluated it from
12 that perspective.

13 **Q. Okay. And fairness, the concept of fairness and**
14 **justness is built into the legislation regarding rate**
15 **setting, correct?**

16 A. Right. Right.

17 **Q. So you deal with that term "fair" all the time?**

18 A. Yeah. I mean, I get concerned when we say
19 "fair" because I know that from the perspective of
20 individual customers, they don't view it as fair.

21 But we have reviewed it from the perspective, as
22 you describe it. So I'm sorry to unnecessarily belabor
23 that point.

24 **Q. That's fine. When I use the term "fair," I mean**
25 **the way that it's used in legislation, right?**

1 So my question is have you made any
2 determination with that definition of fairness in mind?
3 My question is: Have you made the determination that
4 RMP's proposal is also fair to the subset of customers
5 that generate solar from rooftop installations?

6 A. So to be clear, we did review it, and we have
7 made adjustments to it. And we are now -- we're
8 supporting a different number than them. But because I
9 don't think we're -- I mean, we made adjustments to the
10 actual numbers, but the general proposal is similar.
11 That's why I said generally we think it's fair. But
12 we're not supporting their proposal as-is. We did try to
13 review it from the perspective of all the customers that
14 we represent.

15 Q. Okay. Fair enough. I'm going to rephrase the
16 question for you, then.

17 Have you made any determination that RMP's
18 proposal, as adjusted by your testimony, is fair to the
19 subset of customers that generate solar from rooftop
20 installations?

21 A. Yes.

22 Q. And is there any reason that the word "fair" is
23 not explicitly part of your testimony?

24 A. No.

25 Q. Now, you also said in response to that prior

1 answer that you made a conclusion that the proposal, as
2 adjusted, accurately captures costs and benefits.

3 But OCS didn't do any independent study of the
4 costs and benefits of rooftop solar in this proceeding,
5 did it?

6 A. No. Our approach to this one, this proceeding,
7 was to review the evidence that came in from the parties
8 who were advocating specifics.

9 Q. So in your decision to support RMP's proposal as
10 adjusted, were you relying on the analysis that they did?

11 A. We relied on their analysis. We relied on your
12 analysis as well. We relied on the analysis that was put
13 forward in everyone's proposals and their direct
14 testimony.

15 Q. Did you rely on the DPU analysis?

16 A. We did not review the load study. We take no
17 position on the load study.

18 I also would like to say that there are some
19 elements that we did our own analysis. For example, the
20 grid study, we re-ran ourselves. So there are some --
21 some of the technical elements that we did our own
22 analysis on, and I'm going to have to refer you to Phil
23 Hayet to get an understanding of specifically which ones.

24 But, for example, he is an expert on grid. And
25 he re-ran it and found an error, and we put that forward.

1 He did his own analysis on line losses as well
2 as reviewing your analysis, others' analysis. And we
3 adopted a revised proposal that came, I think, from
4 Vivint. I should probably stop talking because he's the
5 better witness to ask those specifics.

6 **Q. Okay. Is it your testimony, sitting here today,**
7 **that the evidence submitted in this proceeding by Rocky**
8 **Mountain Power actually is sufficient to determine the**
9 **relative costs and benefits of rooftop solar?**

10 A. I don't think that was the intent of this
11 proceeding, so I don't know that it is.

12 **Q. Okay. So my question wasn't about the intent.**
13 **And I appreciate your answer, but I just want to be**
14 **clear.**

15 **You're not testifying that you're able to make a**
16 **determination about the relative costs and benefits of**
17 **rooftop solar based on any analysis done by RMP in this**
18 **docket; is that fair?**

19 A. Right. We've simply looked at the export
20 credits, and that's a focus -- that's more focused than
21 the broad question. Although, I'm also not testifying
22 that you can't make that determination. That's not what
23 we evaluated it for.

24 **Q. But I want to understand if it's your testimony**
25 **here today that Rocky Mountain Power has put forth**

1 sufficient data and evidence in this case to make a
2 determination, a valid determination, of the relevant
3 costs and benefits of rooftop solar?

4 A. Well, my testimony -- and I think that this is
5 the Commission's view -- is that the Commission needs to
6 weigh the evidence from all parties in making that. So I
7 don't think it's right for you to require a utility to
8 make an affirmative case that a -- that a cost doesn't
9 exist or that a benefit doesn't exist. They put forward
10 the costs and the benefits that they are supporting.
11 Vote Solar put forward the costs and the benefits that
12 you are supporting.

13 And so I don't think that Rocky Mountain Power's
14 evidence, alone, is sufficient to make that
15 determination. I'm not here testifying that the full set
16 of evidence isn't there, but we did not, OCS did not take
17 a position on the full set of evidence of cost versus
18 benefits, of that theory.

19 Q. So I don't think you answered my question, but I
20 want to unpack it a little bit so that maybe we can be
21 clear.

22 One is I think you would agree with me that each
23 party who is putting forth the proposal in this case has
24 the burden of proof of submitting all the necessary
25 evidence to carry their burden. We agree on that, right?

1 A. I think we -- I feel like I need to unpack it
2 slightly more.

3 I don't know -- I think that each element of
4 cost or benefit that a party puts forward, they bear the
5 burden. So if we're saying the same thing, then we
6 agree.

7 Q. I think we are. That each party that is putting
8 forth a proposal with respect to a cost or a benefit
9 bears the burden of proving that --

10 A. Yes, I think we agree.

11 Q. Okay. Separately getting back to the question
12 that I was asking, which is you said you don't believe
13 the purpose of this proceeding was to prove the relative
14 costs and benefits of rooftop solar.

15 And setting that issue aside, what you think the
16 purpose of the proceeding is, I'm asking you whether you
17 believe that Rocky Mountain Power has put forth
18 sufficient evidence in this case to make that
19 determination?

20 A. Solely based on Rocky Mountain Power's evidence,
21 I don't think so.

22 Q. Okay. Thank you.

23 So according to OCS policy, as stated on its
24 website, you oppose rates that are unjust or unreasonable
25 to any subset of customers; is that correct?

1 A. That is correct.

2 Q. And you agree that this Commission can evaluate
3 whether the proposed ECR, the rates are fair and
4 reasonable as to any subset of Utah ratepayers, right?

5 A. Yes.

6 Q. Okay. And it's your position here that the ECR
7 set by this Commission for solar exports should be both
8 fair and reasonable to all Utah customers, correct?

9 A. Yes.

10 Q. And do you believe that the Commission should
11 consider the impact of the ECR on the well-being of the
12 state of Utah?

13 A. Yes.

14 Q. And do you believe that the Commission should
15 consider whether the ECR is a cost-effective means of
16 encouraging conservation of resources and energy in the
17 state of Utah?

18 A. I don't -- well, I guess with emphasis on
19 cost-effective, yes.

20 Q. Okay. And in this -- so that's a good point.
21 I'm actually -- that's a good point. Let's talk about
22 the term "cost-effective." We've heard it a lot in this
23 proceeding. I suspect we'll hear it a little more. But
24 maybe we could see if we agree on this.

25 In order to determine whether or not something

1 is cost-effective, you actually have to weigh its
2 relative costs and benefits to the rate base; is that
3 fair?

4 A. To the rate base? I don't know what that means.

5 Q. To the ratepayers -- sorry, I mean to the --

6 A. The ratepayer?

7 Q. Yeah.

8 A. Yes.

9 Q. Okay. And in this proceeding, OCS, you've
10 talked about a couple of different calculations that
11 Mr. Hayet has made in this proceeding.

12 But do we agree that OCS did not attempt to
13 quantify any particular benefits of CG solar as part of
14 its testimony?

15 A. We -- yes. We -- well, I mean we certainly
16 evaluated the evidence that came forward from other
17 parties. And had we felt like those were well-supported,
18 we would have brought that into our proposal as well.

19 So we didn't independently bring forward an
20 evaluation of benefits, and nor did we independently
21 bring forward evaluation of costs. We stated very
22 clearly in our direct testimony that we would be
23 evaluating the proposals brought forward by others.

24 Q. Okay. Well, thank you. You answered my
25 question and the next question. But just so the record

1 is clear: OCS did not independently quantify either
2 costs or benefits for purposes of this proceeding?

3 A. We did not file a direct proposal. But we did
4 do some of our -- some independent analysis as part of
5 verification of other proposals.

6 Q. Okay. And when you say that you haven't brought
7 forth your own proposal, that means that OCS has not
8 calculated its own recommended export rate for CG solar,
9 right? Have you independently done that?

10 A. So I am struggling to understand the purpose of
11 these questions. We did not bring forward a direct
12 proposal. We said in direct that we would evaluate
13 everyone else's proposal, which we have done. And we do
14 take an affirmative stand at this point that we think 3.7
15 cents is the right answer.

16 So I don't know how to answer your question in a
17 yes or no because we took the best approach we could to
18 this case given our limited resources.

19 Q. I understand that. But I do have a purpose for
20 you answering my questions, even if you don't appreciate
21 it. And I just want you to try to focus on what I'm
22 asking you.

23 Did OCS independently calculate and recommend an
24 export credit rate for solar in this case?

25 A. We did not independently calculate, but we do

1 recommend a rate.

2 Q. Okay. Under Utah's prior net metering program,
3 customer generators were paid the full retail rate for
4 their exports, correct?

5 A. Yes.

6 Q. And that was a transparent structure for
7 customers to understand, right?

8 A. I think it was simple. I would not agree it's
9 transparent.

10 Q. So was at any time, in connection with --

11 A. I'm sorry. I'm really sorry. I just need one
12 minute to take care of something happening here.

13 Q. Yes, ma'am. Of course.

14 A. I'm so sorry.

15 Q. No, it's okay.

16 CHAIRMAN LEVAR: Why don't we just make this a
17 5-minute recess. Thank you.

18 (A break was taken from 11:40 a.m. to 11:45 a.m.)

19 CHAIRMAN LEVAR: Okay. I think we are ready to
20 continue the cross-examination. We can restart the
21 transcript. Thank you.

22 MS. SELENDY: Thank you, Mr. Chairman.

23 Q. (BY MS. SELENDY:) Are you all set, Ms. Beck?

24 A. I am. I apologize for that interruption. Thank
25 you very much.

1 Q. No. No, it's quite all right. Working from
2 home has all kinds of excitements.

3 A. Yes.

4 Q. We appreciate it.
5 You're familiar with the transition program,
6 correct?

7 A. Yes, I am.

8 Q. And under the transition program, the rate paid
9 to CG solar customers was reduced from the retail rate to
10 9.2 cents per kilowatt hour for the residential
11 customers, right?

12 A. Right. And the netting period changed as well.

13 Q. And you personally signed the settlement
14 stipulation that you referenced in your opening statement
15 that replaced, then, the net metering program with a
16 transition program, correct?

17 A. Yes.

18 Q. And as part of that settlement, OCS agreed,
19 then, that 9.2 cents was a just and reasonable rate for
20 CG exports, correct?

21 A. We agreed that in the context of all of the
22 settlement provisions, it was in the just and reasonable
23 end result.

24 Q. Okay. And you didn't ask for any qualifying
25 language to be added to that provision of the settlement

1 stipulation, correct?

2 A. Correct. But that is my understanding of how
3 our settlements work here in Utah.

4 Q. Okay. Now, RMP's proposed average ECR in this
5 case is 1.53 cents per kilowatt hour; is that correct?

6 A. I think they -- I think that's correct. But I
7 think they also were indifferent towards a second method
8 that resulted in a higher -- somewhere around 2.22.

9 Q. 2.2 cents, right?

10 And subject to the adjustments that you made,
11 OCS supports adoption of an ECR rate that I think brought
12 it up to 3.7 cents per kilowatt hour, right?

13 A. That's correct. We calculated our position that
14 we had previously only stated qualitatively.

15 Q. Okay. And with respect to the settlement
16 agreement that you signed, that was back in August of
17 2017, correct?

18 A. Yes.

19 Q. And that settlement agreement expressly
20 contemplates a new rate program that will be established
21 by the Commission during this proceeding, correct?

22 A. Yes.

23 Q. And also according to that settlement,
24 participants in both the existing net metering program,
25 which was a defined term, the NEM customers, and the

1 existing transition participants must be allowed to
2 voluntarily move into the new rate program that's created
3 by the Commission in this proceeding, right?

4 A. Yes.

5 Q. Okay. And you would agree that there is nothing
6 in the settlement agreement that says that the new net --
7 that the new rate program established in this proceeding
8 can't involve net metering, right?

9 A. Right. But we -- that does -- well, I'll just
10 say yes.

11 Q. And that agreement also does not explicitly
12 preclude any party from advocating that the Commission
13 implement a new net metering program as part of this
14 proceeding, correct?

15 A. I don't agree with that.

16 Q. So your testimony is that the agreement
17 explicitly precludes the parties who signed it from
18 advocating for a new net metering program?

19 A. That's my understanding of the agreement of what
20 we signed, yes.

21 Q. Okay. So why don't we pull up the agreement,
22 and you can show me where that language is.

23 A. I would direct you to paragraph 34.

24 Q. Okay. Thank you. Can we pull of paragraph 34
25 of the agreement?

1 We're working on getting that up for you,
2 **Ms. Beck.**

3 A. That's fine.

4 **Q. And you said that's paragraph 34 we should look**
5 **at?**

6 A. Yes.

7 **Q. Okay.**

8 A. I have to find some reading glasses.

9 **Q. So can you point to that language that you said**
10 **it explicitly precludes a party from advocating for a --**
11 **for net metering to be part of the new rate program that**
12 **is set in this proceeding?**

13 A. Okay. So it talks about "Parties agree not to
14 initiate or support any regulatory action that challenges
15 any term of this Stipulation." And one of the terms of
16 the stipulation is to close the net metering program.

17 **Q. Right --**

18 A. Cap and close it.

19 **Q. That was the preexisting, that was a defined**
20 **term, the net metering program that existed prior to this**
21 **agreement, correct?**

22 A. Right.

23 **Q. And your understanding from this is that the**
24 **parties to this settlement agreement are agreeing that**
25 **there could never be a new or different net metering**

1 program?

2 A. Well, that's how I understood our agreement to
3 be. I'm not here speaking to any legal standard binding
4 people to that. But that is how I understood our
5 agreement to be.

6 Q. Okay. Thank you for that.

7 So you would agree, however, that the Commission
8 held in its order approving the settlement stipulation
9 that the net metering evaluation statute still pertains,
10 right?

11 A. Yes.

12 Q. And the order also expressly held that the
13 settlement didn't in any way annul the Commission's duty
14 to evaluate whether the benefits of net metering outweigh
15 its costs or vice versa, right?

16 A. I agree.

17 Q. And isn't it important to the consumers that you
18 represent that the Commission actually discharge that
19 legislative obligation and determine whether the costs
20 outweigh the benefits of net metering or vice versa so
21 that your office and the Commission can determine whether
22 any subsidies exist in one direction or the other?

23 A. Yes, I agree.

24 Q. And you're not testifying in any way that the
25 Commission lacks authority to create a net metering

1 program as part of this proceeding, right?

2 A. Yep. Nope.

3 Q. On page 4 of your affirmative testimony, or
4 perhaps to be more accurate, the testimony of Ms. Murray
5 that you adopted as part of this proceeding, you testify
6 in effect that the relevant costs and benefits that
7 should be considered by the Commission are those that
8 accrue to the utility or its non net metering customers
9 in their capacity as ratepayers of the utility; is that
10 accurate?

11 A. Yes.

12 Q. Okay. Now, do we agree that there's nothing in
13 the Commission's order from July 1 of 2015 that actually
14 requires that any such costs and benefits that are
15 considered by the Commission accrue solely to the utility
16 or the non net metering customers, is there?

17 A. No. I mean, maybe yes. I think you said do we
18 agree? But, I'm sorry, I'm not sure how to answer yes or
19 no to -- will you rephrase your question?

20 Q. Do you and I agree that there actually isn't
21 anything expressly in the order that requires the
22 Commission to find that any costs and benefits accrue
23 solely to the utility or its non net metering customer?

24 A. I agree with that.

25 Q. And so just to be clear, the Commission can then

1 consider a cost that would accrue to Rocky Mountain Power
2 even if that cost -- and let's use for an example the
3 integration cost -- would be borne by all ratepayers and
4 not just the net metering ratepayers, right?

5 A. Yes.

6 Q. Okay. And likewise, the Commission could
7 consider a benefit of CG solar, even if that benefit
8 accrues to all of the ratepayers and not just the non net
9 metering ratepayers?

10 A. Yes, and I think they should, yes.

11 Q. Okay. So to the extent that rooftop solar
12 reduces energy generation costs, that is a benefit that
13 would accrue to the utility and its non net metering
14 customers, right?

15 A. Yes.

16 Q. And to the extent that CG solar reduces energy
17 capacity costs, that would be a benefit that accrues to
18 the utility and its non net metering customers, right?

19 A. Yes.

20 Q. And fuel hedging expenses are expenses that
21 accrue to the utility, right?

22 A. Yes -- well, and customers.

23 Q. And to the customers, yeah, exactly.

24 And any reduction in the costs associated with
25 RMP's fuel hedging that is brought about by CG solar

1 would accrue to the benefit of all Utah ratepayers,
2 correct?

3 A. Yes.

4 Q. Okay. So to the extent that costs of carbon
5 compliance are imposed, those costs would accrue to the
6 utility and non net metering customers, right?

7 A. Well, I want to consider carefully how you
8 phrased that. Costs of carbon compliance will be borne
9 by the utility and passed through to customers.

10 Q. Okay. That answers my question. Thank you.

11 And to the extent there are health benefits from
12 reduced emissions that are associated with fossil fuel
13 generation, those benefits would accrue to non net
14 metering customers, correct?

15 A. Not in their capacity as ratepayers.

16 Q. And why is that not the case?

17 A. Because health costs aren't in rates.

18 Q. So that's what you mean by in the -- in their
19 capacity as ratepayers?

20 A. That's how I interpret what the Commission
21 means.

22 Q. Okay. So isn't that circular a bit, though?
23 Because if the rates that are set properly account for
24 the costs and benefits of it, it would then get
25 incorporated into the ECR rate, right?

1 A. Yes. Well, I'm not going to acknowledge
2 "proper," which I think is a, sort of an assumption
3 embedded in your question. But if the rates accounted
4 for it, then it would be in rates.

5 **Q. Okay. And, similarly, to the extent that there**
6 **are benefits to the environment in Utah from reduced**
7 **fossil fuel generation, those benefits would accrue to**
8 **non net metering customers, correct?**

9 A. Not in their capacity as ratepayers.

10 **Q. Unless the Commission -- and, again, that's**
11 **unless the Commission decided to include it as a benefit**
12 **in the rates?**

13 A. I would suggest unless the legislature directed
14 the Commission to include them.

15 **Q. But are you suggesting that the Commission**
16 **doesn't have the authority to include them?**

17 A. Well, I'm not going to make -- I don't have a
18 position on whether they have an authority. But I do
19 have a position based on 13 years of participation and
20 observation of how policy gets established in the state
21 of Utah. And so I don't think our Commission ever would,
22 and I think our legislature would be concerned if they
23 did based on very specific experiences for more than a
24 dozen years.

25 **Q. But doesn't the Utah code expressly allow the**

1 Commission to include those type of considerations?

2 Isn't that part of the definition of "just and
3 reasonable" that's built into the code in Utah?

4 A. Well, I don't have a position on that. I'm just
5 explaining how the interactions take place in a practical
6 manner.

7 Q. Okay. I'm not going to ask you to interpret the
8 code, but I appreciate your answer.

9 So is it fair to say that OCS believes that the
10 Commission should seek to minimize the extent to which
11 any utility rate tends to incorporate subsidies from one
12 class of ratepayer to another?

13 A. Yes.

14 Q. And on page 2 of your rebuttal testimony, you
15 say that one of your primary principles that will drive
16 the OCS evaluation of the proposals in this case is the
17 extent to which it, "removes subsidies provided by
18 nonparticipants to customer generators."

19 Do you recall that?

20 A. Yes.

21 Q. And are you aware of any finding made by this
22 Commission on any docket that nonparticipants have
23 subsidized CG solar customers through the rates they pay
24 for electricity in the state of Utah?

25 A. I don't think there is a Commission finding.

1 Q. Okay. In fact, that was just an argument that
2 has been fairly consistently made by RMP, correct?

3 A. RMP has made that argument. They're not alone
4 in making that argument.

5 Q. Right. In fact, OCS has made that argument,
6 correct?

7 A. Yes.

8 Q. And RMP hasn't actually offered any proof in
9 this proceeding that nonparticipants subsidize CG solar
10 customers in Utah; isn't that right?

11 A. Well, I mean, there's the -- directly what -- I
12 think that it falls out -- I mean, one can conclude
13 mathematically from some of what has been offered here,
14 but they didn't affirmatively set forth that position. I
15 mean, they solely looked at an export credit rate, so
16 they didn't -- they did not provide that evidence of
17 what, if we were to go back to net metering, what does
18 that look like, and what are the costs?

19 So, I guess -- I'm sorry, that was long. And I
20 guess I would say no, they didn't.

21 Q. Okay. And, in fact, isn't it true that in order
22 for the Commission to find that such a subsidy exists,
23 the Commission would have to make a finding based on
24 evidence that the costs of CG solar to nonparticipants
25 outweigh its benefits to those nonparticipants?

