

In the Matter Of:

In Re: Service Schedule 37 17-035-T07 and Avoided Cost 17-035-37

HEARING, DOCKET NO. 17-035-T07, 17-035-37

December 04, 2017

Job Number: 409248

1 BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

2 In the Matter of Rocky Mountain Docket No. 17-035-T07
3 Power's Proposed Tariff Revisions to
4 Electric Service Schedule No. 37,
5 Avoided Cost Purchases from Qualifying
6 Facilities

6 In the Matter of Rocky Mountain Docket No. 17-035-37
7 Power's 2017 Avoided Cost Input
8 Changes Quarterly Compliance
9 Filing

9
10 HEARING PROCEEDINGS

11 TAKEN AT: Utah Public Service Commission
12 4th Floor
13 160 East 300 South
14 Salt Lake City, Utah

14 DATE: Monday, December 4th, 2017

15 TIME: 9:00 a.m.

16 REPORTER: Mary R. Honigman, R.P.R.

17 Job No. 409248

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1 PROCEEDINGS

2 COMMISSIONER LEVAR: We are here this
3 morning for two Public Service Commission dockets
4 that have been consolidated, Docket No. 17-035-T07,
5 which is Rocky Mountain Power's Proposed Tariff
6 Revisions to Electric Service Schedule No. 37,
7 Avoided Cost Purchases from Qualifying Facilities,
8 and Docket No. 17-035-37, Rocky Mountain Power's
9 2017 Avoided Cost Input Charges Quarterly Compliance
10 Filing. We'll go to appearances now for the
11 Utility.

12 MS. HOGLE: Good morning,
13 Chair LeVar, Commissioner Clark, and Commissioner
14 White. My name is Yvonne Hogle, and I'm here on
15 behalf of Rocky Mountain Power. With me at counsel
16 table is Mr. Dan MacNeil, who is PacifiCorp's
17 resource and commercial strategy adviser. Thank
18 you.

19 COMMISSIONER LEVAR: Thank you. For
20 the Division of Public Utilities?

21 MR. JETTER: Good morning. I'm
22 Justin Jetter, and I'm here today representing the
23 Utah Division of Public Utilities. The Division
24 intends to call a witness at the hearing today,
25 Dr. Abdinasir Abdulle.

1 COMMISSIONER LEVAR: For the Office?

2 MR. SNARR: My name is Steven Snarr.

3 I represent the Office of Consumer Services.

4 COMMISSIONER LEVAR: Thank you.

5 We'll go to Utah Clean Energy next.

6 MS. HAYES: Good morning.

7 Sophie Hayes on behalf of Utah Clean Energy. With
8 me at counsel table is Mr. Ken Dragoon. Utah Clean
9 Energy will also be calling Kate Bowman.

10 COMMISSIONER LEVAR: Thank you. For
11 the Renewable Energy Coalition?

12 MR. SANGER: My name is Irion Sanger
13 on behalf of Renewable Energy Coalition, and here
14 with me today is Mr. John Lowe, the executive
15 director of Renewable Energy Coalition. We'll also
16 be calling Mr. Neal Townsend as a witness for
17 Renewable Energy.

18 COMMISSIONER LEVAR: Thank you. Does
19 anyone else have any preliminary matters before we
20 go to the Utility's first witness? Ms. Hogle.

21 MS. HOGLE: Thank you. The Company
22 calls Mr. MacNeil.

23 DANIEL MACNEIL,
24 having been first duly sworn to tell the truth, was
25 examined and testified as follows:

1 BY MS. HOGLE:

2 Q Good morning, Mr. MacNeil.

3 A Good morning.

4 Q Could you please state your name and your
5 position for the record?

6 A Daniel MacNeil, M-a-c N-e-i-l, and I'm a
7 resource and strategy adviser for PacifiCorp.

8 Q And in that capacity, did you prepare
9 direct testimony with work papers dated August 17th,
10 2017, rebuttal testimony dated with work papers
11 October 31st, 2017, and surrebuttal testimony dated
12 November 21st, 2017?

13 A Yes.

14 Q And do you have any changes to any of
15 those pieces of testimony that you would like to
16 make today?

17 A No.

18 Q So if I were to ask you the questions
19 therein again here today, your answers would be the
20 same?

21 A Yes.

22 MS. HOGLE: Thank you. At this time,
23 I'd like to move for the admission into the record
24 of Mr. MacNeil's direct testimony with work papers
25 dated August 17, 2017, rebuttal testimony with work

1 papers dated October 31st, 2017, and surrebuttal
2 testimony dated November 21st, 2017.

3 COMMISSIONER LEVAR: If anyone
4 objects to this motion, please indicate to me.

5 MS. HAYES: Yes. I would prefer to
6 cross-examine the witness before agreeing to admit
7 those pieces of testimony into the record, if that's
8 all right.

9 COMMISSIONER LEVAR: Ms. Hogle, do
10 you have any response to that objection?

11 MS. HOGLE: I guess I'm a little
12 surprised because to my knowledge, Ms. Hayes has
13 never required that the Company's testimony not be
14 admitted until after cross-examination. I guess I'm
15 not sure what the difference is.

16 MS. HAYES: There are some statements
17 in Mr. MacNeil's testimony that I would like to
18 clarify because I feel like he misrepresented Utah
19 Clean Energy's position.

20 COMMISSIONER LEVAR: Considering the
21 objection, I don't think any party could be
22 prejudiced if we put off the admission of the
23 testimony until after cross-examination. It's not
24 typically how we do things, but I don't see any
25 prejudice to Rocky Mountain Power to do so, so I

1 think we'll hold the motion until the conclusion of
2 cross-examination.

3 MS. HOGLE: And does Ms. Hayes
4 believe that he misrepresented UCE's position with
5 respect with to all of his testimony or is it --

6 MS. HAYES: No, just specific
7 sections.

8 MS. HOGLE: In each of the direct,
9 rebuttal, and surrebuttal testimony?

10 MS. HAYES: Rebuttal and surrebuttal.

11 MS. HOGLE: Do you have any objection
12 to anything in the direct testimony?

13 MS. HAYES: No.

14 COMMISSIONER LEVAR: And so you're
15 modifying your objection at this point?

16 MS. HOGLE: I am. Thank you.

17 COMMISSIONER LEVAR: If anyone
18 objects to admission of the direct testimony with
19 the exhibits and work papers, please indicate to me.
20 I'm not seeing any objections, so that motion is
21 granted. We'll await a second motion after
22 cross-examination.