1 A. Well, in my experience, the Commission,
2 frequently in cases before it, makes adjustments to
3 better match cost of service without making a specific
4 finding that previously there existed a subsidy. So I
5 just don't think that we often see a finding, There is a
6 subsidy; rather, we see a finding, This improves rates.

7 **Q. Let me rephrase that, then, because I appreciate**
8 **that as an evidentiary matter.**

9 But isn't it true that in order for the
10 Commission to find that a subsidy existed, it would have
11 to reach some sort of conclusion based on evidence that
12 the costs of CG solar to nonparticipants outweighs its
13 benefits to those participants?

14 A. Yes.

15 **Q. Okay. Is it fair to say that you come to this**
16 **proceeding with an assumption that solar participants are**
17 **subsidized by nonparticipating ratepayers?**

18 A. I think "solar customers" is too general. We
19 now have two classes of solar customers and seek to
20 create a third. And it is my considered opinion based on
21 evidence that net metered residential solar customers are
22 subsidized.

23 **Q. And you come into this proceeding with that**
24 **belief?**

25 A. Yes.

1 Q. And what about transition customers? Do you
2 hold that same belief for the transition customers?

3 A. I think that they are subsidized to a much
4 lesser extent.

5 Q. Okay. And you come with that assumption,
6 despite the fact that there's no actual evidence of a
7 subsidy that's before the Commission as we sit here
8 today?

9 A. I think that was not -- I think there is
10 absolutely evidence of that, not necessarily in this
11 proceeding because that's not how this proceeding was
12 designed.

13 Q. And there was no evidence that there was no
14 finding by the Commission in any prior proceeding that
15 that subsidy existed, right?

16 A. There wasn't a finding, but there has been
17 evidence. I'm not limited in evaluating only a
18 Commission finding. We can evaluate all evidence.

19 Q. And would you agree that there was also evidence
20 submitted that solar customers, in fact, subsidized non
21 solar customers, residential in Utah?

22 A. I would agree that there were assertions of
23 that.

24 Q. But you wouldn't agree that there was evidence
25 presented of that? Is that your testimony?

1 A. My testimony is that it was not compelling
2 evidentiary-quality information presented.

3 Q. Okay. You've also testified that applying a
4 credit or cost to selective resources not consistently
5 across all generating resources will result in
6 distortions and price signals and resource selection.

7 Is that your testimony?

8 A. Yes, it is.

9 Q. Okay. Do you have any reason to believe that to
10 the extent the Commission were to assign a value to any
11 cost or benefit in calculating the ECR in this proceeding
12 that it will necessarily act inconsistently in the future
13 when evaluating similar resources?

14 A. Well, it creates a current inconsistency. If
15 the Commission set rates right now and established an
16 ECR, for example, that had economic development benefits,
17 it would at that instant create distortions because we
18 don't have economic development benefits on any of the
19 other generating resources that are in our rates. So it
20 creates an automatic and an instant problem.

21 Q. And you don't think the Commission has any way
22 to remedy that problem, as you define it?

23 A. There is no evidence in front of them to change
24 rates otherwise.

25 Q. You're aware that RMP seeks to charge new CG

1 customers an application fee, right?

2 A. Yes.

3 Q. And does OCS support that application fee even
4 though RMP doesn't charge application fees to other
5 customer groups?

6 A. OCS did not take a position on this. We did not
7 review. We support, in concept, a cost-based application
8 fee. I think it's unfair to just generally say they
9 don't charge it to other customer groups. I would need
10 to have specific examples because I think there are cases
11 where there are fees that are cost-based. But we support
12 a cost-based fee. We did not review to know whether this
13 was a cost-based fee.

14 Q. Is there a reason why you're not taking a
15 position on the fee?

16 A. Yes. We do not have resources to take a
17 position on every element of every matter in front of the
18 Commission.

19 Q. Would you agree that the proposed fee is a
20 substantial fee?

21 A. I agree that it is -- I don't know what
22 "substantial" means. I agree that it's a fee.

23 Q. In your view, was there evidence put forth by
24 RMP that substantiated sufficiently the costs that they
25 claim gives rise to the need for this fee? Or you just

1 didn't look at it at all?

2 A. I have no view; we have no position.

3 Q. But do you think the appropriate analysis that
4 the Commission should undertake is to determine whether
5 RMP has adequately substantiated the cost that would give
6 rise to the fee?

7 A. Yes, I do agree that's the appropriate
8 evaluation.

9 Q. Okay. Now, RMP is also asking the Commission to
10 impose an AMI metering fee on CG customers, right?

11 A. Yes.

12 Q. And assuming that AMI program is put in place,
13 does OCS support the proposal to impose the metering fee
14 solely on CG customers?

15 A. No. That was specifically in my surrebuttal
16 testimony.

17 Q. Okay. So, I just want to make sure I understand
18 it. I thought your position was the fee -- the fee would
19 be fine so long as it's not also recovered a second time
20 through the rate base?

21 A. Right. So you just told me -- your question, as
22 I understood it, asked me to assume that there's an AMI
23 program in place. I do not -- as I think you may know,
24 OCS opposed the AMI program in the rate case docket,
25 which is still in front of the Commission.

1 And also, the Commission will be making this
2 order almost certainly before that order. So there will
3 not be any AMI, at least for residential customers, in
4 rates when they make this order.

5 So that's our position is that yes, if a new
6 meter is required, then a customer should pay for it.
7 But a customer should not have to double pay for it, and
8 it should not, maybe not be required. So I think it
9 should be revisited if and when AMI is in base rates.

10 **Q. Is it your position that if CG solar customers**
11 **are charged for their AMI meters that it's appropriate**
12 **that all customers would be charged, or do you support a**
13 **fee that would only be to CG solar customers?**

14 A. I support a fee for CG customers right now
15 because those meters are not implemented. But if and
16 when they get implemented -- and we don't support
17 implementing those AMI meters until they have been cost
18 justified. But if and when they are implemented, then I
19 would support that the CG customers would all have to pay
20 for that meter.

21 **Q. Is it your testimony today that you don't**
22 **believe that there are AMI meters that have been deployed**
23 **at this point? Is that your understanding?**

24 A. Right. I mean, we represent residential and
25 small commercial, so I'm much more familiar there. But

1 for residential, I don't think there are.

2 And what I know is that there's no cost
3 associated with AMI and base rates right now.

4 **Q. Okay.**

5 CHAIRMAN LEVAR: Ms. Selendy, would this be an
6 appropriate time for a recess for an hour?

7 MS. SELENDY: Sure, Mr. Chairman. That would be
8 fine.

9 CHAIRMAN LEVAR: If you are going to continue on
10 the AMI discussion, we can continue that for a few
11 minutes. But if this is a good break.

12 MS. SELENDY: This is fine. I do have a couple
13 more questions if you want me to close that out and then
14 we take a break. Would that be ...?

15 CHAIRMAN LEVAR: I'm fine either way.

16 MS. SELENDY: Let's take a break. That's fine.

17 CHAIRMAN LEVAR: We will reconvene in one hour,
18 then. Thank you.

19 (A break was taken from 12:13 p.m. to 1:15 p.m.)

20 CHAIRMAN LEVAR: Okay. We will go back on the
21 record and continue with your cross-examination of
22 Ms. Beck. Thank you.

23 MS. SELENDY: Ms. Beck is muted. Just want to
24 flag for her

25 THE WITNESS: I'm ready.

1 Q. (BY MS. SELENDY:) Okay. Ms. Beck, you're
2 aware that Rocky Mountain Power proposes that excess
3 credits accrued by solar generators would expire each
4 year under Schedule 137; is that correct?

5 A. Yes.

6 Q. And does OCS support this aspect of the
7 proposal?

8 A. Yes.

9 Q. And you're aware that the value of expiring
10 credits from Schedule 137 customers would be credited to
11 all RMP customers as part of the energy balancing
12 account, right?

13 A. That's my understanding.

14 Q. Okay. And are you concerned with respect to the
15 RMP proposal that the expiration feature creates an
16 incentive for customers to increase their energy use to
17 avoid losing their credits?

18 A. You know, I'm really not because I just -- I was
19 trying to think that through after the earlier
20 cross-examination in this case. And I'm just even trying
21 to understand what that means. Like, what would I do?
22 Like, go around and turn all the lights on? Like, I
23 can't really think of a way that I could artificially
24 increase my consumption. To me, it seems more important
25 to provide the incentives upfront to properly size the

1 resource.

2 Q. Well, for example, rather than running around
3 and turning all the lights on, what I was thinking of,
4 for example, is failing to use energy-efficiency features
5 on your appliances or using -- keeping the air
6 conditioning on longer than you otherwise would, or, you
7 know, the heating. There are kind of a number of ways, I
8 think, where you could imagine this incentive working
9 detrimentally. Would you agree?

10 A. Well, I mean, I think that we're just imagining
11 scenarios. I don't agree. I think that a lot -- that
12 there are a lot of factors that would go into it. People
13 who have energy-efficiency measures choose to use or not
14 use them for reasons, I think, other than whether or not
15 you have a few extra credits. So, to me, I don't think
16 it's a nonissue, but I don't worry about it as being a
17 significant issue.

18 Q. Let's turn to the issue of the reduction in
19 RMP's fuel hedging costs.

20 You're aware that RMP admits in its testimony
21 that solar generation reduces fuel hedging costs, right?

22 A. I am somewhat aware of that, but it has been a
23 while since I reviewed it. So if we're going to have a
24 line of questioning on this, I might need to refresh my
25 memory.

1 Q. Okay. But I think the simple point is you
2 wouldn't dispute RMP's testimony if it said that solar
3 generation reduces its fuel hedging costs?

4 A. Correct.

5 Q. Are you aware of any evidence in the record that
6 shows that the actual reduction of their fuel hedging
7 costs by CG solar would be less than the 5 percent
8 proposed by Vote Solar?

9 A. So, this is a little tricky. I'm not aware of
10 that evidence, no. But I also think that whether or not
11 such evidence exists does not change who bears the burden
12 of proof.

13 Q. Correct. Correct. You testified that customer
14 generation should not be considered in RMP's fuel hedging
15 program in the same way that other solar resources are
16 considered because there is no contractual obligation for
17 customer generators to provide power to RMP; is that
18 right?

19 A. Yes.

20 Q. But as we sit here today, we all know with
21 certainty that there are customer generators generating
22 solar electricity in Utah, right?

23 A. Yes.

24 Q. And we know with certainty that customer
25 generators are going to continue to generate solar power

1 in Utah in the future, don't we?

2 A. At some level, yes.

3 Q. And is it your position that without any
4 contract there is any meaningful risk that CG customers
5 would stop generating?

6 A. Well, not that they would stop generating, but
7 that the generation level is not reliable.

8 Q. And you're talking for any individual customer,
9 correct?

10 A. Correct.

11 Q. But if you look across all rooftop solar
12 generators over a period of time, it is possible to come
13 up with a picture of the level of generation that exists
14 at any particular level of penetration, right?

15 A. I think over time, that data could be developed,
16 absolutely. I don't think that's the basis of the
17 proposal in the record right now.

18 Q. But you're not aware of any examples of CG
19 customers actually abandoning their investments in
20 rooftop solar, correct?

21 A. Correct. That's not my allegation.

22 Q. Are you aware of any buyers for rooftop solar
23 exports in Utah other than RMP within its territory?

24 A. No.

25 Q. So I want to be clear that your position is that

1 to the extent customer generators in Utah do generate
2 solar over the course of, say, a 20-year period that
3 their installation is productive, and that they do
4 reduce, in fact, RMP's fuel hedging costs, that value
5 should just be captured by RMP and the other ratepayers
6 because there's no contract for that production; is that
7 your testimony?

8 A. That is not my position.

9 Q. Isn't that the implication of your position,
10 though, that without a -- without a contract, you don't
11 think that the solar -- rooftop solar generation should
12 count in this way, in the same way that, say, the
13 production from a QF facility would count?

14 A. I don't think it should count in the same way.
15 I'm not saying it shouldn't count at all, but I am saying
16 that there is not evidence in the record to support --
17 that puts forward a supportable position for any hedging
18 benefits.

19 Q. Okay. But that's ultimately -- the validity and
20 admissibility of the evidence is ultimately a decision
21 for the Commission, correct?

22 A. It is, but that's what we're basing our position
23 on as well.

24 Q. You're aware that Vote Solar in its proposals
25 quantifies local economic benefits from CG exports,

1 right?

2 A. I'm aware that Vote Solar put forward a number
3 to represent potential economic benefits. I do not think
4 that Vote Solar quantified local economic benefits. I
5 think it was extrapolated from a study done in a
6 different region.

7 Q. Right. And extrapolation is a legitimate --
8 courts admit studies based on extrapolation, correct?

9 A. Well, I have never been a lawyer, and I do not
10 practice in courts, so I cannot answer that question.

11 Q. Okay. That's fair.

12 You offer a critique that Vote Solar did not
13 address "the economic disbenefits from existing RMP
14 fossil fuel resources running less frequently or being
15 retired early in part of their being displaced by
16 customer generation"; is that right?

17 A. Yes.

18 Q. Are you opposed in a general sense to renewable
19 resources displacing fossil fuel resources in the state
20 of Utah?

21 A. No.

22 Q. Do you understand why Rocky Mountain Power is
23 adding substantial solar and wind resources to its
24 portfolio at this time?

25 A. Yes.

1 Q. Is it OCS's position that customers who install
2 rooftop solar should bear the costs of RMP retiring
3 inefficient assets?

4 A. No.

5 Q. And in this proceeding, there's no -- OCS hasn't
6 sought to quantify any economic disbenefits to the extent
7 rooftop solar would displace a fossil fuel asset for RMP;
8 is that right?

9 A. No, I provided that as an example of how Vote
10 Solar's proposal regarding economic development benefits
11 is being selectively used with comparison to other
12 resources.

13 Q. If you admit -- so I want to be clear about -- I
14 believe in your testimony, in your rebuttal testimony,
15 you say, "Although I did not review in detail the studies
16 and assumptions Vote Solar relied upon in its estimate of
17 potential economic benefits," then you go on to say that,
18 "It appeared to me that" -- certain things appeared to
19 you.

20 What do you mean by you didn't review in detail?
21 Did you review sufficiently to draw conclusions about the
22 studies that Vote Solar submitted?

23 A. I read the testimony. I did not go and read the
24 cited studies. So, but -- and I tried to choose my words
25 carefully.

1 I actually studied in graduate school some of
2 this type of analysis. But I'm rusty, and I don't want
3 to be here appearing as an expert witness on those
4 things. So I concluded that I have some concerns, but my
5 overarching concern is not having it applied consistently
6 across all resource types.

7 Q. So let's drill down on that a little bit more.

8 So is it your testimony that, for example, the
9 avoided-cost measure doesn't include the types of
10 benefits that Vote Solar has suggested should be included
11 as part of this ECR? And that's the kind of disparity
12 that you were talking about in saying that you opposed
13 environmental factors, for example, for being factored in
14 here.

15 Is that an example of the sort of disparity that
16 you'd be concerned about?

17 A. Maybe, but that's not really an example I would
18 give.

19 I would give the example of all of the resources
20 that are embedded in base rates. So there are some
21 choices that evaluate some of those elements. Certainly
22 scenario analysis and integrated resource planning
23 evaluates some of that. But there's nowhere else in rate
24 setting. We don't consider jobs of -- and let's not even
25 talk about fossil fuel. We don't consider economic

1 development benefits associated with utility scale solar
2 in setting the rates of how utility scale solar is
3 incorporated in base rates. So that's an example.

4 Q. Okay. But you would not -- you don't dispute
5 the fact that the legislature has specifically said that
6 the Commission can consider the welfare of the citizens
7 of Utah and environmental conservation as part of its
8 determination of what's just and reasonable in rate
9 setting. You don't dispute that, right?

10 A. I don't think they said environmental
11 conservation. Wasn't it -- it was energy conservation.

12 Q. Energy conservation.

13 With that correction, you'd agree with me
14 though, right?

15 A. I agree.

16 Q. Okay. Were you present for the testimony
17 yesterday of the RMP witnesses?

18 A. I was present for the vast majority of it. But
19 I may have had to step out for a few minutes here or
20 there.

21 Q. Did you hear testimony to the effect that RMP
22 believes that the purpose of an ECR rate program for CG
23 solar is simply to allow customers to offset their own
24 utility bills through generating their own electricity?
25 Did you hear that testimony yesterday?

1 A. I think I was here for most of that, yes.

2 Q. And do you agree with RMP that that is the
3 purpose of an ECR rate program?

4 A. I do.

5 Q. Okay. Do you think there's anything that limits
6 the Commission from concluding that there are, in fact,
7 broader beneficial purposes for an ECR rate program?

8 A. I'm not in the business of telling -- of trying
9 to limit the Commission in any way. I think they can
10 come up with what they want.

11 I do note that the original net metering statute
12 explicitly identified it as being a program for folks to
13 cover some of their own energy. But the Commission can
14 set up a new program any way they want.

15 Q. And in your view, should the Commission allow an
16 investor-owned utility to define the purpose of Utah's
17 ECR program?

18 A. I don't -- I mean, they will define it, but I
19 don't know that the utility did define it. And so Vote
20 Solar forced them to answer that question in cross. I
21 just don't understand this question.

22 Q. So, I think the question is pretty
23 straightforward. But to the extent that in this
24 proceeding, Rocky Mountain Power has identified a
25 singular purpose for an ECR rate program.

1 What is -- is it your view that the Commission
2 should allow the utility to define that singular purpose
3 for Utah's export credit rate?

4 A. I have every confidence that this Commission
5 will make its own ruling and consider the evidence put
6 forward by everyone. So no, I never think that this
7 Commission should allow the utility to define any of the
8 programs.

9 Q. Did you hear some testimony yesterday from
10 Mr. Meredith around Schedule 2?

11 A. I did.

12 Q. Okay. Has OCS raised any concerns with Rocky
13 Mountain Power that it's overcharging customers in Utah
14 under that schedule?

15 A. No, not -- I mean, we've raised concerns about
16 the schedule behind the scenes, but we don't have any
17 testimony.

18 Q. So, behind the scenes, you have raised concerns
19 with Rocky Mountain Power that they're overcharging
20 customers with that schedule?

21 A. Not necessarily that they're overcharging, just
22 that it's not designed properly to meet today's
23 conditions.

24 Q. So is it fair to say that you don't believe that
25 Rocky Mountain Power is overcharging Utah ratepayers

1 under that schedule?

2 A. No, that's not fair to say.

3 Q. Okay. I don't have any further questions.

4 Thank you, Ms. Beck, for your time.

5 A. Thank you.

6 CHAIRMAN LEVAR: Thank you, Ms. Selendy.

7 Mr. Holman, do you have any questions for
8 Ms. Beck?

9 MR. MCDERMOTT: I have no questions. Thank you,
10 Chairman.

11 CHAIRMAN LEVAR: Okay. Thank you.

12 Mr. Mecham.

13 MR. MECHAM: Just a little bit, Mr. Chair, thank
14 you.

15
16 CROSS-EXAMINATION

17 BY MR. MECHAM:

18 Q. Ms. Beck, good afternoon.

19 A. Good afternoon, Mr. Mecham.

20 Q. As you know, I don't have a client in the
21 Company's general rate case, so I don't -- I haven't had
22 the pleasure of reading your testimony on the AMI meters.

23 But it sounds like there's a proposal by the
24 Company to incorporate some number of those in base
25 rates, and the Office is opposing that; is that correct?

1 A. Correct.

2 **Q. Is it -- what is your expectation in the future?**
3 **Do you expect those meters to be changed out entirely at**
4 **some point, or are you arguing that there's no basis for**
5 **it at least now?**

6 A. So there's two questions there, and forgive me
7 if I give you too long of an answer.

8 So we addressed this testimony with two of our
9 witnesses. The first one was in our revenue requirement
10 witness, who raised concerns that it was not shown to be
11 cost beneficial and that it's not used and useful in the
12 test period.

13 And then our second witness related to the cost
14 of service study. He also observed that it did not pass
15 the cost benefit test that actually Rocky Mountain Power
16 conducted. And then he raised concerns that if and when
17 it is approved, it should be allocated differently upon
18 different allocation factors. And he really provided
19 quite substantial -- and I feel like it would be a
20 pleasure if you read it -- quite substantial testimony
21 about how to have a robust and reasonable plan for
22 implementation.

23 And so I hope it was clear from that testimony
24 that OCS does not support AMI until it has been shown to
25 be cost beneficial. And of course, it needs to be used

1 and useful in the test period. But as part of that, we
2 would want to have a very robust plan to make sure that
3 it captures all the potential benefits and that there's
4 good communication, et cetera.

5 So we don't oppose it conceptually, but we
6 oppose it for those three reasons in the rate case.

7 **Q. But at whatever point it is put into base rates,**
8 **you would agree -- you did agree that it's discriminatory**
9 **to charge a meter fee to rooftop solar customers,**
10 **correct?**

11 A. Well, I would agree, with maybe a slight caveat
12 that if there's some additional cost, I heard that -- I
13 only partially heard, I will have to confess, the
14 Commission's -- Chairman Levar's question this morning.
15 If there's some cost to reprogram, maybe we could
16 consider that. But definitely, I agree that we need to
17 revisit that because it should not be double -- first of
18 all, the Company shouldn't be able to double recover; and
19 second of all, a customer should not -- one set of
20 customers should not have to pay when another set does
21 not.

22 Was that clear? I'm sorry.

23 **Q. Yes, I understand.**

24 A. Thank you.

25 **Q. Okay. All right. That's enough. Thank you**

1 **very much.**

2 A. Thank you.

3 CHAIRMAN LEVAR: Thank you, Mr. Mecham.

4 We'll go back to Mr. Snarr. Do you have any --

5 I'm sorry, did that conclude all of your
6 cross-examination, Mr. Mecham, or just that issue?

7 MR. MECHAM: No, that's good. Thank you.

8 CHAIRMAN LEVAR: Sorry, Mr. --

9 MR. MCDERMOTT: Chairman Levar, this is Jake
10 McDermott. I didn't expect this to come up so soon after
11 we just addressed this with the prior witness. But there
12 are a few limited questions on cross-examination that the
13 Company would like to ask to -- I think they're basically
14 factual questions that I think would benefit the record
15 in the case.

16 So I would move to be allowed to ask some
17 cross-examination questions out of turn.

18 CHAIRMAN LEVAR: Okay. Before I go to any
19 other -- to the other parties to see if anyone objects to
20 this request, can you give us a high-level idea of the
21 topics you intend to cover?

22 MR. MCDERMOTT: There are sort of basic factual
23 things about how the Company -- how rates are made for
24 the Company, how the Company recovers for its
25 investments. A couple items on how the Company plans for

1 generation resources and gets approvals for those in the
2 state of Utah. And one question on some details in the
3 settlement stipulation that led to this proceeding.

4 CHAIRMAN LEVAR: Okay. Why don't I go to Mr.
5 Snarr first.

6 Do you have any objection to this additional
7 cross-examination?

8 MR. SNARR: I don't object, but it's puzzling
9 that it's coming up at this point in time. It sounds
10 like it's part of what Rocky Mountain Power should have
11 had or did have in their own case. But maybe there's a
12 basis for some cross-examination.

13 CHAIRMAN LEVAR: Mr. Jetter, do you have a
14 position on this?

15 MR. JETTER: Just waiting for my face to show up
16 here. I don't have an objection to the cross.

17 CHAIRMAN LEVAR: Okay.

18 Ms. Selendy?

19 MS. SELENDY: Based on the topics that are put
20 forth there, with the exception of the settlement issue,
21 I would question whether it's appropriate for Rocky
22 Mountain Power to use the OCS witness to put on evidence
23 about how Rocky Mountain Power goes about setting rates
24 and doing all that. I feel that if they want to put
25 on -- offer another rebuttal witness of their own at the

1 end of the case, that is something that the Chairman
2 should consider. But I don't think it's appropriate to
3 use Ms. Beck for that purpose.

4 MR. MCDERMOTT: Chairman, just if I may respond.
5 The Company doesn't intend to put on any new evidence.

6 CHAIRMAN LEVAR: Why don't I go through the
7 other two attorneys, and then I'll circle back to you.

8 MR. MCDERMOTT: Certainly.

9 CHAIRMAN LEVAR: Mr. Holman?

10 MR. HOLMAN: I don't have anything else to add
11 to this discussion at this time, Mr. Chair. Thank you,
12 though.

13 CHAIRMAN LEVAR: Okay. Thank you.

14 Mr. Mecham?

15 MR. MECHAM: I don't object, since I'm the one
16 that suggested it.

17 But the condition is, is that if it brings up
18 other subjects that someone wants to cross on, that they
19 not be prevented from doing that.

20 And then I would move -- I'm not going to tell
21 you how to run the hearing -- but then I would allow for
22 redirect of all the cross and then keep redirect and
23 recross very limited.

24 CHAIRMAN LEVAR: Okay.

25 Mr. McDermott, did you want to respond to that

1 and to Ms. Selendy's comments?

2 MR. MCDERMOTT: I have no objection to
3 Mr. Mecham's suggestion.

4 And with respect to Ms. Selendy's concerns, we
5 are not straying from anything that's already been
6 discussed in cross. And it's really, again, factual
7 questions that we believe could be better stated in the
8 record, and we want to provide the opportunity for
9 Ms. Beck to do that.

10 CHAIRMAN LEVAR: Okay. Here's how I think I
11 intend to move forward, and I'll invite either of my two
12 Commissioners to jump in if you prefer to move forward a
13 different way.

14 I don't want to encourage this becoming the
15 norm. But listening to everybody's comments, I think it
16 probably makes sense to allow the first round of cross to
17 continue. And Mr. McDermott's questions would still be
18 subject to any individual objections that would have been
19 relevant during the original cross-exam round. Allowing
20 this, I think, opens up the need to allow anyone else to
21 supplement their own original cross-examination before we
22 go to redirect.

23 So I think we'll move that way. And any
24 objection that would have been relevant during
25 Mr. McDermott's original cross-examination is still

1 relevant at this point.

2 I do want to emphasize that I don't want to
3 encourage this process becoming too common.

4 But, Mr. McDermott, why don't you go ahead.

5 MR. MCDERMOTT: Thank you, Chairman.

6
7 FURTHER CROSS-EXAMINATION

8 BY MR. MCDERMOTT:

9 Q. So, Ms. Beck?

10 A. Yes.

11 Q. Okay. Just making sure you're there and you can
12 hear me. I just have some very limited questions, as I
13 mentioned.

14 When you were speaking with Ms. Selendy, she
15 asked you about whether the returns for the Company were
16 proof in advance of the Company's investments. Is that a
17 fully accurate way to describe -- I believe you answered
18 affirmatively that they were. Is that an accurate way to
19 describe how the returns for the Company are approved by
20 the Commission in relation to investments the Company
21 makes?

22 A. Well, I tried to answer carefully that the
23 allowed rate of return is approved when rates are set,
24 but the actual rate of return is not set, so. But it's
25 not approved -- it's approved at the time that general --

1 at a general rate case. It's not approved in advance of
2 some new resource.

3 Q. Thank you. And then just moving on.

4 Again, in your conversation with Ms. Selendy
5 today, she asked you a little bit about competition in
6 the Utah territory, I think regarding retail electric
7 competition.

8 I wanted to follow up on that and just ask
9 whether the Company acquires many of its resources
10 through competitive bidding processes?

11 A. Yes. The Company does acquire most -- of
12 course, we have taken issue with some, but most through
13 competitive bids.

14 Q. Thank you. And then are all of the bids that
15 are awarded in those competitive processes for
16 Company-developed or Company-owned resources?

17 A. So not all bids are Company-developed or
18 Company-owned. But the majority -- it seems like a large
19 portion at the end are, but not all bids come in. So
20 they do get reviewed, both by an independent evaluator
21 and a full proceeding in front of the Commission before
22 they're selected.

23 And I apologize, but I just don't recall the
24 specific ownership of the ones that have been selected
25 recently.

1 Q. Sure. But to the extent the Company doesn't own
2 a resource that's been selected through a competitive
3 process, would that typically be contracted for through a
4 power purchase agreement?

5 A. Yes.

6 Q. And does the Company earn a return on power
7 purchase agreements?

8 A. No.

9 Q. Thank you. So, I just want to move on, and
10 hopefully this will be quick.

11 I believe you had a copy of the settlement
12 stipulation from the 14-035-114 case?

13 A. I have it up on a different computer here. Give
14 me one second.

15 Q. Sure.

16 A. Yes, I do.

17 Q. Can you turn to paragraph 28. It's on page 9 of
18 the stipulation.

19 A. Yes.

20 Q. Could you read that paragraph for me and,
21 really, just in your own words, tell me what you think
22 that means about this proceeding and its purpose.

23 A. All right. So, shall I read it first and then
24 in my own words or ...?

25 Q. You don't need to read it out loud. Read it to

1 **yourself, and tell me what you think it means for this**
2 **case.**

3 A. So the way I have -- I understood it at the time
4 of signing and I continue to understand it is that those
5 who joined in this stipulation supported that this -- the
6 current proceeding we're in now, the export credit
7 proceeding, would be specifically to determine the
8 compensation rate for exported power, so the excess power
9 not used by -- behind the meter for CG customers that
10 gets exported to the grid. And we did attempt to
11 carefully define that that was the scope of the current
12 proceeding.

13 **Q. Okay. And that's all I had for you today.**
14 **Thank you for answering a few extra questions for me.**

15 MR. MCDERMOTT: And thank you, Chairman, for
16 allowing me to.

17 CHAIRMAN LEVAR: Thank you, Mr. McDermott.

18 With this deviation from our typical pattern, I
19 will ask if any attorneys have any further
20 cross-examination they would like to do before I go back
21 to redirect for Ms. Beck.

22 Ms. Selendy?

23 I'm not seeing anyone else indicating that they
24 have any, so I'll go to Ms. Selendy.

25 MS. SELENDY: Just a couple.

FURTHER CROSS-EXAMINATION

BY MS. SELENDY:

Q. Ms. Beck, with respect to the allowed rate of return, is Rocky Mountain Power able to earn more than the allowed rate of return?

A. Well, they're allowed to earn what they earn, which can be more or less or right on the dot, which is never the case, of course, until they come in for a rate case, or -- typically, I think it would be one of the state agencies -- but, you know, a Request for Agency Action of the Public Service Commission to reexamine their rate of return -- or their actual -- not their rate, their actual levels of return.

Q. And in your experience during the time that you've been the director of OCS, are there examples of years when Rocky Mountain Power has, in fact, earned more than its allowed rate of return?

A. Yes. I mean, I wouldn't say large amounts. Not large enough that we felt it was worth doing -- I want to be really clear that if it had been significant overearnings, we would have put in a Request for Agency Action. So I would say it is -- it was low levels of earnings above what was authorized.

Q. And how many years has that occurred, to your recollection?

1 A. I want to say a couple but meaning not too
2 precisely, but just thereabouts because this is a
3 valuation I've overseen but not conducted myself, so I
4 don't have that precise number.

5 **Q. Okay. And with respect to the settlement**
6 **agreement, did Vote Solar sign onto that settlement**
7 **agreement?**

8 A. No.

9 MS. SELENDY: I have no further questions, your
10 Honor.

11 CHAIRMAN LEVAR: Thank you, Ms. Selendy.

12 We'll go back now to Mr. Snarr for any redirect
13 of Ms. Beck.

14 MR. SNARR: Just a few questions on redirect, if
15 I might.

16
17 REDIRECT EXAMINATION

18 BY MR. SNARR:

19 **Q. Ms. Beck, do you recall a little while ago where**
20 **Ms. Selendy was asking about the expiration of credits at**
21 **the end of the year?**

22 A. Yes.

23 **Q. And there was somewhat of a discussion or a**
24 **hypothet about the possible conduct of some customer**
25 **generator who, fearing that the credits that are mounding**

1 up might somehow be diverted or given to other customers
2 or somehow that they would expire, that they might be
3 motivated to do something different in their own energy
4 conduct.

5 Do you recall that line of questioning?

6 A. I recall.

7 Q. Is this Commission in the business of regulating
8 the extent to which individual customers who might want
9 to use solar energy should use more or less or conserve
10 energy generally?

11 A. Well, I don't think that this Commission
12 regulates behind-the-meter activity. But I do think that
13 efficient use of energy is, you know, at least a factor,
14 among others, to be considered.

15 Q. But if you had two different generators who had
16 similar houses, similar panels on their rooftops, and one
17 was conserving and perhaps donating the excess energy at
18 the end of the year to others, and the neighbor was using
19 as much energy as he could and inviting his neighbors
20 with electric cars to come over and charge their cars on
21 his account so that they could get free use of his energy
22 produced by those panels, that really doesn't raise an
23 issue that we would need to worry about in terms of
24 what's happening behind the meter; isn't that correct?

25 A. It's primarily correct.

1 **Q. All right. I think that's all I have. Thank**
2 **you.**

3 CHAIRMAN LEVAR: Thank you, Mr. Snarr.

4 Mr. Jetter, do you have any recross?

5 MR. JETTER: I do not. Thank you, Mr. Chairman.

6 CHAIRMAN LEVAR: Thank you, Mr. Jetter.

7 Mr. McDermott, do you have any recross?

8 MR. MCDERMOTT: None for the Company. Thank
9 you.

10 CHAIRMAN LEVAR: Thank you.

11 Ms. Selendy?

12 MS. SELENDY: Nothing further, Mr. Chairman.
13 Thank you. And thanks again to Ms. Beck.

14 CHAIRMAN LEVAR: Thank you, Ms. Selendy.

15 Mr. Holman, anything else?

16 MS. WEGENER: I have no questions, thank you,
17 Chair Levar.

18 CHAIRMAN LEVAR: Thank you.

19 Mr. Mecham?

20 MR. MECHAM: I do not. Thank you.

21 CHAIRMAN LEVAR: Okay. I'll go Commissioner
22 Clark next. Do you have any questions for Ms. Beck?

23 COMMISSIONER CLARK: No questions. Thank you
24 very much.

25 CHAIRMAN LEVAR: Thank you.

1 Commissioner Allen?

2 COMMISSIONER ALLEN: Also no questions for me.

3 Thank you.

4 CHAIRMAN LEVAR: Okay. Thank you.

5
6 CROSS-EXAMINATION

7 BY CHAIRMAN LEVAR:

8 Q. I have a few, Ms. Beck.

9 Looking at the policy implications behind the
10 annual expiration of credits, in your opinion, is the
11 policy different in a net metering kilowatt hour per
12 kilowatt hour -- banking of kilowatt hours versus a
13 regime where we're compensating the generators for what
14 we determine to be the correct value of those credits, if
15 we're moving from really banking kilowatts to
16 compensating for the value of the credits, does that
17 impose a different policy implication on expiration?

18 A. Well, so I think the policy implications are the
19 same, but they're in a different place on the continuum.
20 So I certainly think that, especially if one believes --
21 and I do -- that net metering constitutes the subsidy,
22 then it's especially important to limit those credits and
23 have them expire at some point.

24 On the other hand, if the credits are set at the
25 perfect rate to, you know, accurately capture every

1 single cost and every single benefit, then I guess the
2 concerns are, you know, very little.

3 It's still, though, the case that they're not a
4 generator, and so there still would be a very small level
5 of concern. Like, they're not a generator. They don't
6 have all of the responsibilities of a generator,
7 including a contract, and performance, et cetera. So I
8 would still have some, but it would slide way far over to
9 the other end of that continuum. We're not going to get
10 it perfect, with all due respect, if -- you'll make your
11 best -- you'll make your best effort to get it right.

12 So I still personally believe that we should try
13 and give them incentives to give all customers them -- I
14 mean, including me if I decide to put it on my roof --
15 the right incentive to try and get it sized correctly.
16 But I do agree that the concerns are greatly diminished
17 under a paradigm where the rate is set properly for
18 compensation.

19 **Q. Sure. Let me just follow up with you a little**
20 **bit on that. I want to make sure -- I mean, I think I**
21 **understand kind of what you mean when you use the term**
22 **"generator," when you say they're not a generator. I**
23 **think you're maybe using too general of a term.**

24 **There's a wide spectrum of generators from**
25 **long-term contracts to short-term contracts to spot**

1 purchases to PPA to PURPA. There's certainly a generator
2 somewhere along that spectrum of obligation.

3 A. That's fair, yeah, fair.

4 Q. So, and putting aside any wish that we might get
5 the export credit rate perfect --

6 A. Yes.

7 Q. -- if the export credit rate is, instead, just
8 and reasonable yet maybe not perfect, what implications
9 does that have to whether an annual expiration makes
10 sense?

11 A. So my concerns remain. I still think that the
12 bigger concern is to try to get it sized right. And part
13 of the reason for that is I want to have expectations set
14 correctly for folks. And I think there's been a lot of
15 confusion about these credits out there. And they're
16 not -- nobody who -- no individual customer who puts
17 solar on their roof has the standard obligations of a
18 generator with whom the utility contracts. And a lot of
19 those obligations are to protect customers.

20 So, I'm not in the business of protecting their
21 shareholders. But contracts get set up also to protect
22 customers, and they come in front of the Commission.

23 So I still have concerns, but they're greatly
24 minimized. So that's, I guess that's -- that's our
25 position.

1 Q. I want to ask you two different -- about two
2 other topics. My questions will be about hypotheticals.
3 And as I've said before, please don't read anything more
4 to the hypotheticals. I'm just trying to analyze our
5 range of options in front of us.

6 You've recommended additional process after this
7 docket to address what would be appropriate for updates
8 to the rate, to the export credit rate. If we were to
9 state in whatever we order on this export credit rate
10 that updates would be limited to general rate cases,
11 would you still feel a need for comments and replies on
12 what process, or is the process for a general rate case
13 pretty well-established for how it would happen in that
14 context?

15 A. Well, I'm going to answer your question and
16 another question that you didn't ask.

17 So I think the process is well-established in a
18 rate case. But I also want to note that general rate
19 cases cover many, many, many issues. As we've seen in
20 the one before the Commission right now -- and I will not
21 speak to its merits -- but just it covered kind of an
22 astonishing number of issues.

23 And so if you set it up there, I say you
24 disadvantage the Office of Consumer Services because we
25 only have the staff that we have, and we're struggling

1 already to cover the issues that we think are important
2 to customers. So, to me, I feel some level of concern of
3 having it all kicked into a general rate case.

4 **Q. Okay. Thank you for that perspective.**

5 **Let me just ask you this: Does where we handle**
6 **those updates have some implication on whether we're**
7 **treating these customer generators more as generators**
8 **versus more as customers?**

9 A. Well, I don't know if they do. I mean -- and
10 not to just throw another wrench into the process, but it
11 could be that maybe some elements should only come
12 through the rate case because it might be things that get
13 updated in a rate case. But a lot of it is related to
14 energy costs, like a significant portion is weighted
15 energy. And all customers are getting their energy costs
16 updated every year.

17 But I don't know that it -- I could be
18 convinced. I acknowledge maybe I'm overlooking
19 something. Maybe you'll have a follow-up question for
20 me. But I don't immediately see how it influences
21 whether they're being treated like customers or
22 generators.

23 **Q. Well, I'm sorry I don't have a follow-up**
24 **question to clarify what I meant by that, so I'll just**
25 **leave it at that. But I have one more topic I want to**

1 ask you about.

2 Getting back to the AMI meters and the metering
3 fee, I want to ask you this: Putting aside whatever
4 might happen in the general rate case, putting the issue
5 of whether AMIs should be implemented across the board as
6 undecided and not on the table right now, it seems to me
7 from witnesses we've had before that the main purposes of
8 AMIs for these new -- for this new class of customer
9 generation is to accommodate the peak and off-peak rates
10 and potentially any netting, 15-minute or hourly netting.

11 So for lack of a better way to ask this, is
12 there enough bang for the buck on those two items?
13 Looking just at this in isolation, not at whether AMI has
14 other benefits that's being evaluated in a rate case, is
15 the bang for the buck for those two items worth AMIs and
16 the costs that are associated with AMIs for customer
17 generated -- for customers who are generating?

18 And that's somewhat outside the -- you didn't
19 really testify to that question, so if you want to
20 decline to answer, that's fine. But I wanted to give you
21 the opportunity to answer that question if you'd like to.

22 A. It's a good question, and I would need to do a
23 little more analysis to give you a considered answer.

24 Q. Okay. Thank you.

25 A. I'm sorry. I was just going to offer if you

1 really -- you know, if it was something that was very
2 important to you, we could do that analysis and maybe
3 provide something to you tomorrow. But I can't give you
4 an answer on it today.

5 Q. I am certainly not requesting that analysis.
6 I'll just ask for one other observation, then.

7 The peak and off-peak rate don't seem that far
8 apart in what's being proposed by the utility in this
9 docket, in my -- would you agree with that statement?

10 A. Yeah, I would agree with that.

11 So it raises the question -- and again, I don't
12 want to be too specific in this -- but it does raise the
13 question of maybe that element of the proposal can wait
14 until AMIs have been cost justified, whether it be in a
15 few weeks in one case or later down the road, depending
16 on the outcome of this other case.

17 Q. Thank you. That's all my questions. Thank you
18 for your testimony, Ms. Beck.

19 A. Thank you.

20 CHAIRMAN LEVAR: Mr. Snarr, your next witness.

21 MR. SNARR: Yes. We'd like to call Phil Hayet
22 as a witness on behalf of the Office of Consumer
23 Services.

24 CHAIRMAN LEVAR: Are you there, Mr. Hayet?

25 Mr. Snarr, I'm not seeing him on my list of

1 participants.

2 MR. SNARR: We'll see if we can get him on
3 immediately, all right?

4 CHAIRMAN LEVAR: Why don't we take a 10-minute
5 break and then see if we can come back and have him on.
6 We've been going for about an hour. Well, I guess we
7 haven't been going that long. But why don't we go ahead
8 and take 10 minutes for you to

9 MR. SNARR: Thank you.

10 CHAIRMAN LEVAR: Thanks.

11 (A break was taken from 2:02 p.m. to 2:12 p.m.)