23 BY MS. HOGLE:

24 Q Mr. MacNeil, do you have a summary that
25 you would like to provide to the Commission and

1 **parties today?**

2 A I do.

3 **Q Please proceed.**

4 A Thank you, Chairman LeVar, and
5 Commissioners White and Clark, for the opportunity
6 to testify this morning.

7 The Public Utility Regulatory Policies Act
8 of 1978, PURPA, specifies that qualifying
9 facilities, QFs, are to be paid a rate that is just
10 and reasonable to retail customers and does not
11 exceed a utility's incremental cost of alternative
12 electric energy. This is known as the customer
13 indifference standard. Because QF power purchase
14 expense is included in the Company's Energy
15 Balancing Account in Utah, the rates paid to QFs are
16 generally subject to true-up and collected from
17 customers annually. As a result, while the Company
18 supports setting accurate avoided costs for
19 compliance with PURPA and in the interest of its
20 customers, it is generally indifferent to the rates
21 QFs ultimately receive. With that in mind, the
22 primary questions in this proceeding are twofold:
23 First, what methodology should be used to produce
24 avoided cost pricing for QFs, consistent with the
25 customer indifference standard. And second, what

1 avoided cost prices for small QFs should be
2 published in the Schedule 37 tariff.

3 The Company currently uses the Partial
4 Displacement Differential Revenue Requirement
5 methodology, PDDRR, to calculate avoided cost prices
6 for non-standard QFs under Schedule 38. In this
7 proceeding, the Company has also proposed using the
8 PDDRR methodology for standard QFs under Schedule
9 37.

10 The PDDRR methodology includes two
11 components: First, avoided fixed costs are
12 calculated based on the proxy resource in the IRP
13 preferred portfolio that a QF is assumed to
14 displace. Second, avoided energy costs are
15 calculated using the Generation and Regulation
16 Initiative Decision Tools model, GRID, which is also
17 used to set net power costs in rate cases. Two
18 scenarios are prepared. The first has existing
19 resources, planned resources from the most recent
20 IRP preferred portfolio, as well as signed and
21 prior-queued potential QFs.

22 The second run is the same as the first
23 run with two exceptions: the capacity of the
24 displaced IRP resource is reduced and the operating
25 characteristics of the proposed QF project are

1 added, with its energy dispatched at zero cost. The
2 difference in costs between the two runs is the
3 avoided energy cost.

4 Identifying the proxy resource to be
5 displaced is the issue at the core of the proposals
6 made by the parties. In the IRP and when the
7 Company is proposing resource additions, the Company
8 uses sophisticated portfolio optimization models to
9 identify the changes in its portfolio that are
10 expected to occur with different combinations of
11 resources. These models are powerful but take a
12 great deal of time to run. The intent of the PDDRR
13 methodology is to produce a reasonable estimate of
14 expected portfolio changes for the purpose of
15 providing prices quickly in response to the
16 hundreds of QF pricing requests the Company receives
17 each year. In accordance with the Commission order
18 in Docket No. 12-035-100, when the Company's IRP
19 preferred portfolio includes renewable resources
20 that are the same type as a QF project, the next
21 deferrable renewable resource of that type in the
22 preferred portfolio is used as a proxy. If the
23 Company's IRP preferred portfolio does not include a
24 renewable resource that is the same type as a QF,
25 the next deferrable thermal resource in the IRP

1 preferred portfolio is used instead. Resources
2 become part of the IRP preferred portfolio because
3 they support an optimized balance of cost and risk
4 for the portfolio as a whole. Limiting deferral of
5 renewable resources to QFs of the same type helps
6 the existing methodology to maintain this optimized
7 balance, thus ensuring the customer indifference
8 standard is met.

9 The Coalition and Utah Clean Energy
10 instead suggest that it is appropriate to prepare
11 avoided costs for QFs of all types, based on
12 displacement of renewable resources of any type. In
13 particular, they propose that avoided costs be based
14 on the costs and characteristics of the 2021 Wyoming
15 wind resource identified in the 2017 IRP preferred
16 portfolio. Despite this being contrary to the
17 Commission's previous ruling, Parties provide no
18 evidence that having baseload or solar resources
19 defer the 2021 Wyoming wind resource, maintains a
20 reasonable balance of cost and risk consistent with
21 the IRP preferred portfolio, nor have they produced
22 any calculations of avoided cost which would allow
23 the impact of their proposals on customers to be
24 identified. In fact, when the Company asked the
25 Coalition and Utah Clean Energy to provide

1 calculations illustrating their proposed
2 methodologies, both responded that they had not
3 prepared calculations. The Company's best
4 interpretation of avoided costs based on deferral of
5 the 2021 wind resources indicates that avoided costs
6 would be lower than under the Company's proposal.
7 This indicates that there are other higher cost
8 resources remaining in the Company's portfolio
9 besides the 2021 wind resources, such that they are
10 not an appropriate basis for setting avoided costs.
11 Because there is no evidence in the record which
12 demonstrates the effect of the assumption changes
13 proposed by the Coalition and Utah Clean Energy, it
14 is impossible to judge whether the resulting avoided
15 cost prices would be just and reasonable and
16 consistent with the customer indifference standard.

17 Utah Clean Energy has also proposed that
18 avoided costs be calculated based on the deferral of
19 thermal resources as is done today but with a floor
20 on avoided costs based on renewable resources in the
21 IRP preferred portfolio. The proposal produces
22 inaccurate avoided costs by ignoring geographic and
23 operational differences between renewable resources
24 and by failing to account for the aggregate effects
25 of QFs on the Company's portfolio and system.

1 Further, to the extent the IRP evaluated
2 resource options that are of the same type and
3 location as a QF, the absence of those resources in
4 the preferred portfolio is evidence that their costs
5 are in excess of avoided costs. Again, Utah Clean
6 Energy has not provided any supporting documentation
7 or calculations that would allow avoided cost rates
8 to be prepared based on its proposal so it is
9 impossible to judge the impact, relative to the
10 customer indifference standard.

11 The Coalitions' proposal to allow QFs to
12 choose between renewable and non-renewable pricing
13 options is inconsistent with FERC precedent, as Utah
14 does not have a renewable portfolio standard or
15 other obligation to acquire renewable resources.
16 Because system operations and dispatch would be the
17 same for a given project regardless of renewable
18 energy credit ownership, there's no basis for paying
19 different prices for renewable and non-renewable
20 resources.

21 With regard to the QFQ for the purposes of
22 setting Schedule 37 rates, the Company's May filing
23 in Docket No. 17-035-T07 calculated Schedule 37
24 rates assuming a queue position was established at
25 the end of the queue at the time the 2017 IRP was

1 filed. In response to concerns raised by parties,
2 the Company's August filing proposed rates based on
3 a smaller queue that only included higher queued
4 resources from the May filing that had not dropped
5 out or moved to the end of the queue by that time.
6 The remaining resources are roughly 36 percent of
7 the queue position from the May filing. Again, this
8 does not represent the end of the queue in August,
9 but rather a point in the middle that is intended to
10 more accurately represent the Company's avoided
11 costs between now and the next Schedule 37 tariff
12 update, likely in June 2018.