12 CHAIRMAN LEVAR: Okay. We'll be back on the
13 record.

14 Mr. Snarr, you may go ahead with your next
15 witness.

16 MR. SNARR: Thank you. We'd like to call
17 Mr. Phil Hayet as a witness on behalf of the Office of
18 Consumer Services. Mr. Hayet is signed in and is
19 available, if you'd like to swear him.

20 CHAIRMAN LEVAR: Thank you.

21 Good afternoon, Mr. Hayet. Do you swear to tell
22 the truth?

23 THE WITNESS: (Inaudible).

24 MR. SNARR: Mr. Hayet, you --

25 CHAIRMAN LEVAR: Can you say that again? Maybe

1 I can unmute you.

2 THE WITNESS: I do.

3 CHAIRMAN LEVAR: Okay. Thank you.

4 Mr. Snarr.

5
6 PHILIP HAYET,
7 was called as a witness, and having been first duly
8 sworn to tell the truth, the whole truth, and nothing
9 but the truth, testified as follows:

10
11 DIRECT EXAMINATION

12 BY MR. SNARR:

13 **Q. Mr. Hayet, would you please state your name and**
14 **your business location and what assignment brings you to**
15 **this hearing.**

16 A. My name is Philip Hayet, vice president and
17 principal of J. Kennedy and Associates. And I'm
18 appearing on behalf of the Office as a consultant on
19 issues that are related to the evaluation of the economic
20 credit rate.

21 **Q. And in connection with your engagement with the**
22 **Office of Consumer Services, has that resulted in you**
23 **preparing testimony that was submitted and filed in this**
24 **proceeding?**

25 A. Yes.

1 Q. And that included both rebuttal testimony and
2 surrebuttal testimony; is that correct?

3 A. Yes.

4 Q. With respect to the testimonies that have been
5 submitted, do you have any correction to your rebuttal
6 testimony?

7 A. I have one correction to my rebuttal testimony,
8 and that would be on Line 424. "7.4C" should read
9 "7.3C."

10 Q. All right. Thank you. And I understand you
11 also have a correction to your surrebuttal testimony that
12 might take us to a few different lines; is that correct?

13 A. Yes. The correction that I have is on three
14 different pages or -- depending on the page break. But
15 yes, it's one change to the testimony, very minor;
16 however, it does affect a number of numbers spread across
17 those pages.

18 MR. SNARR: Let me say at this time that the
19 Office has prepared a redline version reflecting these
20 corrections on the various different lines and has
21 submitted that for filing with the Commission just about
22 an hour ago, along with a clean version.

23 I would like Mr. Hayet to go ahead and describe
24 the correction and, based upon the testimony that was
25 previously filed, identify where the ripple corrections

1 need to take place so that we'll be fully apprised as to
2 how to proceed.

3 Those who may want a clear picture of it can
4 access their emails and find the recently-submitted
5 corrected testimony.

6 **Q. (BY MR. SNARR:) Mr. Hayet, why don't you**
7 **describe that correction and the ripple effect.**

8 A. The correction that I did was that I did a
9 calculation, or had done a calculation and had used
10 something from my rebuttal testimony when, in fact, I
11 needed to use an updated number.

12 And to begin with, Lines 116 and 117 are the
13 first corrections. That sentence that begins at Line
14 506, it's going to -- that sentence is going to begin
15 "The inclusion of." And then the next correction is at
16 Line 118. ".28 will become .43." So this is a very
17 small change. It affects \$0.15 in megawatt hours, small
18 change. But that ripples through.

19 The next location, Line 123, ".28" changes to
20 ".43." Line 125, ".28" changes to ".43." Line 126,
21 "22.37" changes to "22.52." Line 126, "4.65" changes to
22 "4.80." Line 128, "7.11" changes to "7.26." Line
23 No. 146 -- I'm sorry, 158, "7.11" changes to "7.26."
24 Line 159, "7.11" changes to "7.26," and "4.65" changes to
25 "4.80."

1 And that's the conclusion of those changes.

2 Q. Thank you for spelling those out.

3 With respect to both the rebuttal testimony and
4 the surrebuttal testimony that you have submitted, if we
5 ask questions of you today, would your answers be the
6 same as have been presented in the filed testimonies as
7 you have corrected them today?

8 A. Yes.

9 MR. SNARR: On that basis, Chair Levar, we would
10 move the admission of his rebuttal testimony and
11 surrebuttal testimony as corrected, noting that there are
12 redline versions and new clean versions that have been
13 submitted to the Commission just today to make clear what
14 these latest corrections are that Mr. Hayet has
15 summarized today.

16 CHAIRMAN LEVAR: If anyone objects to this
17 motion, please unmute yourself and indicate your
18 objection.

19 I'm not seeing or hearing any objection, so the
20 motion is granted. Thank you.

21 Go ahead, Mr. Snarr.

22 MR. SNARR: Thank you.

23 Q. (BY MR. SNARR:) Mr. Hayet, have you prepared a
24 summary of your testimony for presentation today?

25 A. Yes, I have.

1 **Q. Will you proceed to provide that to us, please.**

2 A. Yes.

3 Good afternoon, Commissioners Levar, Clark, and
4 Allen.

5 I appreciate the opportunity to appear in front
6 of the Commission on this matter, as I participated in
7 the original phase of Docket 14-035-114 back in 2015.

8 My testimony primarily addresses cost components
9 that the OCS recommends should be included in the
10 customer generator export credit rate and other related
11 issues, including Rocky Mountain Power's proposal to
12 implement realtime metering, the expiration of credit
13 balances, and certain rate design issues.

14 The OCS has reviewed other parties' proposals,
15 including Vote Solar's 24.17 cent rate and Vivint Solar's
16 10.35 cent rate as well as the Company's rates that they
17 propose, and believe that the amounts these parties
18 proposed -- the amounts that Vivint Solar and Vote Solar
19 proposed far exceed the worth of customer generation,
20 particularly considering the other generation
21 alternatives that are available to the Company.

22 In developing our recommendations, we considered
23 certain factors, including, No. 1, we believe that the
24 costs and benefits that reflected in the ECR should
25 reflect true cost-base rate. To that end, we believe it

1 would be discriminatory to include compensation for
2 benefits that do not directly translate into costs
3 customers pay to the utility today for electric supply.

4 No. 2, rates should be designed so that cost
5 shifts from customer generators to nongenerators are
6 minimized. PacifiCorp has paid for the fixed costs of
7 its generating units, transmission, and distribution
8 system and recovers those costs, especially from
9 residential customers through energy-related charges.
10 And when energy sales are reduced, these costs don't just
11 evaporate. They still have to be recovered and are
12 shifted to other customers.

13 The OCS and others understood that calculating a
14 fair export credit rate was one of the compromises
15 embedded in the stipulation that allowed customer
16 generators to be able to use the system and not have to
17 pay for all of the fixed-cost services that they rely on
18 in all hours when they use Rocky Mountain Power's system.

19 The OCS generally agrees with Rocky Mountain
20 Power's realtime net billing proposal, though the OCS
21 identified some adjustments both in rebuttal and
22 surrebuttal, which I will explain further on.

23 Based on Rocky Mountain Power's net billing
24 proposal, solar customers will be able to offset their
25 otherwise applicable electric charges other than the

1 monthly customer charge in all hours that they produce
2 electricity, including all fixed distribution,
3 transmission, and generation costs while receiving export
4 credits for the full amount of energy they export.

5 The OCS believes that realtime pricing is easier
6 to understand and avoids the situation that would occur
7 with other netting periods; for example, with hourly
8 netting in which customer generation could offset
9 Company-supplied energy in different moments in time.

10 The OCS recommends that export credits should
11 accrue and be carried forward from one month to the next
12 and will expire on an annual basis. The reason for the
13 expiring credits is that this will encourage customers to
14 right size their systems and not oversize them in an
15 attempt to increase revenues.

16 The OCS found it reasonable to include seasonal
17 differentiation with a summer period of June through
18 September and a winter period of October through May as
19 well as time-of-use payments. Both of these measures
20 will help better match export credit payments with the
21 varying nature of generation costs during different
22 seasons and time of the day.

23 In my rebuttal testimony, I address the avoided
24 cost components that I believe should be included in the
25 export credit rate. And I contrasted Rocky Mountain

1 Power's, Vote Solar's, and Vivint's proposals.

2 Based on my analysis of the different proposals,
3 I concluded that it would be appropriate to compensate
4 customer generators for avoided energy cost, avoided line
5 losses, and to include an integration cost component.

6 Furthermore, I concluded that it would be a
7 better approach to calculate avoided costs on an
8 annually-updated basis because upfront, long-term
9 payments would be unfair to nonparticipating customers.

10 At the time of rebuttal, I agreed with the
11 Company's approach in performing grid runs to derive a
12 1-year estimate of avoided energy costs for the year
13 2021. However, I identified one adjustment referred to
14 as a "market cap adjustment," which increased avoided
15 energy costs by a small amount.

16 I also agreed with Rocky Mountain Power
17 concerning integration costs, as I've always supported
18 the inclusion of some amount for integration costs
19 associated with intermittent resources.

20 Furthermore, I noted that Rocky Mountain Power's
21 integration estimate in this proceeding is fairly
22 insignificant; it does not appear to be unreasonable.
23 Though, this is one of the items that we noted should be
24 reviewed again in the future as more customer generators
25 are added.

1 I did make one adjustment to Rocky Mountain
2 Power's ECR derivation associated with line losses in
3 that I agree with Vote Solar's recommendation that
4 solar -- that secondary transformer losses should be
5 included in the calculation.

6 The remainder of my rebuttal testimony discussed
7 my objections to including other components, such as
8 avoided generation, transmission, and distribution
9 capacity benefit and various externality costs, which
10 were also discussed by OCS witness Beck.

11 With regard to an avoided generation capacity
12 cost, though I did not support the inclusion of such a
13 component at the time of my rebuttal, I noted one reason
14 that could justify including avoided generation capacity
15 in the ECR; that is, as opposed to transmission and
16 distribution, generation capacity can be readily obtained
17 from the market, which lessens the risk associated with
18 acquiring capacity from customer generators.

19 Also, after reviewing intervenor testimony in my
20 surrebuttal testimony, I agreed with Rocky Mountain Power
21 and other intervenors that it would be reasonable to
22 compute an avoided energy cost using historic EIM price
23 data, particularly because it could possibly avoid
24 certain controversy. It offers a simpler, more
25 transparent approach to calculating the values. And

1 PacifiCorp is migrating to a new production cost model
2 which potentially would add complications. Since filing
3 surrebuttal testimony, and for the reasons just
4 described, the OCS has now decided that this is our
5 preferred position.

6 Finally, I noted in both rebuttal and
7 surrebuttal testimony that the OCS recognizes that
8 customer generation could provide some small amount of
9 avoided generation capacity benefit. And while I do not
10 believe that any of the parties in this proceeding
11 quantified reasonable value, I did state that I thought a
12 value in the range of 25 to 50 percent of what Vote Solar
13 derived may be reasonable.

14 Based on further consideration since filing
15 rebuttal testimony, the OCS has decided that it supports
16 the inclusion of a small avoided generation capacity
17 benefit in the ECR.

18 To identify a value within the range I just
19 described, I performed a calculation using 50 percent of
20 the average of the values that Vote Solar and Vivint
21 proposed. And I determined that an avoided generation
22 capacity credit of 1.41 cents would be acceptable.

23 Including this avoided generation capacity
24 benefit, the OCS recommends that the Commission approve
25 an ECR of 3.7 cents per kilowatt hour.

1 And this concludes my summary.

2 MR. SNARR: Chair Levar, Mr. Hayet is available
3 for cross-examination.

4 CHAIRMAN LEVAR: Thank you, Mr. Snarr.

5 Mr. Jetter, do you have any questions for
6 Mr. Hayet?

7 MR. JETTER: I have no questions. Thank you.

8 CHAIRMAN LEVAR: Thank you, Mr. Jetter.

9 Mr. McDermott, do you have any questions for
10 Mr. Hayet?

11 MS. WEGENER: It's Ms. Wegener now, and I have
12 no questions.

13 CHAIRMAN LEVAR: Thank you. Welcome back.

14 Anyone from the Vote Solar team have any
15 questions for Mr. Hayet?

16 MS. ROKITO: We do have some questions.

17 CHAIRMAN LEVAR: Okay. Please identify yourself
18 and then move ahead.

19 MS. ROKITO: Sure. Thank you, Mr. Chairman.
20 For the record, Shelby Rokito on behalf of Vote Solar.

21
22 CROSS-EXAMINATION

23 BY MS. ROKITO:

24 Q. Mr. Hayet, you're testifying today on behalf of
25 Utah's Office of Customer Services?

1 A. Yes.

2 Q. And your assignment was to prepare a report in
3 support of RMP's proposal in this docket subject to the
4 modifications that you recommended?

5 A. I would characterize it a little different than
6 that. I think I would say that my job was to evaluate
7 proposals that were put forth in this proceeding.

8 Q. Is the Office of Consumer Services compensating
9 you for your testimony --

10 A. Yes.

11 Q. -- in this proceeding?

12 A. Sorry, yes.

13 Q. Yes.

14 You're familiar with the Office of Consumer
15 Services's objectives; is that right?

16 A. Yes.

17 Q. You're aware that one of the Office's objectives
18 is to protect the interests of all customers, correct?

19 A. I would say that's generally correct, though
20 they have a responsibility to small commercial and --
21 small -- to residential and small commercial.

22 Q. Okay. And that objective, that would entail
23 ensuring all consumers have access to understandable
24 information concerning their rates, right?

25 A. Yes.

1 Q. And you're aware that the Office supports fair
2 and reasonable standards for terms and conditions of
3 service for all consumers, aren't you?

4 A. That's my understanding.

5 Q. Mr. Hayet, you reviewed RMP's proposed Schedule
6 137; is that correct?

7 A. Yes.

8 Q. And you agree with RMP's proposed on- and
9 off-peak rates?

10 A. Yes.

11 Q. You testified in this proceeding that the
12 seasonal and on/off-peak rates do provide price signals
13 that can impact behavior.

14 Do you stand by that testimony?

15 A. Yes.

16 Q. Mr. Hayet, you recognize that RMP has
17 represented in this proceeding that it is not the intent
18 of differentiated export credit rates to drive customer
19 behavior?

20 A. I think that's right, yes. That's what they
21 said.

22 Q. But it remains your position and the position of
23 the Office of Consumer Services that RMP's time-of-use
24 rates do provide price signals that can impact behavior?

25 A. Yes. It is my position that the price signal

1 that it has would -- if the customer wanted to, it can
2 make decisions about when to set a timer for having
3 something on. It can control its appliances, if it wants
4 to. That it has as its ability to do.

5 **Q. So even though RMP has conceded that its**
6 **intention in setting those rates, that on-peak/off-peak**
7 **differentiation was not to drive customer behavior, you**
8 **believe that the rates do, in fact, provide price signals**
9 **that can impact behavior?**

10 A. No. I'm just saying that the way it is -- it
11 wasn't -- I didn't say that it was the intention of the
12 design, I'm saying that because there are on- and
13 off-peak rates, customers do have the ability to control
14 their appliances at their own decision.

15 **Q. So your belief is that the difference between**
16 **on- and off-peak rates, that's enough to drive customer**
17 **behavior?**

18 A. No, I didn't say that, either. I just simply
19 said that the customer has the ability to change its
20 behavior by making decisions if it's in its own best
21 interest to change when it makes use of -- makes
22 consumption. If it's in its interest to do it in the
23 afternoon or at night, it has the ability to do that.
24 That's all I'm saying.

25 **Q. All right. Mr. Hayet, you're aware that Dr. Lee**

1 conducted an analysis in this proceeding in which he
2 compared the Schedule 137 fees to the export credit that
3 the average customer could expect to receive if RMP's
4 proposed export credit rate were approved, right?

5 A. Yes.

6 Q. You know RMP is proposing an application fee of
7 \$150?

8 A. Yes, I think I understand that. I understand
9 that.

10 Q. Okay. And that fee, that's just to interconnect
11 to the grid and to start exporting energy, right?

12 A. Yes.

13 Q. And you know RMP's also proposing a \$160
14 metering fee?

15 A. Yes.

16 Q. And so, in total, CG customers will be required
17 to pay \$310 just to start exporting energy; is that
18 right?

19 A. Yes.

20 Q. But you disagree with Dr. Lee's conclusion that
21 a customer will not break even until the fourth year of
22 exporting energy; is that right?

23 A. Well, I think it requires more explanation than
24 that. It's not that -- the point I'm making is that
25 that's not the only value that the customer is receiving.

1 The customer is also receiving the value because
2 they're not paying the full rate, retail rate, to the
3 Company for power that would pay the utility's fixed cost
4 in the hours in which their generation is serving their
5 own load. And that savings to the customer is part of
6 the equation in making a decision to install -- install a
7 solar rooftop generator.

8 So to look at just the metering fee, the
9 application fee, and the export credits doesn't tell a
10 complete picture.

11 **Q. So CG production, then, generation behind the**
12 **meter, that should be added to the equation. Is that**
13 **your testimony?**

14 A. Well, what I'm trying to say is that what we're
15 really getting down to is a customer is going to make a
16 decision about whether they're going to install a rooftop
17 solar. They're going to look, for example, at the cost
18 of, say, \$17,000, which is an estimate that we saw in
19 Ms. Bowman's testimony. They're going to look at the
20 cost that they're going to -- the payments that they're
21 going to receive for exporting to the grid. They're
22 going to look at the savings that they achieve by not
23 having to pay for power that they otherwise would have
24 paid Rocky Mountain Power.

25 When they do that math and do these payback

1 calculations that we've been talking about or that have
2 been talked about throughout the hearing, you've got to
3 take the full cost of the rooftop solar, you have to take
4 the payments that the customer otherwise would have made,
5 and you have to take the revenues that the customer will
6 receive in making exports. And that's how you do a
7 pay -- that's how you do a payback calculation to
8 determine. You don't look at just a couple components
9 and compare it to revenues that they're going to receive
10 because that's not the full calculation that one would do
11 to evaluate the rooftop solar.

12 **Q. Sure. So let's talk about that calculation. So**
13 **a CG customer, they're going to pay the full market rate**
14 **for deliveries, right? Let's say that's 10.2 cents per**
15 **kilowatt hour. Does that sound right?**

16 **A. You're talking about when they buy from the**
17 **Company?**

18 **Q. Sure, yes.**

19 **A. Yes. In the hours in which they buy, they'll**
20 **pay 10.2 cents.**

21 **Q. And the Company --**

22 **A. 10.2 cents? I mean, that's about right. Yes.**

23 **Q. Okay. And the Company is proposing to pay**
24 **customer -- to pay CG customers in this proceeding**
25 **somewhere between 1.5 and 2 cents kilowatt; is that**

1 right?

2 A. Yes. That's about what they -- that's correct.
3 That's not the value that we propose. As you know, we
4 propose a rate of 3.7.

5 Q. Okay. And so let me get this correct here.

6 So a CG customer, they will pay the full market
7 rate for deliveries, somewhere around 10.2 cents per
8 kilowatt hour. And you're proposing that they should be
9 compensated for those exports at, I'm sorry, 3.2 cents
10 per kilowatt?

11 A. 3.7.

12 Q. 3.7. Okay.

13 And you think that's a fair and reasonable
14 export?

15 A. I absolutely do.

16 Q. The Office of Consumer Services supports RMP's
17 avoided energy cost calculation; is that right?

18 A. I think that, you know, if you listened to my
19 summary, the way that we support it were the items that I
20 talked about.

21 Q. Okay. Well, you support using energy in balance
22 market prices to calculate avoided energy costs for the
23 export credit rate, right?

24 A. Yes, I think that's reasonable.

25 Q. Okay. You acknowledge that EIM prices are

1 **historic prices, right?**

2 A. Yes.

3 **Q. You acknowledge they're backward looking?**

4 A. Yes.

5 **Q. By definition, EIM prices cannot account for**
6 **future changes to the grid, can they?**

7 A. No, but they're not so far back that they're
8 going to be that different than what the grid looks like
9 at the time. It -- there could be differences. There
10 will be a little bit of a lag. But we're not talking
11 about 20 years. We're not -- and I think that's an
12 important distinction to make clear. We are not
13 supporting the notion of a 20-year levelized cost. We're
14 saying 1 year forward and annually updated as changes to
15 the system, changes to the -- in fact -- in fact, it's
16 possible that the changes could increase the rate, and
17 we'd be in favor of that.

18 **Q. So it's your position that using historic EIM**
19 **data is reasonable for calculating a short-term avoided**
20 **energy cost; is that right?**

21 A. Yes.

22 **Q. And you acknowledge that relying on historic EIM**
23 **prices to calculate avoided energy costs would not make**
24 **sense if we were setting an export credit rate that's**
25 **going to go anywhere beyond a single year; is that right?**

1 A. I would agree with that.

2 **Q. And the reason --**

3 A. A short period of time, I would say.

4 **Q. A short period of time.**

5 And the reason it doesn't make sense to use EIM
6 **prices for anything but a short-term rate is because EIM**
7 **prices are backward looking, right?**

8 A. Because EIM -- there are future changes in the
9 system that could come about that aren't reflected in the
10 EIM price.

11 **Q. And those future changes, they could affect the**
12 **avoided energy cost calculation?**

13 A. Yes. Further out in time, I think that it would
14 make a more significant impact. And by the way, it could
15 be lower, it could be higher.

16 **Q. Okay. You'd acknowledge that forward-looking**
17 **prices are better than historic prices for calculating a**
18 **long-term rate, right?**

19 A. Yes.

20 **Q. You're aware that Vote Solar uses PacifiCorp's**
21 **official forward price curve in its avoided cost**
22 **calculation?**

23 A. Yes.

24 **Q. And to be clear, OFPC prices are forward-looking**
25 **market prices, right?**

1 A. They're derived based on models that forecast
2 forward-looking accounting for expected changes.

3 Now, of course, you know that the changes in the
4 future don't always come about. This notion -- I mean,
5 I'm not trying to suggest that it's not appropriate.
6 It's the best tool at the time that you have available.
7 But just be aware that fuel costs change and change from
8 forecasts and all kinds of things will change.

9 But yes, for forecasting long term, I think it's
10 best to do a forward projection over the long term.

11 **Q. Okay. And the Office of Consumer Services, as**
12 **you said earlier, supports the Company's proposal to**
13 **update the export credit rate every year?**

14 A. Yes.

15 **Q. You work for an economic consulting firm, don't**
16 **you?**

17 A. I do.

18 **Q. Have you ever studied the economics of**
19 **fixed-cost investments?**

20 A. Yes.

21 **Q. Are you aware of any utility in the United**
22 **States that's willing to invest in a generation asset**
23 **without being able to calculate the return on that**
24 **investment?**

25 A. They are able to make estimates. If you had

1 to -- if you had do an analysis, consultants such as
2 myself could make estimates of long-term costs for the
3 utility. And you could use estimates to make a
4 determination, if that's something that you need to do.

5 I think that with very sophisticated -- the
6 people that have provided testimony in this case are very
7 sophisticated. And those type of people are able to do
8 analyses of long term, even though the rates change once
9 a year.

10 Q. Okay. So you agree it's important to be able to
11 calculate that return to be able to make that estimate
12 and make a determination before a utility is going to
13 invest in a generation asset; is that right?

14 A. I think the utilities must do studies before
15 making a decision to invest, yes.

16 Q. You'd acknowledge, wouldn't you, that installing
17 a generation system is a big investment for the average
18 homeowner?

19 A. Yes. Because they have to look at the payback,
20 taking into consideration the factors of what they're
21 going to get paid from the export credit rate and how
22 much they think that they're going to save and also
23 whether or not there are going to be any tax credits and
24 any other kinds of things such as that to make a decision
25 if the payback period is going to be sufficient for them

1 to be able to make that decision to invest.

2 Q. Thank you. Generally speaking, the operational
3 life of a generation system is about 25 years, isn't it?

4 A. Yes. Yes. I think it probably is about that.

5 Q. So the average homeowner, then, is going to look
6 at what returns they can expect over the duration of the
7 operational life of that generation system, right?

8 A. I'm not sure that's actually true. Because a
9 homeowner's evaluation period may not look at, is it cost
10 effective over 25 years? We've heard quite a bit of
11 testimony that the number of installations goes down as a
12 payback period extends.

13 We've heard that the sweet spot is 10 years. So
14 if 10 years is the required period to invest, it's very
15 important that you consider all revenue -- the revenue
16 stream that you're going to get, the costs that you're
17 going to avoid because you're going to have the solar
18 panel. And you have to take into consideration the tax
19 credits you're going to receive and whether or not those
20 tax credits are going to expire. Those are significant.

21 Q. Okay. Well, you testified just a few minutes
22 ago, Mr. Hayet, that you have to take into account how
23 many export credits you're going to accrue when you're
24 making that calculation --

25 A. Yes.

1 Q. -- right?

2 And you admit that if the export credit rates
3 updated every year the amount of export credits that a
4 customer can expect to accrue, by definition, that's
5 subject to change on an annual basis, right?

6 A. I'm not sure. Can you remind me what I said
7 about accrual? Now you're talking about accrual.

8 Are we talking about the annual expiration
9 issue?

10 Q. I'm talking about the payback period, that
11 calculation that the average homeowner is going to make
12 before they decide to go and spend thousands of dollars
13 on installing a generation system.

14 A. Okay. But I -- maybe I was getting ahead of
15 you. But I thought I heard you discussing something to
16 the effect of accrual and this issue about the --

17 MR. SNARR: Perhaps you could restate the
18 question.

19 MS. ROKITO: Sure.

20 Q. (BY MS. ROKITO:) So, Mr. Hayet, you testified
21 just a few minutes ago that in making that determination
22 about whether to install a generation system on their
23 home, the average homeowner is going to take into
24 account, among other things -- I think you mentioned
25 taxes -- they're going to take into account how many

1 export credits they can expect to accrue.

2 A. The revenue from the export, correct. that's
3 what I meant.

4 Q. Revenue from the export credit.

5 And you must admit that if the export credit
6 rate is updated every single year, the amount of export
7 credits that a customer can expect to accrue, that's
8 subject to change on an annual basis, right?

9 A. Yes. But I think a study could be performed on
10 their behalf by parties that have the sophisticated
11 ability, such as people that been hired in this case on
12 behalf of Vote Solar, to be able to do those kinds of
13 studies.

14 Q. So you're suggesting that the average homeowner
15 who is thinking about installing a generation system in
16 their home should go and hire an expert like one of the
17 experts Vote Solar has hired in this proceeding?

18 A. No. I'm thinking that the marketing company who
19 wants to sell them that rooftop solar could provide them
20 with that kind of information as part of the -- as part
21 of the process in trying to entice the homeowner to put
22 the solar panels on their rooftop.

23 Q. Okay. Well, without the marketing and without
24 an expert, the average homeowner is not going to know for
25 certain whether the credits they can expect to receive in

1 Year 1 of their investment in a generation system is
2 going to be the same as in Year 2, right? They can't
3 know that for sure because under -- the proposal that
4 you're recommending is going to be updated every year?

5 A. That's correct. And it could possibly go up.

6 Q. Okay. It could possibly go up?

7 A. And in fact, when we looked at the Vote Solar
8 calculations, one year after the next, it was a higher
9 value. It wasn't lower from one year to the next, it was
10 higher value. And so therefore, the levelized cost over
11 20 years wasn't necessarily giving value from 2021.
12 You're actually paying that customer for the fact that
13 you've got wrapped into that number increasing values
14 over the next 20 years and then levelized.

15 So it's much, much higher because you've got a
16 levelized 20-year payment. So that customer could -- one
17 of the things that they could be told is if that's what
18 Vote Solar believes that's going to happen, Vote Solar,
19 or whoever is hired, the consultants, could just give
20 them a forecast that says we expect that Rocky Mountain
21 Power's avoided energy costs are going up.

22 Q. Okay. So you agree that if the rate is going to
23 change every year, it's going to be difficult for a
24 customer to predict how many credits they'll be able to
25 accrue over the next 5 years, let's say. I'm not talking

1 **about 20 years. Over the next 5 years.**

2 A. I think they'd have an ability to bound it,
3 figure out a range, have an idea of what they think the
4 revenue is going to be and have a forecast, just like
5 planners -- all planners do. They have to make a
6 forecast.

7 **Q. So, just like planners. Just like the utility**
8 **has when they're considering an investment in a**
9 **generation asset?**

10 A. Well, I think --

11 **Q. Do you think that the average homeowner has the**
12 **same resources available that a utility does?**

13 A. The average homeowner does not have the
14 resources available that the utility has.

15 But you've told us through testimony through
16 this proceeding that the homeowner is a generator. Why
17 should they be treated differently? Now you're telling
18 us that they should be treated differently when it comes
19 to making a forecast. I don't think that that's the
20 issue that would prevent a -- somebody from making a
21 decision or not making a decision about it. A forecast
22 could be developed.

23 **Q. And just so the record is clear: You do know**
24 **that Vote Solar does not sell solar panels; is that**
25 **right?**

1 A. Yeah, I understand that.

2 Q. Okay. You testified in this proceeding that
3 there may be some non-zero avoided capacity value
4 associated with CG exports; is that right?

5 A. Yes.

6 Q. But you support RMP's proposal to exclude
7 avoided capacity costs?

8 A. Well, could you repeat that? Because we support
9 avoided capacity costs.

10 Q. You do support avoided capacity costs?

11 A. We do. We added in an avoided generation
12 capacity cost component.

13 Q. Okay. But at the same time, it's your position
14 that that capacity cost must take into account that
15 there's no long-term commitment on the part of the CG
16 customer?

17 A. And the fact that the -- that there is risk of
18 the capacity being supplied to the utility as promised by
19 the homeowner using its appliances in different ways,
20 making use of energy. There's no guarantee that the
21 homeowner isn't going to turn on additional appliances or
22 do other things that could lead to the avoidance of the
23 capacity being available to the utility as promised.

24 Q. Okay. So it's true that customer generation
25 behind the meter, you would agree with me that that

1 **alleviates capacity by reducing demand on the system,**
2 **right?**

3 A. Yes. I would agree that to some extent, as
4 we've talked about and acknowledged, it does. But there
5 are risks that we've also identified.

6 **Q. And as you stated in your testimony, should**
7 **those risks materialize, PacifiCorp has laid out**
8 **procedures for purchasing capacity on the market; is that**
9 **right?**

10 A. Essentially. We think that the market is more
11 liquid, available to the Company. If it turned out that
12 it was a very, very sunny day and the capacity didn't
13 materialize as expected, given a reasonable amount of
14 time, the Company can go out and acquire resources to
15 make up for that lack of supply from homeowners.

16 **Q. But in your analysis in this proceeding, you're**
17 **not taking into account the potential for**
18 **behind-the-meter generation to actually defer or avoid**
19 **capacity requirements of the utility, are you?**

20 A. Well, I actually am because we have given value
21 to avoided generation capacity costs.

22 **Q. Oh, okay. So you are giving value to both CG**
23 **exports and to behind-the-meter generation?**

24 A. And I have to apologize because I know that you
25 don't -- it's been presented to you today, so apologize

1 for that. But we presented in our rebuttal, we presented
2 in our surrebuttal our concern about the avoided
3 generation capacity costs.

4 But we acknowledge, starting back in rebuttal
5 testimony, that we can understand that there's some small
6 value associated with it. We did not quantify it, but it
7 became apparent to us that through our reading,
8 especially of surrebuttal testimony, that it was a value
9 that we wanted to include and that we felt was
10 reasonable.

11 So in my -- in my summary today, I presented the
12 fact that we did a calculation and believed that it's
13 reasonable to provide 1.41 cents per kilowatt hour as an
14 avoided generation capacity cost. And that was based on
15 things that we talked about in rebuttal and in
16 surrebuttal about we thought it should be a small value
17 somewhere in the range of 25 to 50 percent of what Vote
18 Solar was proposing. And we thought that 1.41 cents was
19 reasonable. And we apologize that it required the full,
20 complete record that we reviewed to determine that that
21 was a reasonable value to include.

22 **Q. Okay. Thank you for that clarification.**

23 **This new calculation that you're talking about,**
24 **today is the first day that we're hearing of this; is**
25 **that right?**

1 A. Well, let me just say yes to that question,
2 absolutely, in the sense that this is the first time that
3 that number has been presented.

4 As I mentioned, the rebuttal and the surrebuttal
5 testimony, it laid the foundation that we were -- we were
6 thinking that there may be value; we thought it should be
7 some small value. And then we gave the notion of
8 25 percent to 50 percent of Vote Solar's calculation.

9 **Q. Okay. So you originally believed that it would**
10 **not be appropriate to attribute any value to avoided**
11 **capacity benefits until today. And today, you attributed**
12 **value?**

13 A. No, that's not true. Because we said from the
14 start of rebuttal testimony that we thought some small
15 non-zero value we could conceive of. We did not quantify
16 a value until today. That's more properly stated.

17 **Q. Okay. Yeah, I'm sorry. I misspoke. So you did**
18 **not quantify the value until today? Today's the first**
19 **day that you are proposing a number value for that**
20 **avoided capacity?**

21 A. Yes. And I apologize that today is the first.
22 But it took the thorough review of the record for us to
23 come to that position. But we thought the Commission
24 should have the benefit of our opinions on that matter.

25 **Q. Okay. Thank you. And thanks for your**

1 clarifications.

2 I just have one more topic today, I believe.
3 The Office supports RMP's proposed integration cost
4 calculation in this proceeding?

5 A. Yes.

6 Q. In your testimony, you don't actually quantify
7 the amount of integration costs that CG resources impose
8 on the grid, do you?

9 A. No, but I've reviewed studies before, and I've
10 reviewed Rocky Mountain Power's. And I have to tell you
11 that this is a much-reduced price, way-reduced price from
12 what Rocky Mountain Power previously assumed solar
13 integration costs would be.

14 Q. Okay. Were you listening to the proceedings
15 yesterday, Mr. Hayet?

16 A. Yes.

17 Q. So you heard Mr. MacNeil testify that the
18 flexible reserve study on which the integration cost was
19 based, that actually did not study the impact of CG
20 resources in particular on the grid; is that right?

21 A. That's correct.

22 Q. Okay. No further questions.

23 I'm sorry, I have one more question. I
24 apologize.

25 A. You had my hopes up.

1 MS. ROKITO: Chairman Levar, we just want to
2 request the right to supplement the record to respond to
3 Mr. Hayet's new calculations today.

4 CHAIRMAN LEVAR: Okay. We will deal with that
5 motion when it becomes ripe, I suppose, right?

6 MS. ROKITO: Okay. We very much appreciate
7 that. Thank you.

8 CHAIRMAN LEVAR: Okay. Thank you.

9 Mr. Holman, do you have any questions for
10 Mr. Hayet?

11 MR. HOLMAN: I have no questions. Thank you,
12 Mr. Chair.

13 CHAIRMAN LEVAR: Okay. Thank you.

14 Mr. Mecham, do you have any questions for
15 Mr. Hayet?

16 MR. MECHAM: Just a clarification.

17
18 CROSS-EXAMINATION

19 BY MR. MECHAM:

20 Q. Hello, Mr. Hayet. How you doing?

21 A. Good. It's good to see you again.

22 Q. Thank you. Nice to see you.

23 So this 1.41 cents, did I mishear? I mean, just
24 now, you said it was 50 percent of what Vote Solar
25 proposed. And I thought in your opening statement that

1 you said it was -- you added what Vivint Solar and Vote
2 Solar did and then divided it by 2.

3 A. That's exactly right. And I think I said that
4 just now, I'm not sure. But we took --

5 Stepping back again, all along, we've said that
6 we thought some small value, 25 to 50 percent, is
7 reasonable.

8 The calculation that we did was to take the
9 average between the Vote Solar and the Vivint
10 calculation, and then we took 50 percent of that. So 2.2
11 was the value that Vivint had. 3.43 was the value that
12 Vote Solar had. Add it together, take the average and
13 then divide by 2, and you get 1.41.

14 Q. So, is this just a matter of judgment? I mean,
15 it's not very scientific. It sounds like one of the old
16 regulatory rules of add it up and divide by 2.

17 A. It was a matter of judgment and reasonableness
18 of a value. I'll mention that Mr. Milligan, Dr. Milligan
19 thought it was a reasonable value when he presented his
20 direct testimony.

21 All that I'm saying is the magnitude of what we
22 came up with was not perceived by Dr. Milligan to be
23 unreasonable when he presented it in direct testimony
24 until, of course, he realized that he had a flaw in his
25 calculation. I'm not saying -- I'm not criticizing that,

1 just saying that 1.41, we believe is a reasonable value.
2 Dr. Milligan didn't believe it was an unreasonable value
3 when he filed his testimony in direct.

4 **Q. Okay.**

5 MR. MECHAM: I think that's all I have,
6 Mr. Chair.

7 Thank you, Mr. Hayet.

8 CHAIRMAN LEVAR: Thank you, Mr. Mecham.

9 Mr. Snarr, any redirect?

10 MR. SNARR: No redirect.

11 CHAIRMAN LEVAR: Okay. Thank you, Mr. Snarr.

12 Commissioner Allen, any questions for Mr. Hayet?

13 COMMISSIONER ALLEN: No questions. Thank you.

14 CHAIRMAN LEVAR: Thank you.

15 Commissioner Clark?

16 COMMISSIONER CLARK: I do have a question.

17
18 CROSS-EXAMINATION

19 BY COMMISSIONER CLARK:

20 **Q. Mr. Hayet, I think during your summary I heard**
21 **you say that, among other things, the export credit**
22 **should reflect the fixed costs of the system to serve the**
23 **customer that has its own generation when that generation**
24 **is not supplying adequate levels of energy to the**
25 **customer; is that correct?**

1 A. Well, a little bit different, I think. What I
2 was getting at is essentially the compromise of the
3 stipulation.

4 The compromise of the stipulation essentially is
5 that the rooftop solar customer is not going to have to
6 pay the fixed costs of the system in the hours in which
7 that customer is supplying its own load. Cloud cover
8 goes overhead, all of a sudden it's not supplying its own
9 load. Over the distribution system, the transmission
10 system power flows to that customer.

11 So the point is, there's a system that's
12 standing at ready. The customer isn't paying for the
13 system through all hours, only paying through the hours
14 in which he's buying power from Rocky Mountain Power. So
15 the fixed costs still have to be recovered, and those end
16 up getting recovered from other customers. Because Rocky
17 Mountain Power has a right to recover its costs, they
18 just, in the next rate case, they recompute their rates.
19 The customers that don't have rooftop solar end up
20 getting charged those costs.

21 So there's a compromise that occurred in the
22 stipulation that said, all right, we're going to allow
23 you to avoid the entirety of the full retail rate when
24 you buy power from Rocky Mountain Power. But the
25 compromise is we're going to -- we're going to pay you a

1 fair rate for the power and the value of that power to
2 this system when you act as a generator and sell.

3 And think in terms of this: When Rocky Mountain
4 Power goes out and buys power from the market at \$20 a
5 megawatt hour, or it contracts for new solar, \$35 a
6 megawatt hour levelized, that's a far cry from \$90 a
7 megawatt hour, the \$240 a megawatt hour that we're
8 hearing in this case or translating into cents, you know,
9 9 cents a kilowatt hour or 24 cents a kilowatt hour.

10 That 3-cent power is a far cry from those kinds
11 of numbers. So that's what we're trying to say is that
12 this is a fair compromise as long as we set a fair rate
13 for that export credit.

14 **Q. So thinking of the proposals by other technical**
15 **witnesses in the case who are testifying on behalf of the**
16 **solar industry interests, is there anything in their**
17 **proposals that you identify as explicitly violative or**
18 **contrary to that premise that you describe as underlying**
19 **the stipulation?**

20 A. Well, there are components in there that are
21 just unreasonable. They're asking -- they have a
22 situation in which, when the customer buys power from
23 Rocky Mountain Power, they pay, say, the 10-cent rate.
24 What they've calculated is a rate of 24 cents, including
25 health benefits and job benefits and CO2 costs. These

1 are all costs that Rocky Mountain Power doesn't charge
2 for through rates. Those are -- those costs that are
3 embedded in their proposal are exorbitant.

4 So if we eliminate the 24-cent proposal, then
5 we're down to something like another proposal that's
6 about a 10-cent proposal. And again, those are including
7 things like CO2 costs, which no customer is paying for
8 right now. We all recognize climate change issues, but
9 there is no CO2 cost that goes out in a bill to a Rocky
10 Mountain Power customer. So why, if current customers
11 don't pay Rocky Mountain Power for a CO2 cost, why should
12 the rooftop solar turn around and get paid for a CO2
13 cost?

14 And then we have some issues, of course, with
15 their proposals on giving the avoided distribution and
16 avoided transmission benefits because -- and this is
17 where a large argument comes up. But it really has to do
18 with the notion of the absolute certainty, really of
19 whether or not those costs are going to be avoided by the
20 rooftop. Will the distribution department at the utility
21 truly avoid having to install the equipment at the local
22 level, at the customer level, at the secondary
23 distribution system level because it knows it has the
24 rooftop solar? Furthermore -- and really, it's a maybe
25 yes, maybe no.

1 And furthermore, there are issues with the fact
2 that there could be costs that are added. So you have
3 distribution system costs that may come about that Rocky
4 Mountain Power has to pay for caused by these people that
5 put on rooftop solar. And all of a sudden, now we have
6 to account for that.

7 So that's the reason why we've opposed those --
8 the distribution component, the transmission component.
9 But we aren't opposed completely, and we've actually
10 given value to the avoided capacity component.

11 So our proposal is basically take the -- a fair
12 calculation of avoided energy, not over 20 years
13 levelized because that really raises the number up. Take
14 it over a 1-year period and update it. And
15 theoretically, if there's no error in any kind of a
16 forecast proposed, the value that you give on a 1-year
17 basis in time going forward, assuming no updates, is
18 going to be the same -- assuming no new costs are added
19 or taken away -- is going to be the same. But for, you
20 know, forecast error, that could make a difference
21 between what you determine today and what actually turns
22 out when you go forward year by year.