13 Utah Clean Energy proposes that small QFs
14 interconnected on the distribution system receive
15 higher rates to account for avoided line losses.
16 However, merely being connected to the distribution
17 system does not necessarily indicate that a resource
18 has lower line losses. Since this is a complicated
19 issue that hasn't been considered in detail and
20 Utah Clean Energy hasn't made a specific proposal, I
21 believe it would be better to address avoided line
22 losses at a future time.

23 Finally, in June 2017, the Company
24 proposed two non-routine changes to the Schedule 38
25 avoided cost methodology. Both were contested by

1 parties. These changes concern renewable energy
2 credit ownership when a QF is displacing a renewable
3 resource and avoided energy costs beyond the end of
4 the IRP study period. None of the parties oppose
5 the Company's non-routine updates.

6 In summary, to achieve just and reasonable
7 avoided cost rates and maintain the customer
8 indifference standard, the Company requests that the
9 Commission: 1) approve the Company's two non-routine
10 methodology changes but otherwise maintain the
11 existing Schedule 38 methodology, including
12 specifically the like-for-like deferral of renewable
13 resources; 2) acknowledge that avoided costs for
14 Utah wind QFs are appropriately based on deferral of
15 2013 wind resources in the 2017 IRP preferred
16 portfolio rather than the 2021 wind resources; 3)
17 deny the Coalition's request that QFs be allowed to
18 choose between renewable and non-renewable pricing
19 options and; 4) accept the use of the Schedule 38
20 methodology for setting Schedule 37 rates,
21 specifically by approving the rates proposed in the
22 Company's August filing based on a partial QF queue.
23 That concludes my summary.

24 MS. HOGLE: Thank you, Mr. MacNeil.
25 Mr. MacNeil is available for cross-examination.

1 COMMISSIONER LEVAR: Thank you,
2 Ms. Hogle. Mr. Jetter?

3 MR. JETTER: I don't have any
4 questions.

5 COMMISSIONER LEVAR: Thank you.
6 Mr. Snarr?

7 MR. SNARR: The Office has no
8 questions.

9 COMMISSIONER CLARK: Pardon me,
10 Chair LeVar. I'm led to understand that the parties
11 who are listening not in this room are having a
12 difficult time hearing the witness. Could we ask
13 you to pull the microphone a little closer to your
14 mouth?

15 COMMISSIONER LEVAR: Thank you.
16 Ms. Hayes.

17 CROSS-EXAMINATION

18 BY MS. HAYES:

19 Q Good morning, Mr. MacNeil. In your
20 rebuttal testimony and again in your summary this
21 morning, you indicated that Utah Clean Energy
22 proposed that all QF resources should be eligible to
23 defer the 2021 Wyoming wind and transmission
24 resources. Utah Clean Energy did not actually
25 propose that, did they?

1 A I guess I'm not -- I understand that the
2 testimony says that, but it isn't clear to me how
3 you can add a QF and pay them based on a resource
4 and not remove that resource. How is that avoided
5 cost?

6 Q Can you point to me somewhere in Utah
7 Clean Energy's testimony where we propose that
8 resources be able to defer the wind and
9 transmission?

10 A I guess the clearest thing I can point to
11 is the data request which says you don't have any
12 calculations. If you want me to sit here and have
13 me go through your testimony again, I could, but --

14 Q So would you agree that it is a
15 mischaracterization of Utah Clean Energy's testimony
16 to say that we do propose -- that the wind be
17 deferrable?

18 A I would agree that to the extent you
19 indicate that your testimony does not indicate that
20 that's your position.

21 Q In fact, Mr. Dragoon's testimony said that
22 the deferrability of that wind is irrelevant,
23 correct?

24 A I'll take that, subject to check.

25 Q All right. If we could turn to your

1 surrebuttal testimony, at lines 48 to 50. I'll find
2 you a page number momentarily.

3 A I'm there.

4 Q You say that Mr. Dragoon appears to
5 conclude that Mr. Townsend's analysis was
6 inadequate, although Mr. Dragoon does not actually
7 conclude that, does he? I'll point you to
8 Mr. Dragoon's rebuttal testimony on page 5, starting
9 at line 70. Do you want to read that?

10 A I'm reading it. Just one moment, please.

11 Q Doesn't Mr. Dragoon say that
12 Mr. Townsend's analysis shows that different
13 operating characteristics need not be a barrier to
14 setting avoided cost rates?

15 A It does say that, and he's describing his
16 review of the example provided. But he says there
17 may be simpler solutions.

18 Q Sure. But Mr. Dragoon's testimony
19 actually says pretty much the opposite of what you
20 represented in your testimony, correct?

21 A Implementation of the Commission's ruling
22 that renewable resources can defer renewable
23 resources deserves more thought and discussion than
24 it has received to date. I mean, that says there
25 hasn't been enough analysis which means the analysis

1 is inadequate.

2 Q Well, do you agree that reasonable minds
3 could differ on that?

4 A On more thought and discussion?

5 Q Utah Clean Energy has recommended that
6 this topic does deserve more thought and is
7 discussion, but Mr. Dragoon prefaced that by saying
8 that Mr. Townsend's analysis shows that different
9 operating characteristics need not be a barrier to
10 setting avoided cost rates, correct?

11 A It does say that and I guess I would agree
12 that that need not be a barrier, but I think it is
13 still a barrier based on the record we have and the
14 information we've been able to achieve in this
15 docket.

16 Q So in your surrebuttal testimony at page
17 3, you give an example. You say that Mr. Dragoon
18 recommends replacing 3.8 megawatts of wind with
19 1 megawatt of tracking solar. Mr. Dragoon did not
20 actually make that recommendation, did he?

21 A I'm not sure.

22 MS. HOGLE: I'm not sure where she's
23 reading from from his surrebuttal. Can you point to
24 line numbers, Ms. Hayes?

25 MS. HAYES: Lines 56 to 59, and

1 there's also a footnote.

2 MS. HOGLE: Are you there,
3 Mr. MacNeil?

4 THE WITNESS: Yes. Please repeat the
5 question.

6 BY MS. HAYES:

7 **Q Mr. Dragoon didn't actually make that**
8 **recommendation, did he?**

9 A I guess I'm still not clear on what
10 Mr. Dragoon's recommendation is. He suggests that
11 it's possible to pay a price based on a renewable
12 resource in the portfolio, but, you know, using the
13 operational characteristics to adjust that price
14 somehow, but I haven't seen any calculations which
15 would say how many megawatts. The only translation
16 between resources which has been on the table that
17 I've seen is capacity equivalence. That's what the
18 PDDRR methodology uses, that's the example I give
19 there.