23 But that's, in a nutshell, our proposal.

24 **Q. That concludes my questions. Thank you,**
25 **Mr. Hayet.**

1 A. Okay. Thank you.

2 CHAIRMAN LEVAR: Thank you, Commissioner Clark.

3
4 CROSS-EXAMINATION

5 BY CHAIRMAN LEVAR:

6 Q. Mr. Hayet, you largely addressed my main
7 question in your answers to Commissioner Clark, but I'm
8 going to follow up just a little bit, probably just for
9 redundancy and clarification.

10 Am I correct in restating your characterization
11 of the 1.41 cents that you've discussed today as simply a
12 numerical representation of the position that was in your
13 surrebuttal? Am I oversimplifying that?

14 A. That is absolutely --

15 Q. Sorry. I don't mean to interrupt you. Go ahead
16 and answer. Sorry.

17 A. That is absolutely a good way to look at it. I
18 suppose playing devil's advocate, that somebody else
19 could look at that, and I supposed they could say, Well,
20 Mr. Hayet could have calculated it a different way. I
21 grant you that. But yes, it's -- one good way to look at
22 it is it's a numerical representation of what we talked
23 about in both rebuttal and surrebuttal.

24 Q. Sure. And I wasn't meaning to get to Vote
25 Solar's potential objections to that. That's not where I

1 was going. Because I think what you said to Commissioner
2 Clark indicated that that 1.41 cents still represents
3 zero value for transmission and distribution; is that
4 correct -- or transmission and generation capacity?

5 A. That's right. We feel as if it's not
6 unreasonable to give a generation capacity value. We
7 don't think that it's reasonable to give transmission
8 distribution. Our concern is with export credits, there
9 are two factors that come into play. There's certainly
10 the contractual issue that it's non-firm power, as
11 available, you know, the clouds come over and so forth.
12 But there's also the notion of the only amount of export
13 that could be done comes after the customer has used the
14 energy at its own home. So to the extent that there's a
15 change in the customer's usage of energy, there might be
16 less energy available to serve the grid, and that's a
17 risk.

18 And for that reason, that is the reason why we
19 feel a lower capacity value is warranted, not at the full
20 level that the parties such as Vivint and Vote Solar have
21 proposed.

22 Q. Okay. So I'm going to ask the same question
23 again. You've answered it, and so someone could object
24 to asked and answered to this.

25 A. I'm not going to answer it again.

1 Q. You're proposing a reduced level for generation
2 capacity but a zero value for transmission and
3 distribution?

4 A. Yes.

5 Q. And your reasons -- you're applying some of the
6 same reasons to all of it. As I read your testimony,
7 particularly on -- I want to focus on transmission and
8 distribution.

9 A. Okay.

10 Q. But I noted four arguments that you made for
11 zero value on those. They all seemed to be based on what
12 you just described. That seemed to underlie all four of
13 them, the lack of reliability based on things like you
14 just described, both weather and customer usage.

15 But at an aggregate level, isn't the aggregate
16 output of all of the CG customers on the PacifiCorp
17 system reliable enough that PacifiCorp uses it for IRP
18 planning purposes and other purposes? Isn't there some
19 reliability to an aggregate output of all DEG across the
20 system?

21 A. You know, I would not say no. I think on an
22 aggregate level, yes, that's true.

23 But think about this: Our differentiation
24 between capacity, generation capacity and transmission is
25 even if there happens to be a time when there's a really

1 legitimate risk -- and that's what we are concerned about
2 is those few times that there are legitimate risks -- in
3 the case of the generation, that capacity could
4 potentially be replaced through market purchases, and
5 PacifiCorp does that all day long.

6 In the case of transmission distribution, you
7 can't just go out and buy a distribution transformer and
8 put it on the pole at the time when that event occurs.
9 Or, you know, if we thought that we could construct the
10 distribution system to a lower level of capacity and the
11 capacity isn't available when you need it, that's a risk.
12 And it can't be easily addressed.

13 So that's our distinction and why avoided
14 capacity is reasonable. And again, to account for all
15 the other factors, that's why we set 25 to 50 percent of
16 the average of Vote Solar and Vivint.

17 **Q. At the risk of beating a dead horse, one more**
18 **follow up.**

19 **How different is that risk -- if you're looking**
20 **at the aggregate output of all the distributed generation**
21 **across the system, how different is that risk from, say,**
22 **the risk of an unplanned outage of a thermal plant?**

23 **A.** Well, but you see, we account for unplanned
24 outages of the thermal plant in planning. I mean, that's
25 accounted for. That's why we have reserve margins that

1 are taken into account when we -- so it would be like --
2 it would almost be like saying can we ignore the
3 unplanned outage? And how significant is that unplanned
4 outage? Maybe we don't need a reserve margin as large as
5 we do. Just ignore that.

6 How large -- well, with a growing system, with a
7 growing number of solar customers, it will become more of
8 an issue in the future. So how much of a risk? It's a
9 lower risk today.

10 **Q. I keep saying just one more follow-up.**

11 **You say, We plan for unplanned outages. But**
12 **can't you say the same thing about, We plan for the DG**
13 **aggregate capacity? I mean, isn't that built into the**
14 **IRP the same way unplanned outages are built into the**
15 **plan?**

16 **A.** Well, to the extent that you're doing the
17 proper -- the proper capacity valuation analysis, which,
18 to Dr. Milligan's credit, he's gone to extensive effort
19 to discuss it, and to Mr. MacNeil's credit, he's gone to
20 extensive effort as well.

21 Mr. MacNeil has said that the value is as low as
22 4 percent. And that -- that's sort of consistent with
23 our notion that there's 25 -- that it ought to be
24 discounted by 25 to 50 percent. We said that from the
25 start.

1 And on the other hand, the capacity valuation
2 that Dr. Milligan has done is more on the order of
3 27 percent.

4 Now I did not do my own analysis on it, but I
5 just -- I do believe that you have the joint probability
6 distribution risk of having both a situation where you
7 can have weather events going on at the same time, you
8 can have customer usage changes occur, and that capacity
9 may not be available.

10 And again, I'll admit, I think it's more of a
11 problem, you know, as more solar installations occur.

12 **Q. Sure. Okay. I'll leave that issue and go to**
13 **one more topic, and this won't be a lengthy topic.**

14 **You were asked a lot about payback time frames**
15 **and investment payback and how long it takes as a**
16 **customer makes a decision whether to add panels. I want**
17 **to move to a different analogy.**

18 **So if, for example, a tech firm is considering**
19 **building a day center in Utah or maybe one or two other**
20 **states, they're going to evaluate issues like tax**
21 **incentives, specific incentives that might be given to**
22 **them for that particular facility. They're also going to**
23 **consider -- for a data center, they're going to consider**
24 **electricity rates along the life of the facility. Those**
25 **are all factors that a tech firm would consider in that**

1 context, right?

2 A. Yes.

3 Q. Are you aware of any consistent pattern in this
4 state or other states of providing electricity rate
5 guarantees long-term in those kinds of situations?

6 A. Well, I am aware of economic development rates.

7 Q. I'm sorry, say that again?

8 A. I am aware of special contracts and economic
9 development rates and things such as that, if that's what
10 you're asking.

11 Q. So you are -- okay. That does answer my
12 question. Thank you.

13 Thank you for your testimony today, Mr. Hayet.

14 A. Thank you very much.

15 CHAIRMAN GILL: Mr. Snarr, anything further?

16 MR. SNARR: No. That concludes the presentation
17 of the OCS witnesses.

18 CHAIRMAN LEVAR: Okay. Why don't we go ahead
19 and take a 15-minute break, and then we will move to
20 Vivint Solar's witness. Thank you.

21 (A break was taken from 3:21 p.m. to 3:37 p.m.)

22 CHAIRMAN LEVAR: I think it's time for us to
23 begin, so can we start the transcript.

24 Mr. Mecham.

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

1 Vivint Solar calls Dr. Chris Worley.

2 Dr. Worley, would you state your name and your
3 position in Vivint Solar for the record, please.

4 THE WITNESS: Yes. My name is Christopher
5 Worley. I am Vivint's Solar's director of rate design.

6 CHAIRMAN LEVAR: And Mr. Mecham, how about if I
7 swear him in next.

8 MR. MECHAM: Well, that's a great idea.

9 CHAIRMAN LEVAR: Thanks.

10 Mr. Worley, do you swear to tell the truth?

11 THE WITNESS: I do.

12 CHAIRMAN LEVAR: Okay. Thanks.

13 Go ahead.

14
15 CHRISTOPHER WORLEY,
16 was called as a witness, and having been first duly
17 sworn to tell the truth, the whole truth, and nothing
18 but the truth, testified as follows:

19
20 DIRECT EXAMINATION

21 BY MR. MECHAM:

22 Q. And did you prepare direct, rebuttal, and
23 surrebuttal for this proceeding?

24 A. Yes, I did.

25 Q. Do you have any corrections that you need to

1 make to any of that testimony?

2 A. No, I do not.

3 Q. If I were to ask you the questions that are
4 there, would your answers be the same today?

5 A. Yes.

6 Q. Thank you.

7 MR. MECHAM: I would move the admission of
8 Dr. Worley's testimony.

9 CHAIRMAN LEVAR: If anyone objects to that
10 motion, please unmute yourself and indicate your
11 objection.

12 I'm not seeing or hearing any objections, so the
13 motion is granted. Thank you.

14 MR. MECHAM: Thank you.

15 Q. (BY MR. MECHAM:) Dr. Worley, have you prepared
16 a summary for your testimony?

17 A. Yes, I have.

18 Q. Would you go ahead and provide that, please.

19 A. Certainly. I just want to check and make sure
20 my volume is okay?

21 Q. I can hear you perfectly.

22 A. Okay. Thank you.

23 Good afternoon. Thank you, Commission, for the
24 opportunity to testify here today.

25 My name is Christopher Worley. I'm the director

1 of rate design with Vivint Solar, one of the nation's
2 largest residential solar installers. We operate in 22
3 states and the District of Columbia. We help homeowners
4 manage their energy bills through investment in
5 behind-the-meter solar, and in some states, solar plus
6 storage.

7 When considering the export credit rates, I
8 recommend the Commission take a holistic view to the
9 benefits that behind-the-meter solar provides. The
10 Commission should consider all quantitative and
11 qualitative benefits.

12 When it comes to setting an export credit rate,
13 the Commission need not include non-utility costs in
14 retail rates. By my estimate, the value of
15 utility-specific costs that solar exports avoid is at
16 least 10.35 cents per kilowatt hour, which exceeds Rocky
17 Mountain Power's average retail rate for residential
18 customers. So I recommend the Commission set the export
19 credit rate at 10.2 cents per kilowatt hour.

20 Customer investment behind the grid impacts how
21 Rocky Mountain Power operates their grid, and that
22 behind-the-meter investment defers or avoids future
23 investment by the utility. Rocky Mountain Power has
24 proposed an export credit rate that ignores the utility's
25 long-run marginal costs. By ignoring these costs, they

1 are perpetuating a myth that cost -- of a cost shift
2 between solar to nonsolar customers. This case is not
3 about shifting of costs between solar to nonsolar
4 customers based on the estimates that Vote Solar and
5 Vivint Solar have presented.

6 The genesis of this case really starts with lost
7 electricity sales, reduced demand for electricity, and
8 reduced future earnings potential by PacifiCorp. Rocky
9 Mountain Power has proposed an export credit rate that
10 would all but eliminate the ability for customers to
11 reasonably invest in solar, thereby protecting the
12 interest of PacifiCorp shareholders.

13 Rocky Mountain Power's proposal seems
14 tailor-made to hit the financial pressure points that
15 make customer investment in solar possible. A low export
16 credit rate compensation extends out the payback on solar
17 investments. A large application and meter fee are
18 upfront costs that must be amortized over the life of the
19 system, therefore extending the payback further. And
20 under instantaneous netting, customers have no reasonable
21 way to respond to their net load in realtime. And
22 without a history of realtime energy usage data, solar
23 installers will have no way to estimate customer savings
24 before selling a system. Lastly, annual updates to the
25 export credit rate throw risk into the entire investment

1 equation.

2 Based on my experience as a representative of a
3 solar installer, we cannot sell a product that meets
4 those requirements. But just as a person who pays a
5 utility bill, there is no way that I would invest under
6 those terms.

7 Rocky Mountain Power's proposal will shut down
8 the rooftop solar industry in Utah, an industry that is
9 already shrunk as a result of the transition program.

10 If this case is truly, as I would suggest, about
11 lost revenue and risk to future earnings potential, then
12 the Commission should investigate true-up mechanisms to
13 make the utility whole. Rocky Mountain Power should not
14 use the regulatory compact they have as an excuse to shut
15 down Utah's competitive solar markets.

16 Solar is a widely-available technology, and
17 customers have a reasonable expectation that they should
18 be able to install solar and make an investment to help
19 manage their energy bills.

20 In its testimony, Rocky Mountain Power talks
21 about the desire to foster distributed energy resources,
22 the adoption of those, and innovation and to use price
23 signals to better align customer costs with system costs.
24 And I agree with that goal. And I agree with that
25 approach. But Rocky Mountain Power's proposal will not

1 get us to that future. At 1.5 cents per kilowatt hour,
2 or even at 2.2 cents per kilowatt hour, customers will
3 not invest in behind-the-meter solar with or without
4 batteries. And then we all lose the benefits that those
5 resources can provide to the grid.

6 So to enable a future where customers really
7 have the opportunity to invest in DER and drive
8 innovation in the state, I recommend the Commission adopt
9 an export credit rate of 10.2 cents per kilowatt hour.
10 Based on the estimates presented by parties in the case,
11 that rate is just and reasonable.

12 Thank you for your time.

13 **Q. Thank you, Dr. Worley.**

14 **Does that conclude your summary?**

15 A. Yes, it does.

16 **Q. Anything further?**

17 A. No.

18 **Q. Okay. All right.**

19 MR. MECHAM: Mr. Chair, Dr. Worley is available
20 for cross.

21 CHAIRMAN LEVAR: Thank you, Mr. Mecham.

22 I'll go to Mr. Holman next.

23 Do you have any questions for Dr. Worley?

24 MR. HOLMAN: I do not. Thank you, Mr. Chair.

25 CHAIRMAN LEVAR: Okay. Thank you.

1 Does anyone from the Vote Solar team have any
2 questions for Dr. Worley?

3 MR. GOTTLIEB: Good afternoon. This is Spencer
4 Gottlieb. Vote Solar has no questions.

5 CHAIRMAN LEVAR: Thank you.

6 We will to go Mr. Snarr next.

7 Do you have any questions for Dr. Worley?

8 MR. SNARR: Yes, just a few, please.

9 CHAIRMAN LEVAR: Go ahead.

10
11 CROSS-EXAMINATION

12 BY MR. SNARR:

13 Q. Good afternoon, Mr. Worley.

14 A. Good afternoon.

15 Q. I understand you represent Vivint Solar in these
16 proceedings; is that correct?

17 A. That's correct.

18 Q. And Vivint was an active intervenor in the
19 earlier docket, No. 14-035-114, the net metering docket;
20 is that right?

21 A. That is correct.

22 Q. And, in fact, Vivint was a signator to that
23 settlement stipulation that has been discussed in this
24 proceeding; is that correct?

25 A. That is correct.

1 Q. With respect to that settlement, am I correct
2 that existing net metering customers were grandfathered
3 into a continuation of their net metering rates until
4 December 31 of 2035?

5 A. Yes. Subject to check on the 2035, but that
6 sounds right.

7 Q. Okay. And the settlement stipulation defined
8 those existing net metering customers to include any
9 customers that it submitted applications for net metering
10 through November 15 of 2017; isn't that right?

11 A. Subject to check, that sounds right.

12 Q. Okay. So for those customers who had made the
13 decision to invest in solar, their net metering rates
14 would remain in place for 18-plus years, consistent with
15 that settlement?

16 A. Yes.

17 Q. Okay. Now, moving to similar observations but
18 with respect to transition customers.

19 Transition customers are those who submitted
20 applications after November 15th of 2017 but prior to the
21 earlier -- the date on which a transition cap might be
22 reached or the issuance of a final order in this
23 proceeding by the Commission; is that correct?

24 A. Yes, that's my understanding.

25 Q. And for those customers, the settlement

1 stipulation provided for a rate which is approximately
2 90 percent of the retail rate to continue on for them,
3 right?

4 A. Yes, that's correct.

5 Q. And with respect to them, focusing on the time
6 frame, those rates would apply to transition customers
7 until December 31, 2032, or approximately 15 years after
8 the settlement stipulation had been executed; isn't that
9 correct?

10 A. Yes.

11 Q. Isn't it true, then, that for existing net
12 metering customers, there will be no major change to
13 their rates that might affect their payback calculations,
14 not through 2035?

15 A. Yes.

16 Q. And, similarly, for transition customers, there
17 will be no major change to their rates, at least not
18 until 2032?

19 A. Yes.

20 Q. Focusing now on your surrebuttal testimony for
21 just a minute. At Line 134, you state that "Customer
22 investment in behind-the-meter solar by end users defers
23 peak investment by the utility, so distributed energy
24 resources, or DERs, should be compensated for the peak
25 capacity they avoid or defer."

1 **Did I read that correctly?**

2 A. Yes.

3 **Q. You do recognize, do you not, that when**
4 **customers generate and reduce demand to the utility,**
5 **they're, in fact, compensated by no longer having to pay**
6 **the full residential rate for the energy they**
7 **self-produce and consumer, which includes payment for**
8 **some of the fixed capacity costs; is that right?**

9 A. They -- when customers self-generate, they no
10 longer purchase from the utility.

11 **Q. Right. And by no longer purchasing, they're no**
12 **longer contributing by avoiding that rate some measure to**
13 **the fixed costs of the system?**

14 A. For that, say if we're talking about a kilowatt
15 hour, for that kilowatt hour, that is true.

16 **Q. The kilowatt hour that they self-produce?**

17 A. That's correct. And so, you know, I think you
18 raise an interesting question on -- you, yourself, said
19 whether the, you know, solar customer, the CG customer is
20 contributing to the grid or contributing to fixed costs.
21 And there's been a lot of discussion about that.

22 And, you know, in my experience, most CG
23 customers are not zeroing out their bill. In fact, very,
24 very few CG customers zero out their bill. And so those
25 customers that don't zero out their bills, they are

1 contributing to the fixed costs of the utility.

2 **Q. But they might be contributing half as much as**
3 **they used to when they were not self-generating, huh?**

4 A. But they are contributing. And while the
5 Company didn't present any information saying that there
6 was a cost shift or that those customers were not
7 contributing to the upkeep of the grid, they've sort of
8 made statements about that. But they haven't really
9 presented a case here that those customers are not paying
10 their fair share, they've just sort of assumed that
11 that's the case.

12 I think if you look back at the previous net
13 metering case, which, unfortunately, predates my time
14 with the company, so I can't really speak to it, but I
15 think Ms. Bowman with Utah Clean Energy presented
16 information, surrebuttal that said that, in fact, solar
17 customers do contribute to the upkeep of the grid. And,
18 in fact, commercial solar customers actually, you know,
19 contribute more than their share of the cost of service.
20 And so that might be a line of questioning that you would
21 raise with her or with the Company. I guess the
22 Company's witnesses are gone, but

23 **Q. Well, just to kind of paint the picture clear,**
24 **to the extent that someone decides to go with solar**
25 **energy and self-generate, the avoidance of the purchases**

1 from Rocky Mountain, whether it be avoidance of all the
2 purchases or half the purchases, there is at least a
3 reduction in the coverage of fixed costs to Rocky
4 Mountain for those purchases that are being avoided; is
5 that right?

6 A. So they are not purchasing a kilowatt -- when
7 they generate their own kilowatt hour, they are not
8 purchasing a kilowatt hour from Rocky Mountain Power.

9 Q. Right.

10 A. So there's value to that. There's value in
11 avoiding or deferring future investment in the grid.

12 Q. But to the extent that there are capital
13 expenditures that have already been made over the past 1
14 or 5 or 10 years, those customers who are now
15 self-generating have freed themselves from any ongoing
16 contribution, or at least, in part, the ongoing
17 contribution of those expenditures that have already been
18 made; isn't that correct?

19 A. Are we talking about individual customers, or
20 are we talking about a class of customers? Because, you
21 know, an individual customer, that might be the case.
22 But if you look at the class of residential CG customers,
23 based on the -- there's no information here in this case
24 that there's -- the Company has not presented a case
25 that, you know, CG customers are not paying their fair

1 share. It's an assumption that they make, but they
2 haven't presented that case.

3 **Q. Well, I'm zeroing in on the individual customer**
4 **decisions and customer conduct. And I'm merely asking**
5 **you: Isn't there some diminution of the revenues that**
6 **used to be collected to recover fixed costs for the**
7 **utility that will no longer be collected from those**
8 **customers who are self-generating?**

9 **A.** I would agree with that. When customers
10 self-generate, when they don't purchase power from the
11 utility, it does reduce the, you know, utility's revenue,
12 the revenue that they earn. Which is why I've made a
13 suggestion, is if that's the core fundamental issue here,
14 not this cross subsidy that they assume happens but
15 haven't presented any information, if the core issue is
16 lost revenue, then the Commission should consider some
17 sort of true-up mechanism to keep them whole.