20 **Q Right. So you give an example based on**
21 **capacity equivalence; is that correct?**

22 A That example is based on capacity
23 equivalence.

24 **Q Right. And that is not an example that**
25 **Mr. Dragoon included in his testimony, correct?**

1 A Certainly, that example is not in the
2 testimony.

3 Q Okay. Thank you. But Mr. Dragoon, in his
4 testimony, did recommend using a cost per kilowatt
5 hour as a floor on avoided cost prices?

6 MS. HOGLE: Excuse me. Can you
7 please point to the piece of testimony and line
8 number where he makes that recommendation, please,
9 for the witness?

10 MS. HAYES: Yes. In Mr. Dragoon's
11 testimony?

12 MS. HOGLE: Yes. If he's to answer
13 any questions, he needs to know what you're looking
14 at.

15 BY MS. HAYES:

16 Q Yes. If you'll look at Mr. Dragoon's
17 direct testimony at the bottom of page 10, and going
18 on to page 11. And I'll give you a chance to read
19 that, and let me know when you've read that.

20 A I've read that.

21 Q So he does recommend using a cost per
22 kilowatt hour as a floor on renewable avoided cost
23 prices, adjusting it for resource characteristics;
24 is that correct?

25 A Yes.

1 Q All right. And so a kilowatt hour
2 comparison is more of an energy comparison, correct?

3 A Certainly, the example which is included
4 here is an energy comparison, but the adjustments
5 for any differences such as capacity value or
6 integration costs, quoting from lines 196 to 198, I
7 don't know whether those are also energy based or
8 what those might be based on.

9 Q Okay. So if you'll go back to your
10 rebuttal testimony at page 20, line 431, you
11 insinuate that Utah Clean Energy's proposal ignores
12 the benefits of preferred portfolio resources; is
13 that correct?

14 A Yes.

15 Q Were you referring to that portion of
16 Mr. Dragoon's testimony that we were just looking
17 at?

18 A I believe so, yes.

19 Q In that section, didn't Mr. Dragoon
20 specifically condition his example on resources of
21 similar characteristics and adjust for differences
22 in other characteristics?

23 A What was that example again from his
24 testimony?

25 Q The dollar per megawatt hour floor, and

1 **then adjusting for resources with similar**
2 **characteristics and adjusting for other**
3 **characteristics?**

4 MS. HOGLE: And that was, again, in
5 what piece of testimony?

6 A I'm there and can answer the question.
7 His example appears to be based on similar
8 characteristics, but the question he asks himself is
9 how do you propose to calculate an avoided cost
10 floor for renewable QF if it is a different type
11 than the renewable resource called for in the IRP
12 preferred portfolio. Of a different type, I read
13 that to mean different characteristics.

14 Q **Okay. What is the annual cap on Schedule**
15 **37 projects?**

16 A The cap within the tariff is 25 megawatts
17 signed in a tariff before the tariff is replaced.

18 Q **25 megawatts will not have a significant**
19 **impact on avoided cost pricing will it?**

20 A It could have a significant impact over
21 the life of 25 megawatts of resources.

22 Q **Relative to 12.2 megawatts and**
23 **800 megawatts, for example, 25 megawatts is a lot**
24 **closer to 12.2, isn't it?**

25 A Yes.

1 Q And you testified that 12.2 megawatts
2 won't have a significant impact on avoided cost
3 prices, didn't you?

4 A 12.2 megawatts of what?

5 Q QFs.

6 A QFs. Which line was that?

7 Q I don't know. I'll look for that and get
8 back to you on that. Line 111 in your surrebuttal
9 testimony.

10 A So the point here is that it's not how
11 many megawatts we might acquire under Schedule 37
12 that could impact avoided costs, but during the term
13 that Schedule 37 tariff rates are in effect, we
14 could acquire up to 800 megawatts of new resources
15 via our fees, Schedule 38, etc., and the rates in
16 Schedule 37 could be overstated at that point.

17 Q Do you agree that standard-offer QFs have
18 smaller capacity increments?

19 A Yes.

20 Q And shorter lead times?

21 A Sure.

22 Q Do Schedule 38 projects take less time to
23 complete than Schedule 37 projects?

24 A I guess I'm not sure of the relevance.

25 Q Well, is it reasonable to assume that an

1 **80-megawatt project takes less time to complete than**
2 **a 3-megawatt project?**

3 A Ultimately, I don't care how long it takes
4 a QF to come online. I care about the term in which
5 it is online and the Company's avoided costs during
6 that time period. For both Schedule 37 and 38, we
7 assume partial displacement, which is, you can
8 receive a slice of the next resource even if that
9 resource can't be modified by that size. You
10 perfectly can remove your aggregate capacity worth
11 of that resource. That's how we account for lead
12 times and capacity increments by not restraining --
13 we wouldn't say you're not big enough to defer a new
14 gas plant. We'll let you defer a tiny slice of that
15 gas plant.

16 Q **Doesn't subjecting Schedule 37 QFs to the**
17 **queue of Schedule 38 QFs effectively assume that**
18 **they will come online after the Schedule 38 QFs?**

19 A The point is that we're setting an avoided
20 cost that is reasonable and just for customers, that
21 includes the conditions we expect to occur during
22 the term of the tariff. So, yes, we're calculating
23 avoided cost that includes resources being brought
24 online in front of them to account for that effect.

25 Q **Right. Because the resources that come on**

1 first displace the higher cost deferrable resources,
2 correct?

3 A Yes.

4 Q And so making small QFs subject to the
5 queue is the same as assuming that they will take
6 longer to be completed than all the QFs in front of
7 them, correct?

8 A It's not saying that they will be longer
9 to be completed; it's saying that the capacity
10 increments that they're being paid for come after
11 capacity increments that will be acquired by the
12 Company from other QFs and other resources before
13 that QF -- the small QF -- is signed.

14 Q Right. Which is the same as saying that
15 the 3-megawatt resource will be signed after those
16 80-megawatt resources, correct?

17 A Correct.

18 Q So with regard to the like-for-like
19 deferral, rather than basing capacity payments for
20 all renewable QFs on the fixed cost of the next
21 deferrable resource, you are instead designating
22 multiple next deferrable resources; is that correct?

23 A The current Schedule 38 methodology says
24 that when there's a like renewable resource, it
25 defers -- a QF of the same type defers that

1 resource. So, yes. When there's a like renewable
2 resource, we defer that resource rather than other
3 things in the preferred portfolio.