18 **Q. Which happens in a general rate case, anyway.**

19 **A.** Is that a question?

20 **Q. Is that right?**

21 **Which happens in a general rate case proceeding,**
22 **if not sooner in some other form?**

23 **A.** Is there a question mark at the end of that?

24 **Q. Yeah --**

25 **A.** I would agree, yeah.

1 Q. -- do you agree? Okay. Thank you.

2 A. Yes.

3 Q. Yeah. Now, just turning to the settlement
4 stipulation for a minute. I would like to refer to
5 paragraph 30. And I'm going to quote something there.
6 If you need to double check it, certainly we'll give you
7 that opportunity.

8 A. I don't have that in front of me. If you could
9 read it, I guess I would, you know, trust that you're
10 reading it accurately, and I can respond to that.

11 Q. I suspect you'll remember it, too.

12 "In the export credit proceeding, the Commission
13 will determine a just and reasonable rate for export
14 credits. And the parties may present evidence addressing
15 reasonably quantifiable costs or benefits, but the party
16 asserting any position will bear the burden of proving
17 its assertions."

18 Does that sound familiar?

19 A. Yes, that sound right.

20 Q. All right. Now, Line 94 of your rebuttal
21 testimony. You stated that you were hesitant to support
22 the OCS principle that the export credit rate value
23 should be a true-cost base rate.

24 Does that mean that you think it will be okay if
25 the PSC were to include costs or benefits that do not

1 **directly affect the utility's cost of service?**

2 A. I mean, the Commission can, you know, choose to
3 include whatever it would like in its rates. My concern,
4 and I think I discussed this a little further on, is when
5 the OCS discusses what is a true cost, then my concern
6 was really, Well, what costs are important and which
7 costs are not?

8 And so, you know, the Office has made the case
9 or argues that avoided transmission and avoided
10 distribution benefits, capacity -- avoided transmission
11 capacity and avoided distribution capacity are not costs
12 that should be considered. And so, I and other parties
13 as well, we argued those are costs that should be
14 considered.

15 And so I made a comment there because I didn't
16 understand what costs OCS would consider and which ones
17 they don't because, in my opinion, short run -- the
18 utility's short-run marginal costs should be considered
19 as well as the utility's long-run marginal costs. And it
20 seems like from what I have read from the OCS's
21 testimony, they want to include some short-run costs and
22 then just one long-run marginal cost, avoided cost, the
23 generation capacity; whereas, the other ones, they're not
24 interested.

25 And so I guess I disagree with that.

1 Q. All right. I guess I'm focusing on another
2 piece of what's going on in this hearing. Let me just
3 try to summarize it a different way.

4 Some of the parties in this proceeding are
5 advocating that there be a recognition of benefits or
6 costs associated with things that find no place in the
7 utility's cost of service. There's nothing to do with
8 carbon capture in Rocky Mountain's cost of service.
9 There's nothing to do with health benefits. There's
10 nothing to do with a number of things -- I'll just bag
11 them as community benefits.

12 Do you see a problem, at least from what we see
13 in the settlement stipulation, in terms of going outside
14 of cost of service to try to drag some of those things
15 into this formula for payback to export credits?

16 A. So, you know, Vote Solar really does a good job
17 of outlining those community benefits, as you and they
18 call them, you know, things like health benefits from
19 avoided pollution, economic development benefits, those
20 sorts of things. And I think I am, you know, grateful
21 that Vote Solar has presented that testimony because I
22 think it gives the Commission a fuller idea of how
23 behind-the-meter investment really does impact not only
24 the utility system but the, you know, the health of
25 Utahans, the environmental -- the healthy environment of

1 Utah, the economy of Utah.

2 But in terms of embedding that in export credit
3 rates, I don't recommend that. But I think it's great
4 that that data is available and that it has been
5 quantified by Vote Solar. And the Commission should
6 review and consider that information holistically when
7 they set the export credit rate.

8 Q. Okay. Thank you. And in connection with the
9 evolution of these related dockets, the Commission has
10 had an opportunity to look carefully at the Utah statute,
11 which mandates that they get into this and provide some
12 guidance and interpretation of that statute for all of
13 our benefits.

14 Let me just provide a quote, if I can, and get
15 your reaction.

16 A. Okay.

17 Q. And this is a quote from one of the Commission
18 orders, the July 1st, 2015 order in that prior docket.

19 "As a matter of law, we conclude Subsection
20 1" -- and that's the net metering statute the legislature
21 promulgated -- "requires the Commission to consider costs
22 and benefits that accrue to the utility or its non net
23 metering customers in their capacity as ratepayers of the
24 utility. It necessarily follows that any cost or benefit
25 to be included in the Subsection 1 analysis must be a

1 cost or benefit that has some impact on the utility's
2 cost of service. Therefore, cost and benefits that do
3 not impact the utility's cost of service are not relevant
4 to the Subsection 1 analysis and will not constitute part
5 of the frame work the Commission ultimately adopts in
6 this docket."

7 Do you recall hearing that or reading that
8 before?

9 A. Yes.

10 Q. And do you recognize that as a significant
11 hurdle if we're looking seriously at these externalities
12 or community benefits?

13 A. What do you mean by a "hurdle"?

14 Q. For inclusion in the energy credit rate.

15 A. You know, I think that question might be better
16 directed at Vote Solar because I don't recommend that
17 those community benefits be included within the export
18 credit rates.

19 What I recommend is that the Commission review
20 that information, take it into account, and consider it.
21 That doesn't mean that their consideration needs to embed
22 that within the export credit rate.

23 Q. I appreciate your responses to the question.
24 Thank you.

25 MR. SNARR: That conclude my cross.

1 CHAIRMAN LEVAR: Mr. Jetter, do you have any
2 questions for Dr. Worley?

3 MR. JETTER: Thank you, Mr. Chairman. I do have
4 a few questions.

5
6 CROSS-EXAMINATION

7 BY MR. JETTER:

8 Q. Good afternoon, Dr. Worley.

9 A. Good afternoon.

10 Q. You've testified that you're at least
11 knowledgeable at some level to customer behavior and how
12 they'll react to rate structures; is that accurate?

13 A. Yes.

14 Q. And you also testified that customers will have
15 a difficult time understanding a non-fixed export credit
16 rate; is that correct?

17 A. By "non-fixed export credit rate," do you -- are
18 you referring to the annual updating of the export credit
19 rates or --

20 Q. Yes. I'm referring to the relatively short-term
21 1-year or maybe 2- or 3-year period between updates.

22 A. Well, I don't -- I don't think that that's a
23 matter of understanding or not. I think customers
24 understand that while the credit that I might get might
25 change from year to year -- and by it changing, by

1 allowing it to float -- it really throws a risk into the
2 investment. It's not necessarily a matter of
3 understanding, it's more of added risk to a very
4 expensive investment.

5 **Q. Okay. And would you say it's fair to -- would**
6 **you say that you agree with Rocky Mountain Power's**
7 **analysis that on a no netting basis, it would be in the**
8 **ballpark of half of the energy would be used on site and**
9 **half of it would be exported?**

10 A. So I just want to make sure I understand.

11 So, what you're saying is that Rocky Mountain
12 Power has presented a case. They've presented
13 information that, under instantaneous netting, half the
14 power would be used on site and half the power would be
15 exported?

16 **Q. Yes.**

17 A. And so you're wanting to -- based on my
18 experience me to say whether I think that's true or not.

19 I don't know that I -- I don't know that I can
20 answer that question. I think we, as, you know, solar
21 installers, when we go -- and this isn't my job -- but
22 when we go out to sell to a customer, we try and
23 calculate, well, what is your bill savings going to be?

24 And so if it's on a monthly basis, then we go to
25 the National Renewable Energy Lab, NREL. They have a

1 website called "PVWatts," where you can enter in a
2 location. And you can sort of estimate out, okay, well,
3 here's the monthly production at this site, at this
4 location based on solar insolation. And so based on the
5 customer's monthly bills and based on production at that
6 site, we can figure out, okay, well, here's what you're
7 likely to save.

8 In terms of hourly data, you know, if we're on,
9 say, hourly netting. Now, some utilities, you're able to
10 get hourly customer data from -- you know, consumption
11 data from the utility. Many do not have that. And so
12 PVWatts, you are able to get hourly insolation data. And
13 so if you can get those two data sources, yeah, you can
14 figure out, okay, well, here's how much we estimate the
15 customer is likely to save given hourly netting.

16 But in a lot of -- a lot of times, the utility
17 doesn't have hourly data available because they're on
18 old -- old meters, and they just don't collect that
19 information. And so in those cases, it's harder for us
20 to estimate savings to customers under an hourly netting
21 scenario.

22 Now, if we go to instantaneous netting,
23 PVWatts -- the finest granularity in solar production
24 data is hourly. So we have no idea what insolation looks
25 like on a realtime basis. So we have no data on that

1 side. A realtime customer usage data, there's no utility
2 that I am aware of in the world that provides that data.

3 And so because we don't have these two data
4 sources, we can't really estimate how much is going to be
5 pushed back on the grid, and we can't estimate what the
6 savings are likely to be for the customer.

7 And so when, you know, when Rocky Mountain --
8 back to your question, I think, is when Rocky Mountain
9 Power says that 50 percent is going to be pushed back
10 onto the grid, I don't know that that's the case. They
11 have made an estimation with the data that they have from
12 their load research study, and I'll let them speak to
13 that. I don't know that I can agree with that or
14 disagree with that.

15 **Q. Well, let me maybe break this down just a little**
16 **bit.**

17 **When one of your marketing team members in Utah**
18 **currently under the transition program is discussing the**
19 **value with a customer or potential customer in Utah, do**
20 **they calculate a forecasted savings for the on-site use**
21 **and a separate forecasted savings from the credits at 9.2**
22 **cents?**

23 **A. Well, let me start off first by sort of stating**
24 **that, you know, since the transition program has been**
25 **instituted, Vivint Solar no longer actively sells in**

1 Utah, so we don't have salespeople that go out. So the
2 transition program has impacted the market greatly. It's
3 impacted our company such that we put our effort
4 elsewhere.

5 And -- but to your question, if someone comes to
6 us, hey, you're Vivint Solar. I love the Vivint brand.
7 Will you come out and give me an estimate? Yeah, we'll
8 go out, and we'll send someone out and give them an
9 estimate. And we will look at their utility bill
10 currently, and we will look at their projected savings
11 under the transition program or the estimated production
12 from the solar system. We'll look at the savings under
13 the transition program. We'll estimate, okay, here's how
14 much the monthly bill for your utility is, here's the
15 monthly payment that you'll have to pay to Vivint Solar
16 in terms of your loan, if it's a loan product. And
17 here's your estimated monthly savings for your total
18 energy bills, I guess.

19 **Q. And when you're calculating that expected**
20 **savings, the portion of that expected savings that is**
21 **coming from offsetting a residential retail rate, that's**
22 **not based on a fixed, long-term residential retail rate,**
23 **is it?**

24 **A.** No. Generally speaking, we include escalators,
25 estimated escalators. It's going to be utility specific.

1 And so I don't know what that number is in Utah for Rocky
2 Mountain Power customers.

3 Q. And so the customer in that case isn't going to
4 know what their savings will be, they're going to have a
5 forecast of what -- from Vivint Solar, they would have a
6 forecast of what Vivint Solar thinks that residential
7 retail rates will be throughout the period that you're
8 forecasting the savings; is that correct?

9 A. As with anything, the future is really unknown.
10 And so we provide them what we think is a reasonable
11 estimate, a reasonable forecast of their savings. And
12 so, yes.

13 Q. Okay. And is it your testimony that you could
14 not perform the same forecasting for an avoided cost
15 calculation?

16 A. I'm sorry, for an avoided cost calculation?

17 Q. An export credit rate, for example, that would
18 float in the same way that a residential retail rate
19 does?

20 A. So, I mean, people -- and we've -- you can
21 forecast just about anything, right? But your forecast
22 error is going to be so much higher. It's going to be a
23 lot greater. And so the potential outcomes next year and
24 the year after, the range is much, much greater. And
25 it's very likely that, you know, if you're looking at a

1 forecast into the future and there's sort of a 90 percent
2 confidence interval, you'll have sort of like a cone
3 around what you think the savings are going to be. It
4 very well could be that the lower end of that, the
5 customer isn't saving money, and they're not saving a lot
6 of money, so.

7 **Q. When you give your customers forecasting --**

8 A. So just to button it up to answer your question,
9 yes, of course we could forecast that. But the range of
10 that forecast would deter any customer or just about any
11 customer.

12 **Q. Okay. And do you calculate a confidence**
13 **interval with your forecasted residential retail rates?**

14 A. I don't have that answer for you.

15 **Q. Okay. Thank you. I'm going to, I guess, move**
16 **to a little bit different line of questioning here,**
17 **change gears a little bit.**

18 **Do you have your surrebuttal testimony available**
19 **in front of you?**

20 A. Just one moment. Yes, I have my surrebuttal.

21 **Q. Okay. Would you please turn to -- it's the**
22 **bottom of page 4, and it's Table 3, The Value of Export**
23 **Credit Factors.**

24 A. Okay. I'm there.

25 **Q. And I'd like you to imagine a hypothetical solar**

1 power purchase agreement contracted for by PacifiCorp in
2 this instance. And if it was a --

3 Are you familiar with wholesale power purchase
4 agreements generally?

5 A. Generally. It depends -- your question -- your
6 line of questioning probably -- I may be able to answer
7 it, I may be able to not. But generally.

8 Q. Okay. Would you agree with me, then, that a
9 typical wholesale power purchase agreement for all of the
10 output from a utility scale solar facility would include
11 energy as a deliverable under that contract?

12 A. I would agree with that, as far as I'm aware.

13 Q. And moving down to the second line on your
14 factors, the avoided line loss. In my hypothetical,
15 let's assume that we take your number as an accurate
16 avoided loss.

17 And would you assume that the -- is it fair to
18 assume that that hypothetical solar facility provides
19 generation capacity?

20 A. So we're -- just to be clear, we're skipping
21 "line losses." We're going down to "avoided generation
22 capacity"?

23 Q. Yes.

24 A. We're talking about a whole -- I just want to
25 make sure I'm answering your questions correctly. So

1 we're talking about a wholesale power purchase agreement
2 with an independent power producer. And so that power
3 purchase agreement might include avoided -- well, include
4 compensation for the energy that the solar farm provides
5 but also some generation capacity?

6 **Q. Yes, that's correct.**

7 **A. I would agree with those two things.**

8 **Q. Okay. And then I'm going to skip the "avoided**
9 **transmission capacity." I think we both agree that that**
10 **solar facility may use transmission. And let's assume it**
11 **also uses the distribution, and there's no savings on the**
12 **distribution capacity.**

13 **Would you agree with me that that power purchase**
14 **agreement would have a similar effect of a customer**
15 **generation on avoiding hedging, fuel hedging costs?**

16 **A. That's a good question. I don't know that I**
17 **would be able to answer that. I mean, probably, subject**
18 **to check. I'd have to think a little bit more about it.**
19 **But I'm going to say tentatively yes at this time.**

20 **Q. And again, if this is a solar facility, there**
21 **would be no carbon compliance costs associated with that,**
22 **would there?**

23 **A. With a solar farm?**

24 **Q. Yes.**

25 **A. No. You know, I would maybe like to take a**

1 pause at this moment. Because I think what you're trying
2 to do is draw a comparison with a wholesale independent
3 power produced solar farm and a, you know, an investment
4 that a customer makes on their roof, a rooftop unit to
5 reduce load at the source. And those things -- those
6 things are really apples and oranges. And I don't think
7 it's quite fair to make that comparison. I see that
8 that's what you're doing, and I'm willing to go through
9 that a little bit. But I argue that that's not a fair
10 comparison.

11 **Q. Okay. Well, let's work through it until the**
12 **end, and we can maybe leave it to the Commissioners to**
13 **decide if they think this is a reasonable comparison.**

14 **A.** Well, I guess to your point, then, yes, that
15 solar facility would provide a benefit in terms of
16 reduced carbon compliance costs.

17 So, you know, I took some time before this
18 hearing and before surrebuttal, and I reviewed
19 PacifiCorp's annual 10K filings with the Securities and
20 Exchange Commission. And so in that filing, they have to
21 list out a bunch of risks that -- potential risks to the
22 Company that shareholders should be aware of. And so
23 I've previously in my testimony, I really talked about
24 this lost revenue, the decreased demand risk. And I'm
25 not going to touch that right now.

1 But what you do find also, another risk, is
2 carbon compliance. So they outline pretty extensively
3 all of the risks that they have, you know, faced around,
4 you know, the fossil fuel generation that they have in
5 their fleet and the potential risk that they have for
6 future regulations around that.

7 And so to the extent that Vivint Solar customers
8 are investing in solar, or to the extent that an IPP
9 solar farm is investing in a solar farm and selling that
10 power to Rocky Mountain Power, they are reducing risk to
11 the Company. And my -- my customers, they should be
12 compensated for the reduced risk.

13 **Q. And do you not also agree that the same risk**
14 **reduction would result from a power purchase agreement**
15 **from a wholesale solar provider?**

16 A. Yes, I would say so.

17 **Q. Okay. And so would you accept subject to check**
18 **that the avoided line loss, as you've calculated it, and**
19 **avoided generation capacity, as you've calculated it --**
20 **excuse me. I'm going to strike that question and restate**
21 **it.**

22 **Would you agree with me that the avoided line**
23 **loss, as you've calculated -- the avoided transmission**
24 **capacity, that's \$1.52; the avoided line loss is 31 cents**
25 **per kilowatt hour; the avoided distribution capacity**

1 value of 52 cents per kilowatt hour -- that a combination
2 of those three adds up to \$2.35 per kilowatt hour?

3 A. I would. That math seems sound.

4 Q. Okay. And if that wholesale solar power
5 purchase agreement were \$30 per megawatt hour or 3 cents
6 per kilowatt hour, the combination of those two values
7 would be 5 cents, 5.3 cents -- 5 -- excuse me, 5.35 cents
8 per kilowatt hour?

9 A. I'm sorry, can you please repeat that question?

10 Q. So the 2.35 cents per kilowatt hour that is
11 comprised of line losses, transmission capacity savings,
12 and avoided distribution capacity, if you were to add
13 that to 3 cents per kilowatt hour for the power purchase
14 agreement for the energy from a wholesale solar provider,
15 the total of that would be 5.35 cents per kilowatt hour?

16 A. I mean, that math adds up. I'm not sure why we
17 would do that, though. Because independent power
18 producers that build a solar farm use the transmission
19 system. And there are line losses associated with that
20 transmission system. They have to build that
21 transmission system out to be able to access Rocky
22 Mountain Power's grid.

23 So, like I said earlier, what you're trying to
24 do is compare apples and oranges, and that's not a fair
25 comparison, in my mind.

1 Q. And the 0.31 cents for line losses, and the 1.52
2 cents that you've calculated for transmission capacity
3 savings, and the 0.52 cents that you've calculated for
4 distribution capacity value savings, those aren't the
5 same line losses, transmission capacity savings, and
6 distribution capacity savings that would be saved by
7 on-site generation as compared to utility generation?

8 A. I'm not sure I fully understand your question.

9 But what I would say is that avoided line losses
10 occur because rooftop solar reduces load at the source.
11 So by reducing load at the source, it means that a
12 generator a dozen miles away doesn't have to fire up, and
13 it doesn't have to send power to meet load at a
14 customer's home. And by not having to ship that power to
15 wheel that power to the customer -- you know, a rough --
16 it's not really how it works, but we'll just say that it
17 is -- by not having to wheel that all the way over, it
18 reduces line losses on the system.

19 In terms of avoided calculation -- pardon me.
20 In terms of avoided transmission capacity and avoided
21 distribution capacity, because customers are investing in
22 solar behind their meter, it reduces the need for the
23 Company to invest in the future in transmission capacity
24 and distribution capacity by reducing load at the source.
25 It reduces congestion on feeders and the transmission

1 system more broadly. And because there's marginally less
2 congestion, it reduces the need to build additional
3 capacity in the future.

4 Q. Okay. And you've calculated the value of each
5 one of those items, haven't you?

6 A. I'm sorry? Say that again?

7 Q. I said in your testimony, you presented a
8 calculation of the value of each one of those components,
9 haven't you?

10 A. So in my -- I have -- so line losses and avoided
11 distribution capacity, I have adopted both Solar's
12 numbers. For avoided transmission capacity, yes, I did
13 estimate that.

14 Q. Okay. And you still are confident that those
15 are numbers that you support?

16 A. Yes.

17 Q. Okay. Thank you. That's the only questions
18 that I have. Thank you for your time, Dr. Worley.

19 A. Thank you.

20 CHAIRMAN LEVAR: Thank you, Mr. Jetter.

21 Ms. Wegener, do you have any questions for
22 Dr. Worley?

23 MS. WEGENER: I do. Just a few.
24
25

CROSS-EXAMINATION

BY MS. WEGENER:

Q. Good afternoon, Dr. Worley.

A. Good afternoon.

Q. Mr. Snarr and Mr. Jetter took care of some of my questions, so I'm hoping I'll be able to keep this brief for you.

I want to start out in your direct testimony, Lines 121 to 126. You're talking about some of the things that the Commission should keep in mind when setting the rate here.