4 Q In this way, capacity payments for QFs
5 will be based on the operating characteristics of
6 corresponding resource types in the Company's
7 portfolio, rather than simply the order of resource
8 additions selected by the IRP, correct?

9 A That is what happens, yes.

10 Q So, for example, let's just say we have
11 solar called for in the IRP in 2020, and wind and
12 geothermal called for in 2025. Solar QFs will get
13 capacity payments beginning in 2020 based on the IRP
14 solar costs, while wind and other renewable QF types
15 will not get capacity payments until 2025; is that
16 correct?

17 A In your example, yes.

18 Q But isn't it true that wind and geothermal
19 QFs will, in actuality, be incrementally displacing
20 or deferring the next deferrable resource, that is
21 the solar resource, that is called for in 2020?

22 A Not necessarily. The whole point of the
23 IRP process, which is a lengthy and detailed
24 process, is to calculate a portfolio of resources
25 over the next 20 years that will serve customers at

1 least cost, least risk portfolio. When you ask me
2 what resource you're displacing and couldn't it
3 displace this resource or that resource, the answer
4 is it could, but actually running the IRP models, we
5 don't know that that's what the models would choose
6 to do. We don't know that the need for solar is
7 producing some aspect of the portfolio, is providing
8 some benefit, that geothermal and wind resources
9 cannot provide. And the intent of the PDDRR
10 methodology is to have rules to give us an
11 approximate solution without having to run the
12 entire IRP. And the straightforward, clean rule we
13 have today is if there are like renewable resources,
14 we defer the like renewable resources because they
15 have the same characteristics as the resources in
16 the IRP preferred portfolio.

17 **Q Won't there be an IRP in 2019?**

18 **A** There will be an IRP update in March of
19 2018.

20 **Q Will that IRP and all other IRPs consider**
21 **the QFs that have come online between now and then**
22 **in its load and resource balance?**

23 **A** Yes.

24 **Q And won't all those executed QF contracts**
25 **become IRP assumptions going forward?**

1 A Yes.

2 Q So the reality is that QFs, regardless of
3 type, that are in place before the next IRP will
4 impact the Company's resource portfolio going
5 forward, correct?

6 A Absolutely, yes.

7 Q So it's possible, then, that QF contracts
8 for wind, solar, and geothermal resources might
9 change the portfolio of new resources going forward?

10 A I would say it is -- it will absolutely
11 change the portfolio going forward.

12 Q Yes. So then it's possible that the 2019
13 IRP will reshuffle the Company's deferrable resource
14 designations and resource specific deficiency
15 periods, isn't it?

16 A Yes, it is very likely that that will
17 happen. And in the IRP, they have the appropriate
18 tools to see how that reshuffling happens. Not --
19 outside of the IRP, we don't have the tools to say
20 what the equivalence is. It's not just capacity
21 equivalence, it's all the characteristics that that
22 resource contributes to the preferred portfolio.
23 You know, to the extent we want to acquire
24 resources -- and we're looking to acquire some wind
25 and solar in our RFP process -- we use the same

1 models that we use in the IRP. When we go procure
2 resources to serve customers, we look at all those
3 details. But we're not running all those models
4 because we have to send out 200 QF pricing requests
5 every year within 30 days.

6 **Q So the Company is proposing to set avoided**
7 **cost capacity payments based on resource types**
8 **rather than on the energy and capacity that the**
9 **utility will actually avoid, right?**

10 A Our best estimate of the capacity that the
11 utility will actually avoid is by looking at the
12 preferred portfolio, the information it contains,
13 the information it doesn't contain, that there are
14 no -- in your example -- there are no wind and
15 geothermal resources prior to 2025. We look at that
16 information, and we take that and say, what is the
17 expected change associated with adding this new
18 resource to that portfolio. And, yes, that's the
19 answer to your question.

20 **Q In this docket, we're dealing with PURPA's**
21 **requirement that electric utilities purchase energy**
22 **and capacity from QFs at the utility's avoided cost;**
23 **is that correct?**

24 A Yes.

25 **Q The utility's must-purchase obligation is**

1 **not a resource planning requirement, is it?**

2 A No.

3 Q **Did you say the purpose of the proxy PDDRR**
4 **method is to produce a comparable portfolio as that**
5 **in the Company's IRP; is that correct?**

6 A The intent of making a comparable
7 portfolio is that the IRP preferred portfolio is the
8 least-cost, least-risk solution. If customers are
9 going to be indifferent to whatever the outcome is
10 of QF pricing, it needs to be equivalent to that
11 least-cost, least-risk solution. And there are a
12 lot of details that are very difficult to capture
13 according to how a portfolio fits together, all the
14 different components. And the best way we believe
15 to maintain that least cost, least risk solution
16 from the IRP preferred portfolio is to displace QFs
17 by looking at the resources of the same type.

18 Q **PURPA doesn't require QFs to replace the**
19 **utility's IRP resources one-for-one, does it?**

20 A No.

21 Q **PURPA requires states to set avoided cost**
22 **rates based on avoided energy and capacity, correct?**

23 A Correct.

24 Q **You referenced some factors to take into**
25 **account when setting rates in your rebuttal**

1 testimony, didn't you?

2 A I did.

3 Q And in your testimony you also omitted
4 some other factors that should be taken into account
5 to the extent practical?

6 A I'm not familiar with what you're
7 referencing.

8 Q 18 CFR 292.304, subsection e?

9 A Do you have that?

10 Q Well, in your testimony -- let's see.

11 Page 19.

12 MS. HOGLE: In what piece of
13 testimony is that?

14 MS. HAYES: Rebuttal testimony, page
15 19.

16 BY MS. HAYES:

17 Q I'm just wondering if you also looked
18 at -- you quote (e)(2). I'm wondering if you also
19 looked at (e) (1), (3), and (4).

20 A I have read those, but off the top of my
21 head --

22 Q Those weren't something you considered in
23 your preparation?

24 MS. HOGLE: Can you please refresh
25 his memory? Can you quote the language so he knows

1 what you're talking about?

2 MS. HAYES: I don't need to get into
3 it. I'm just wondering if that was something that
4 he used in the preparation of pricing.

5 MS. HOGLE: So is that a question for
6 him?

7 MS. HAYES: Yes.

8 A I believe the PDDRR methodology reasonably
9 accounts for the requirements of PURPA. It's been a
10 long road to get where we are with the PDDRR
11 methodology, so I believe it reasonably accounts for
12 all of those factors. But off the top of my head, I
13 don't know, I can't give you specific examples.

14 BY MS. HAYES:

15 Q Okay. You were focusing on just this
16 section?

17 A That's what I referenced in my testimony.

18 Q All right. Let's see. In your rebuttal
19 testimony -- well, throughout all of your testimony,
20 you talk about the Wyoming wind and talk about the
21 fact that it provides "all in" economic benefits to
22 the Company. And if you want a specific reference,
23 I can provide one, but is that generally --

24 A Yes.

25 Q So in other words, the wind and

1 **transmission project is a really good deal?**

2 A It was better for customers than the
3 alternative of not doing those projects.

4 Q **So is it fair to say that you're pursuing**
5 **it because it's cheap?**

6 A Because it represents a part of the
7 least-cost, least-risk preferred portfolio, yes.

8 Q **And you're getting a lot of that wind,**
9 **aren't you?**

10 A The 2017 IRP preferred portfolio included
11 1,100 megawatts of new wind.

12 Q **Is it fair to say that you're getting as**
13 **much of that wind as you can?**

14 A The limit on how much of that wind will
15 actually be procured will be based on how much of it
16 is cost effective to customers but also based on how
17 much the transmission limits allow. So, yes.

18 Q **And you indicate that the fact that the**
19 **wind is renewable has nothing to do with why it was**
20 **selected in the preferred portfolio; is that**
21 **correct?**

22 A That's correct.

23 Q **Rather, it was selected based on the fact**
24 **that it was so cost effective?**

25 A Yes. It's contribution to the preferred

1 portfolio, yes.

2 Q And you're essentially arguing in this
3 docket that the wind is so cost effective it's below
4 avoided cost; is that correct?

5 A Yes.

6 Q Is it fair to say -- let's see. I'm
7 sorry. So is it fair to say that at a certain
8 price, forcing renewable QFs to take an IRP
9 renewable price would be forcing them to take a
10 price that is below avoided cost?

11 A Certainly, there are resources in our
12 portfolio which are not the highest cost, the
13 incremental capacity of energy that will be added to
14 the system. And, in that case, you can find prices
15 in our portfolio which are less than our incremental
16 cost and less than avoided costs.

17 Q In that sense, an avoided cost floor would
18 be appropriate, would it not, to safeguard against
19 violating PURPA?

20 A I guess I can't tell you whether a floor
21 is appropriate without knowing what it's a floor on,
22 how it will be applied, and so on.

23 Q But it is true that there are renewable
24 prices in your portfolio that are below avoided
25 cost?

1 A The 2021 wind is an example, yes.

2 MS. HAYES: That's all my questions.

3 Thank you.

4 COMMISSIONER LEVAR: Thank you.

5 Mr. Sanger.

6 MS. HOGLE: I apologize. Can I, at
7 this time, move for the admission -- before I
8 forget, I don't want to forget -- for the admission
9 of Mr. MacNeil's rebuttal testimony with work
10 papers, surrebuttal testimony -- and I've just
11 noticed it does have an exhibit -- and so I also
12 move for the exhibit to that surrebuttal testimony
13 to be admitted into the record.

14 COMMISSIONER LEVAR: If any party
15 objects to that motion at this time, please indicate
16 to me. I'm not seeing any objections, so the motion
17 is granted. Mr. Sanger.

18 CROSS-EXAMINATION

19 BY MR. SANGER:

20 Q Good morning, Mr. MacNeil. I'd like to
21 ask you some questions about what you describe as
22 the customer indifference standard.

23 A Okay.

24 Q If you could please refer to your
25 testimony at -- direct testimony -- at page 5? On

1 lines 98 and 99, you state, "The accuracy of avoided
2 cost pricing relative to these requirements" the
3 requirements of PURPA "is known as the customer
4 indifference standard." Is that correct?

5 A That's what it says.

6 Q And you have a couple of footnotes there
7 citing to a number of cases. And, as I see it, the
8 FERC case that you cite to is a Southern California
9 Edison case, correct?

10 A Yes.

11 Q I assume that you have read that case?

12 A Not recently.

13 Q At any point in time?

14 A Perhaps. I'm not sure.

15 Q Okay. Do you know if the Federal Energy
16 Regulatory Commission uses the term "customer
17 indifference standard" in that case?

18 A I view the customer indifference standard
19 as the summary of all of that. Out of all of that
20 legal wrangling, we have derived this simple concept
21 of a customer indifference standard, that if we can
22 compare customers with a QF and without a QF, if the
23 customers are indifferent, that would appear to be
24 our avoided costs.

25 Q Your testimony says that PURPA

1 requirements are known as the customer indifference
2 standard. And my question is since it's known as
3 that, I'm wondering if FERC has used that term in
4 coming up with what you believe is known as the
5 customer indifference standard?

6 A I'm not sure.

7 Q Are you aware of any FERC decisions that
8 have ever used the term "customer indifference
9 standard?"

10 A I'm not.

11 Q Thank you. Now, it is your view that the
12 customer indifference standard means that avoided
13 cost rates should be based upon the most reasonable
14 forecast of the Company's resource costs?

15 A They're intended to set just and
16 reasonable rates for customers, so, yes.

17 Q And it should be based on a reasonable
18 forecast?

19 A Yes.

20 Q And I assume you would agree that if --
21 the customers would be harmed if avoided cost rates
22 are set higher than the most reasonable forecast?

23 A The -- if customers pay in excess of
24 avoided costs, then customers would be harmed, yes.

25 Q And would the converse be true, that if

1 avoided cost rates are set too low, would customers
2 be harmed in that circumstance?

3 A I suppose not, because if customers'
4 actual avoided cost was higher, they're getting a
5 better deal.

6 Q So assume for the sake of argument that
7 the customer -- the Company's actual avoided costs
8 are \$30 per megawatt hour. And if the avoided cost
9 rates are set at \$20 per megawatt hour, do you see
10 any possibility that customers could be harmed in
11 that circumstance? Let me give you an example.
12 Let's assume for the sake of argument that, because
13 the avoided cost rates that are administratively
14 determined are set at \$20, that QFs are unable to
15 contract with the Company. Would that result in
16 harm to the Company if avoided cost rates are set
17 too low and lower than the Company's actual avoided
18 costs?

19 A I guess I would have to say no. The
20 Company is still going to procure the resources it
21 intends to procure, it hasn't signed a QF contract,
22 there's no difference in that example. It's just
23 the continued expectation of future conditions.