And one of the things that you say is that "customer generators should not be treated as independent power producers."

That's right -- that's correct, right?

A. Yes.

Q. And you say that the reason for that is customers invest in behind-the-meter solar to control and reduce their energy bills; whereas, independent power producers build generators to sell power to utilities or intermarkets and earn a rate of return on their investments for a sale of a commodity, right?

A. Yes, that is correct. That is my testimony.

Q. So the primary purpose that customers invest in rooftop solar for is to reduce their energy bill.

1 **Would you agree with that?**

2 A. I would agree with that.

3 **Q. And isn't it true that when a customer installs**
4 **rooftop solar, they don't promise to sell any specific**
5 **amount of power to the Company?**

6 A. The -- who doesn't promise?

7 **Q. The rooftop -- the customer who installs the**
8 **rooftop solar isn't making any promise to the Company**
9 **about selling exported electricity?**

10 A. That's correct.

11 **Q. Okay. And the Company -- the Company only**
12 **receives the leftovers. So the customer consumes what**
13 **they generate. And then the leftovers, after they've**
14 **consumed what they need, go back out onto the grid,**
15 **right?**

16 A. I don't know that I would classify it as
17 "leftovers." But, you know, when customers don't consume
18 all of the power that they generate, that extra power is
19 pushed back onto the grid. And those exports are what
20 we're dealing here in this case. And, you know, the
21 value of those exports can be quite high. If the
22 leftovers are being pushed during system peak, those
23 leftovers could be very valuable to the Company.

24 **Q. Thank you. I understand that.**

25 **The customer can change their usage patterns,**

1 **though, and can change their behavior in a way that might**
2 **affect the amount of the leftovers that are exported.**
3 **Regardless of how valuable those leftovers are, the**
4 **customer's behavior can affect the amount of the**
5 **leftovers that are exported.**

6 A. Are you suggesting that for only CG customers,
7 or for all customers can change their use? Because I --

8 **Q. Well, it wouldn't affect -- I'm sorry. I'll**
9 **answer your question.**

10 It wouldn't affect how much a non CG customer
11 **would export to the grid, correct?**

12 A. So, what I would say is all customers have the
13 ability to change their load profile. So, you know,
14 customers have children. They have babies, and then
15 their energy use goes up. Or they have kids that turn 18
16 and go off to college, and then their energy use goes
17 down. Customers install a hot tub, and their energy use
18 goes up.

19 So there are lots of factors, really, that
20 change how customers' load profile -- customers change
21 their load profile in many different ways. So we could
22 be talking about CG customers, or we could be talking
23 about non CG customers.

24 **Q. But non CG customers don't export to the grid.**
25 **So if they change, it doesn't change the amount exported**

1 to the grid, right?

2 A. Please say that again.

3 Q. Sorry. Non CG customers don't export any
4 electricity?

5 A. Yes.

6 Q. So if they change their behavior, if their kids
7 go off to college or whatever, it doesn't change the
8 amount of electricity that is pushed out onto the grid?

9 A. Non CG customers -- you are correct -- do not
10 push out extra power. They do not push out any power to
11 the grid. And so they have a load profile that looks a
12 certain way. CG customers have a load profile that looks
13 a different way but might be quite similar, except for
14 the fact that they are pushing power out to the grid at
15 certain times.

16 Q. Right. And so if a CG customer buys a panel and
17 is exporting a certain amount onto the grid and then,
18 perhaps, purchases an electric vehicle, the amount of
19 electricity that they continuously push onto the grid
20 would be reduced because they would be using their own
21 electricity, assuming that they're charging it when
22 they're generating. They would be using their own
23 electricity to -- their own generated electricity to
24 power their vehicle or power their battery, and so the
25 amount of exports would go down.

1 A. I would say yeah, net load would go down. That
2 is a true statement.

3 **Q. And the Company couldn't do anything about that**
4 **to increase the amount of electricity that they were**
5 **receiving from that customer?**

6 A. The Company -- could you repeat that? I just
7 want to make sure I fully understand what you're saying.

8 **Q. Just the Company has no mechanism to force that**
9 **rooftop solar customer to export the amount of energy**
10 **that they used to export before they bought their**
11 **electronic vehicle -- or electric vehicle.**

12 A. No. No. You know, like I've said, you know, in
13 my testimony, like you highlighted, you know, retail
14 customers are not independent power producers. They're
15 producing power to offset their local on-site needs.
16 They're going to change their consumption profile, just
17 like any other customer will.

18 The utility does not have the ability to force
19 the customer to give power at certain times and not now.
20 I mean, we could imagine a setup where Rocky Mountain
21 Power had, like, a time-of-use setup for customers, and
22 it could incentivize customers to invest in solar and
23 solar plus storage. And maybe there's some critical peak
24 pricing where the battery could -- you know, when things
25 are really bad on the grid or when prices are very high,

1 then the customer could be dispatching.

2 But that's not what Rocky Mountain Power, I
3 think, is proposing in this export credit case.

4 **Q. Right. And even then, that would just be an**
5 **incentive, right? It wouldn't be, say, liquidated**
6 **damages for not providing electricity?**

7 A. It would be a -- I think you're right that it
8 would be a price incentive. And, you know, the Company
9 has -- I believe it was Mr. Meredith discussed how, you
10 know, the Company wants to, you know, encourage the
11 adoption of DERs and focus on innovation and align
12 customer costs with system costs.

13 And so -- but you're absolutely right. There's
14 no, what did you -- how did you refer to it, liquidation?
15 Or I didn't quite hear that.

16 **Q. Liquidated damages.**

17 A. Yeah, there's none of that. There's none of
18 that going on.

19 **Q. Okay. And if a customer installs rooftop solar,**
20 **and a few years later their inverter fails and they can't**
21 **afford to replace the inverter. I understand that the**
22 **inverters can sometimes be very expensive, like \$5,000 or**
23 **somewhere in that neighborhood. Maybe they're not.**
24 **Maybe Vivint has a great product that's cheaper. But say**
25 **an expensive part of their equipment, like the inverter,**

1 **fails.**

2 **Then they would no longer be exporting energy to**
3 **the grid, correct?**

4 A. Well, I think it depends. You know, in some
5 cases, you know, the homeowner will have a maintenance
6 agreement with the solar installer. And so the solar
7 installer would be on the hook to replace that inverter.

8 Now, if the customer owned the system outright,
9 if they weren't paying for a maintenance agreement, then
10 yeah, they would have to foot the bill for that. But
11 that's, I would say -- well, yeah. I'll just leave it at
12 that.

13 **Q. Thank you. And you talked a little bit with**
14 **Mr. Jetter about independent power producers.**

15 **You'd agree with me that the Company can rely on**
16 **an independent power producer that is under a PPA to**
17 **provide a given amount of electricity, right?**

18 A. I don't know that I can speak to that. I know,
19 you know, sometimes PPAs have must-take obligations. And
20 so, you know, when the IPP is generating power at their
21 renewable facility, the utility has to take it.

22 I'm sure that there are some -- what was the
23 term you used, "liquidated damages"? I don't know that I
24 can speak to an IPP contract, the details of that.

25 **Q. I appreciate that. Thank you.**

1 I'm going to move on and talk a little bit about
2 the costs to install a solar panel. Because we've talked
3 a lot about customers getting a payback on the investment
4 that they make in rooftop solar. And that's something
5 that Vivint is really concerned about; isn't that right?

6 A. Yes. Yes.

7 Q. So you also talk in your testimony about how the
8 cost of solar panels has gone down over the years; is
9 that accurate?

10 A. So I -- you know, that issue actually came up in
11 Ms. Steward's testimony where she highlighted that the
12 cost of solar panels has declined over time. And, in
13 fact, they have, but they've also gone up.

14 You know, I mentioned in my testimony, I think
15 in my rebuttal, a report by NREL. It's a fairly frequent
16 report where they look at different cost components when
17 it comes to installed solar systems. And the panels have
18 generally gone down over time, trend-wise. But there are
19 some quarters where panel costs might go up. And there
20 are other costs as well that can fluctuate. So labor
21 costs might go up. Customer acquisition costs, that's
22 something that my company and other companies have
23 really -- over time, customer acquisition has really gone
24 up.

25 So while I would agree that, you know, squinting

1 your eyes at it, yeah, over the last decade, yeah, the
2 price of panels has gone down, you know, when you
3 consider all of the different costs. While some of them
4 have gone down, some have gone up. Will we expect that
5 price will continue to go down in the future? Well, I
6 certainly hope so. But we -- we're not guaranteed of
7 that. And certainly, some of those components are very
8 likely to go up over time.

9 **Q. But it's possible that a customer that installed**
10 **solar panels 5 years ago, for instance, paid more than I**
11 **would pay today if I were installing a rooftop solar**
12 **system, correct?**

13 A. Are we talking about specific customers or
14 average customers because --

15 **Q. I'm just talking about -- let's have it just be**
16 **me. If I installed a system 5 years ago on my house,**
17 **that system would have cost me more 5 years ago than if I**
18 **was installing the system today on my house probably?**

19 A. I would say very likely, almost without a doubt.
20 I can say that.

21 **Q. Okay. Now, is the value of a kilowatt hour that**
22 **I produce on my system different to the Company if my**
23 **system was installed 5 years ago versus today?**

24 A. Are we talking about the value 5 years ago or
25 the value today? You know, I think --

1 **Q. Today.**

2 A. -- there's inflation. So what you're saying
3 is --

4 **Q. So the value -- the value today of my export is**
5 **not different if I installed my panel yesterday or if I**
6 **installed my panel 5 years ago; isn't that right?**

7 A. I would say that that's correct.

8 **Q. Okay. Thank you.**

9 The final thing I want to talk about is
10 **hamburgers because you have a really interesting analogy,**
11 **and I just want to drill down on it a little bit, about**
12 **subsidies in the hamburger industry; is that right?**

13 A. Yeah. I used that as an example because maybe
14 some of the parties in this case, they might not be
15 familiar with solar installers and the solar market. But
16 I think we all can agree that -- or many of us -- most of
17 us can probably understand the hamburger market. So
18 absolutely. Happy to talk hamburgers.

19 **Q. Your assertion is that a subsidy in the**
20 **hamburger market might increase innovation and creativity**
21 **and quality within the hamburger market; isn't that**
22 **right?**

23 A. I would say that all else being equal, a subsidy
24 is going to lower the marginal cost of providing
25 hamburgers or whatever good that you're trying to sell.

1 And in sort of principles of economics terms, lowering
2 the marginal cost is really shifting the supply curve.
3 That means that we get more companies that are willing to
4 offer that product.

5 And so, you know, if we look at a market like
6 the hamburger market, it's very competitive. And I would
7 argue that the rooftop solar market is very competitive
8 as well. There's a lot of companies that are willing to
9 install rooftop solar.

10 And so if we lower the marginal cost of selling
11 that good through a subsidy, like I would say the
12 investment tax credits, then we're going to have more
13 companies in that market, and it's going to lead to more
14 companies trying to acquire customers. They're going to
15 be doing more things to think of new products and
16 services to get customers.

17 Now, to be clear, there's been a lot of talk in
18 this case from the Company saying that, Oh, there's this
19 cross subsidy issue and that nonsolar customers are
20 paying for solar customer -- paying for system costs.

21 I don't believe that's the case. Based on the
22 calculations that I've done for the export credit rate,
23 based on the calculations that Vote Solar has done, it's
24 roughly equal to the retail rate. And so --

25 **Q. I understand that's what you believe. But we're**

1 just talking hamburgers and hypotheticals right here.

2 A. Fair enough.

3 Q. You'd agree with me that hamburgers are a subset
4 of a type of food, right?

5 A. I would agree, yes.

6 Q. Took you a second there.

7 And some people might prefer hamburgers, but
8 some people might prefer other types of food, right?

9 A. Yeah, sure. I'd agree with that.

10 Q. So in this very hypothetical case, isn't it true
11 that increased innovation in the hamburger industry
12 really only benefits people who want hamburgers?

13 A. Well, you know, for a good like hamburgers,
14 that's a private good. There are no external benefits
15 from that. And my eating hamburgers doesn't really
16 impact my neighbor's eating of hamburgers or not eating
17 of hamburgers or eating of other foods.

18 What we're talking about -- and so I get what
19 you're saying that perhaps my analogy isn't very good and
20 that, oh, I'm trying to draw conclusions from one market
21 that's really not similar to the other markets. And
22 that's not really my point. My point was really to show
23 that in competitive markets, subsidies really do drive
24 innovation.

25 And if we talk about the market for rooftop

1 solar, it's a, what I would suggest is a very competitive
2 market. And subsidies -- you know, the Company,
3 Ms. Steward said that, you know, something about like
4 true innovation or true competition is the only way to
5 get good -- I don't remember exactly what she said. But
6 it's just plain wrong. And so --

7 **Q. Fair enough. And I think that my point is more**
8 **that I -- if I'm a vegetarian, I don't benefit from a**
9 **hamburger subsidy and shouldn't have to pay one.**

10 **Wouldn't you agree with that?**

11 A. Well, you know, if you go to Burger King, not to
12 shill for any specific company, they do have the
13 Impossible Burger. And they added that because they want
14 to think innovatively, and they want to reach out and
15 find additional customers.

16 And so, you know, quite frankly, the hamburger
17 market doesn't require subsidies. And I'm not saying
18 that the hamburger market should get subsidies.

19 **Q. And a subsidy to the hamburger market that**
20 **improves the hamburger market could reduce innovation in**
21 **another market, like a chicken market, because producers**
22 **would be incentivized to focus on one specific type of**
23 **food.**

24 A. I don't know that I necessarily agree with that.
25 You know, I would argue that Chick-fil-A, which is a

1 chicken, fast food chicken, they are a substitute good
2 for McDonald's hamburgers. And so innovation in one
3 market may lead to spillover effects in another good,
4 another product.

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

6 **A.** Thank you.

7 CHAIRMAN LEVAR: Thank you, Ms. Wegener.

8 We'll all go home and watch the Ray Kroc file
9 pic tonight.

10 Mr. Mecham, any redirect for Dr. Worley?

11 MR. MECHAM: Actually, I have no redirect for
12 Dr. Worley.

13 CHAIRMAN LEVAR: Okay. Thank you.

14 Commissioner Allen, do you have any redirect --
15 sorry, any questions for Dr. Worley?

16 COMMISSIONER ALLEN: No, I don't have any
17 questions, but I did enjoy the conversation. Thank you.

18 CHAIRMAN LEVAR: Commissioner Clark, do you have
19 any questions for Dr. Worley?

20 COMMISSIONER CLARK: No questions. Thank you.

21 THE WITNESS: Thank you.

22 CHAIRMAN LEVAR: Thank you. I have maybe just
23 one.

CROSS-EXAMINATION

BY CHAIRMAN LEVAR:

Q. This isn't an issue that you went into great detail. There was a Vote Solar witness that went into more detail on this, but it's a component of some of the issues that you talk about.

The capacity issues that you discussed, one component of that is capacity contribution values.

A. Yes.

Q. At a very high level, would you say that we should consider capacity contribution values for customer generated solar in aggregate in a similar way that we consider capacity contribution values for fixed utility scale solar?

A. That's a good question. So I mean, clearly, I'd have to think a little bit more about it. Utility scale solar, there's a couple of different varieties. Sometimes it's a fixed amount, sometimes it's tracking. And so the capacity contribution is going to be different there. And certainly on a customer's roof, it's fixed.

But if you think about it in aggregate, is it really like, well, we've got some that are facing this direction -- some that are facing southeast, some that are facing south, some that are facing southwest. So effectively over the day, is it kind of like in aggregate

1 it behaves like it's tracking? I don't know. I'd have
2 to think a little bit more about that.

3 What I would say is that the capacity
4 contribution that I adopted in my surrebuttal was the
5 capacity contribution that Dr. Milligan estimated. And
6 you know, I think his approach is right. So you might
7 consider follow-up questions with him.

8 **Q. Okay. Thank you. I will.**

9 **A.** Thank you.

10 CHAIRMAN LEVAR: Thank you for your testimony
11 this afternoon, Dr. Worley.

12 THE WITNESS: Thank you.

13 CHAIRMAN LEVAR: Anything further for Vivint,
14 Mr. Mecham?

15 MR. MECHAM: Nothing further. That's --
16 that's -- Dr. Worley's our only witness.

17 CHAIRMAN LEVAR: Okay. Well, rather than move
18 on and start with another witness, maybe we should take a
19 few minutes and talk about closing statements, unless you
20 all would prefer to talk about them in the morning. I
21 can tell you this: We will know definitively in the
22 morning how long we can expect Monday night's public
23 witness hearing to last. Today was our cutoff for people
24 to sign up, so we might still get some more signups. If
25 it affects at all timing for the closing arguments, I can

1 tell you where we are right now in just a moment. I'm
2 pulling it up.

3 Yeah, brace yourselves. We're up to 9:30 p.m.
4 So we're at 7 1/2 hours for the public witness hearing
5 Monday night. So if that affects your thoughts on when
6 you want to do closing arguments -- or I guess the
7 discussion is still at "if."

8 So do we want to discuss the "if" now, or do we
9 want to adjourn and discuss it first thing in the
10 morning? Any preferences?

11 MR. MARGOLIN: Chairman, we're happy to discuss
12 it now, or we can wait until tomorrow morning when you
13 have more definite details. It's really up to you.

14 MR. JETTER: I would actually just mirror that.
15 And I'm inclined to (inaudible).

16 CHAIRMAN LEVAR: I'm sorry, Mr. Jetter. Would
17 you repeat that?

18 MR. JETTER: I would actually just mirror what
19 Vote Solar said a moment ago. We're fine to do it now or
20 later.

21 MR. SNARR: I think that on behalf of the
22 Office, whether we have a 2 hour or 7 1/2 hour session
23 with public witnesses Monday night doesn't really affect
24 our view on closing argument. We'll do it if we do it,
25 and we won't do it if we don't need to.

1 Frankly, the Office believes that the
2 cross-examination has been thorough and that the prefiled
3 testimony has been significant and well-summarized by the
4 witnesses. And we don't see any particular need for
5 closing arguments. We'll certainly participate and go
6 along with whatever the Commission says, and we can do it
7 before or after the public witnesses on Monday, or
8 however long this case takes.

9 But just to give you a reaction, the Office
10 doesn't necessarily think that closing arguments are
11 needed.

12 MR. MECHAM: I would say that closing arguments
13 could be helpful, but I don't want to do it at 9:30 in
14 the evening.

15 MR. HOLMAN: I would reiterate Mr. Mecham's
16 sentiment. I think closing arguments could be helpful.
17 There's been a lot of testimony. We're still not even
18 done. Vote Solar's witnesses haven't even gone yet. And
19 I would prefer not doing it at the conclusion of the
20 public hearing.

21 MR. MECHAM: And I would also add, Mr. Chair, if
22 a party doesn't want to engage in closing arguments, they
23 don't need to.

24 CHAIRMAN LEVAR: Well, thank you. Just hearing
25 that feedback at this point, why don't we plan to try to

1 nail this down first thing in the morning.

2 I can let you know that I think, as we've had
3 internal discussions, that we would find closing
4 arguments somewhat helpful. But I think we probably
5 should have a conversation about length of those closing
6 arguments, if parties are interested in limiting the
7 length, and when we should schedule them for.

8 So why don't we plan to try to make some
9 progress on this tomorrow morning before we go to our
10 first witness, if there's no objection to that plan.

11 MR. MECHAM: That's fine.

12 CHAIRMAN LEVAR: And I -- I suppose we could
13 also discuss whether closing arguments need to be after
14 the public witness hearing. I'm not sure they need to
15 be. But if parties prefer to wait until after that
16 hearing is done and have them the next day, I don't know
17 that we have a preference that way. So why don't we just
18 make that one of the issues we talk about tomorrow
19 morning, too.

20 MR. MECHAM: That will be fine.

21 MR. JETTER: That sounds good to the Division.

22 CHAIRMAN LEVAR: Anything further from anyone
23 else before we go into recess until tomorrow?

24 MR. MECHAM: No.

25 MR. JETTER: No.

1 CHAIRMAN LEVAR: Okay. We'll see everyone at
2 9:00 Utah time tomorrow morning. Thank you.

3 (The matter adjourned at 4:49 p.m.)
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CERTIFICATE

State of Utah)
 ss.
County of Salt Lake)

I, Michelle Mallonee, a Registered
Professional Reporter in and for the State of Utah, do
hereby certify:

That the proceedings of said matter was
reported by me in stenotype and thereafter transcribed
into typewritten form;

That the same constitutes a true and correct
transcription of said proceedings so taken and
transcribed;

I further certify that I am not of kin or
otherwise associated with any of the parties of said
cause of action, and that I am not interested in the
event thereof.

WITNESS MY HAND at Salt Lake City, Utah,
this 15th day of October, 2020.



Michelle Mallonee, RPR, CCR
Utah CCR #267114-7801
Expires May 31, 2022

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