24 Q So if the Company builds a resource at \$30
25 and the avoided cost rates are set at \$20 so the

1 **Company does not enter into a contract with a QF but**
2 **builds its own resource at \$30, then customers in**
3 **that circumstance are not harmed?**

4 A When the Company procures resources, it
5 does so through a competitive process, and it finds
6 the least-cost opportunities to serve customers. To
7 the extent some shortfall in avoided cost prices has
8 led to less QF procurement, hopefully the RFP
9 process would allow QFs to develop as well, but, you
10 know, we have to set a reasonable avoided cost.
11 That's why we're trying to set something that's not
12 too high and not too low.

13 Q **But if it is set too low, in your view,**
14 **customers are not harmed?**

15 A I think for compliance with PURPA, it's
16 appropriate to set avoided costs at a rate which
17 causes customers to be indifferent.

18 Q **Okay. Thank you. So I'd like to ask you**
19 **some questions in terms of my understanding and**
20 **everybody's understanding of the foundational terms**
21 **of -- at a very high level, how Rocky Mountain Power**
22 **calculates capacity payments to QFs. First of all,**
23 **for energy costs, when you calculate the energy**
24 **costs you do it essentially based on a GRID model?**

25 A That's correct.

1 Q And then for Schedule 38, you determine
2 the capacity costs based on the PDDRR methodology?

3 A That's correct.

4 Q And then historically the current Schedule
5 37 rates -- the capacity costs are based on fixed
6 and variable costs of a thermal resource in the last
7 IRP?

8 A That's correct.

9 Q And the date upon which either the current
10 methodology for Schedule 37 or the PDDRR methodology
11 is based on the resource sufficiency/deficiency date
12 in the IRP?

13 A It's based on the date of the next major
14 thermal resource.

15 Q Is that based on the IRP?

16 A It is drawn from the IRP preferred
17 portfolio.

18 Q So prior to the date in the IRP of
19 acquiring your next major resource, QF is paid
20 energy prices based on the GRID model run, and then
21 after that it's paid capacity payments based on the
22 next deferrable resource in the IRP?

23 A So during the sufficiency period as it's
24 called, that doesn't mean that the Company has
25 adequate capacity to serve customers. It means that

1 the market opportunities that we have access to
2 are -- there are sufficient market opportunities
3 available such that capacity from those market
4 opportunities can be used to serve customers. And
5 in both Schedule 37 and Schedule 38, we include the
6 avoided cost associated with displacing those market
7 opportunities during the entire time frame up until
8 a new resource is displaced.

9 Q Thanks. That's a little more detailed. I
10 appreciate that. So as I understand it, one of the
11 major changes that the Company is proposing in this
12 case is that for renewable resources of the same
13 kind, like, same -- like is how you describe it --
14 in the next -- the date in which you're going to
15 acquire that renewable resource in the IRP, the
16 capacity payments will be based on the cost of that
17 renewable resource rather than a thermal plant?

18 A That is correct.

19 Q Is it correct that in the Company's past
20 IRPs, they didn't always include renewable resources
21 as the least-cost, least-risk resource in the
22 preferred portfolio?

23 A The preferred portfolio makes up the
24 resource additions that are part of a least-cost,
25 least-risk plan, given the forecasts of prices and

1 conditions at that time. So what's actually in the
2 preferred portfolio changes every year when we do an
3 IRP or an IRP update. And, yes, there have been
4 times when it has not contained renewable resources.

5 Q In the current IRP, there's a wide variety
6 of various resources, including renewable resources
7 in the preferred portfolio, correct?

8 A Yes.

9 Q I'd like to direct you to page 9 of your
10 direct testimony. This includes the list of those
11 resources the Company considers deferrable in the
12 preferred portfolio?

13 A That's correct.

14 Q Can you tell me what you mean by
15 deferrable when you say "considered deferrable,"
16 what that means?

17 A Those are resources that we would consider
18 removing from the IRP preferred portfolio when we
19 add QFs.

20 Q Thanks. And the next major baseload
21 renewable resource is the 2029 geothermal project,
22 correct? That's on line 186.

23 A Yes.

24 Q Where is that geothermal resource located?

25 A Oregon. Portland.

1 Q Okay. And under Rocky Mountain Power's
2 like-for-like approach, a Utah QF would be paid
3 capacity payments based on this 2029 geothermal
4 project in Portland? There's a 3-megawatt hydro
5 resource and they are selecting -- they want to be
6 paid -- their avoided cost rate would be based on
7 GRID market purchases until 2029, and then starting
8 in 2029, they'll be paid capacity payments based on
9 this geothermal resource?

10 A It's difficult to see whether there's a
11 distinction between this geothermal resource and a
12 thermal resource for the purposes of Utah avoided
13 costs.

14 Q So I had thought that in your testimony,
15 you considered hydro generation like, or similar to,
16 geothermal generation, right?

17 A Yes.

18 Q So I thought that a hydro resource would
19 be -- or the geothermal resource would be deferred
20 by -- or the avoided cost rate payments would be
21 based on the next deferrable-like-resource in the
22 IRP, which in this case is a 2029 geothermal
23 resource.

24 A I guess in my testimony I gave the example
25 of a baseload resource deferring the 2029 simple

1 cycle. I don't know that a renewable resource based
2 on the Utah rules would necessarily defer the
3 geothermal resource.

4 Q I'm looking at the Company's proposal in
5 this case and if you are a Utah wind QF, my
6 understanding of the Company's proposal is that,
7 looking at this list of what the Company calls
8 deferrable resources, that the Utah wind resource
9 would be paid capacity payments based on the 2031
10 acquisition of Dave Johnston wind.

11 A Okay.

12 Q Is that correct?

13 A Yes.

14 Q So as I understood it, a hydro resource
15 would be considered like a geothermal resource in
16 terms of determining its payments under your the
17 PDDRR methodology?

18 A They're certainly both renewable and they
19 would seem to be like, but I guess I just don't know
20 that there's a distinction between a baseload
21 renewable resource and a baseload non-renewable
22 resource for the purposes of Utah avoided costs.

23 Q So is the Company proposing in this case
24 that, starting in 2029, if you're a renewable hydro
25 project, you would give up your renewable energy

1 **certificates to the Company in 2029?**

2 A Certainly if that hydro project is being
3 paid based on the geothermal resource, but if it was
4 being based on a simple cycle, it would not.

5 Q So what is the Company proposing in this
6 case? So if you look at your testimony on page 8,
7 starting at line 167, it says, "Biomass, biogas,
8 hydro, and other renewable resources with similar
9 output profiles would also be eligible to displace
10 the geothermal resource."

11 A What line is that again?

12 Q Line 167 to 168.

13 A In direct?

14 Q In your direct testimony, opposite side of
15 the page. And then you go on, "Any renewable
16 resource with relatively flat output over a daily
17 and monthly time frame would be considered a
18 resource of the same type as the geothermal resource
19 in the 2017 IRP."

20 A Yes.

21 Q So my assumption was that -- and then when
22 I flipped over to the next page, the one where you
23 have the list of all the various resources -- that
24 since there is a 2029 geothermal resource, if a Utah
25 hydro project came to you, they would be paid an

1 avoided cost rate based on energy payments until
2 2029 and capacity payments based on a geothermal
3 resource starting in 2029?

4 A Yes.

5 Q Okay. Great. So if there was no
6 geothermal resource in your IRP, though, then the
7 hydro resource would be paid based on the next
8 deferrable thermal resource, correct?

9 A That's correct.

10 Q And in your IRP, you've got a thermal
11 resource in 2029, the Utah North simple cycle
12 turbine -- and this is on line 175 -- and then a
13 2030 Willamette Valley combined cycle combustion
14 turbine. And where is the Willamette Valley
15 combined cycle combustion turbine located?

16 A It's in West Main, Oregon.

17 Q Okay. And that is considered deferrable
18 by a 3-megawatt hydro unit?

19 A To the extent other things earlier than
20 that have been deferred, yes.

21 Q Okay. So you consider an Oregon west
22 geothermal project deferrable by a Utah hydro unit,
23 as well as an Oregon gas-fired unit deferrable by a
24 Utah hydro unit?

25 A Those are the capacity additions in the

1 IRP preferred portfolio, yes.

2 Q Okay. Thanks. So let's use another
3 hypothetical here. Let's assume in your 2017 IRP
4 that you only identified two types of resources: A
5 thousand megawatts of wind in 2020, and a thousand
6 megawatts of wind in 2025. That's all the IRP says
7 that you're going to acquire. Now, would this 2000
8 megawatts of wind provide some capacity value to the
9 Company?

10 A Certainly in the IRP analysis, the
11 capacity contribution of the wind would be taken
12 into account as it builds a portfolio of resources
13 necessary to serve customers over the (inaudible)
14 so, yes.

15 Q It might be helpful -- maybe it's only
16 me -- but it might be helpful if you say the yes
17 first, and then give the explanation. I think it's
18 very helpful that you give the explanation, but
19 sometimes it's hard to know whether you're getting
20 to the yes or no.

21 A Okay.

22 Q So if the 2017 IRP did not include any
23 solar thermal resources in the preferred portfolio,
24 then a Utah solar facility would only be paid energy
25 prices based on the GRID model in all years?

1 A To the extent that there were no solar
2 resources in the IRP and no thermal resources in the
3 IRP, then I believe there would still probably be
4 some market transactions that were assumed to
5 provide capacity during the term of the IRP. Those
6 tend to go all the way through the end of the IRP
7 study period. We tend to maximize our use of those
8 lowest cost capacity resources, but the solar price
9 would be based on deferring market capacity.

10 Q **So, yes?**

11 A Yes.

12 Q **Thanks. So under these circumstances,**
13 **PacifiCorp could acquire 2,000 megawatts of wind**
14 **generation, but a Utah hydro or solar facility would**
15 **only be paid energy and not capacity over its entire**
16 **15-year contract term?**

17 A The wind resource would be paid the fixed
18 costs of a wind resource in the IRP portfolio
19 because we believe that's a reasonable change to the
20 IRP portfolio consistent with the least-cost,
21 least-risk standard. The solar resource would be
22 paid market price because that is consistent with
23 the IRP preferred portfolio as well.

24 Q **So, yes?**

25 A Yes.

1 Q So if the IRP does not call for the
2 acquisition of thermal resources or a renewable
3 resource of the same like-kind, then they're not
4 paid capacity based on the circumstances that I have
5 described.

6 MS. HOGLE: I'm sorry. Excuse me.
7 Objection. I think he's mischaracterizing
8 Mr. MacDaniel's [sic] testimony. I believe
9 Mr. MacDaniel [sic] has said "yes" to the extent
10 that the resource is displacing market purchases.
11 Those markets purchases, to the extent they're
12 displacing capacity, are being paid capacity; is
13 that correct, Mr. MacDaniel [sic]?

14 A Yes. Market purchases are a capacity
15 resource which we procure as part of our least-cost,
16 least-risk IRP preferred portfolio, and we would
17 compensate QFs for those to the extent it's
18 appropriate to do so, based on the portfolio.

19 BY MR. SANGER:

20 Q So your market purchases are short-term
21 purchases in the market, a two- to five-year period?

22 A I mean, it could be one hour, two.

23 Q And those include some capacity benefits
24 is what Ms. Hogle was trying to clarify?

25 A Yes.

1 Q It's a small capacity. They're energy
2 purchases but they're not a hundred percent energy?

3 A Correct.

4 Q So in my example of the preferred
5 portfolio including 2,000 megawatts of wind and no
6 other resources, if Rocky Mountain Power entered
7 into contracts with a thousand megawatts of Utah
8 solar, then would that defer any of the planned Utah
9 wind resources?

10 A I would need to run the IRP models in
11 order to determine what our least-cost, least-risk
12 plan would be with a thousand megawatts of solar. A
13 thousand megawatts of solar is a very substantial
14 acquisition. We did add about a thousand megawatts
15 of solar in 2016 thereabouts, so it does happen, but
16 it would be very difficult to say -- for me to say
17 using the PDDRR methodology or anything, that a
18 least-cost, least-risk plan could be -- that we
19 could shortcut the entire IRP process and conclude
20 how a thousand megawatts of solar wind would
21 contribute to our preferred portfolio.

22 Q I'm sorry. I didn't quite know whether
23 that was a yes or no.

24 A Could you repeat the question?

25 Q So if Rocky Mountain Power entered into

1 contract with a thousand megawatts of Utah solar
2 PPAs, then that would not defer a single megawatt of
3 the 2,000 megawatts of wind resources in the
4 preferred portfolio?

5 A I don't know. That's what we need the
6 IRP to tell us.

7 Q And you have -- how many years of
8 experience do you have working with PacifiCorp?

9 A Eight years.

10 Q Eight years experience. Now, if you were
11 to guess, would you guess that the acquisition of a
12 thousand megawatts of solar might defer a single
13 megawatt of the Utah wind?

14 MS. HOGLE: Objection. That's
15 speculative. I believe he's already testified that
16 he wasn't sure, that he didn't know, whether there
17 would be a displacement.

18 BY MR. SANGER:

19 Q What if Rocky Mountain Power acquired
20 2,000 megawatts of solar? Is there any point at
21 which you become sure that at least a megawatt of
22 that wind would be deferred by the acquisition of
23 Utah solar?

24 A At some point it would have to, but I
25 don't know what that point is.

1 Q Okay. Thank you. So I want to move on a
2 little bit here now to renewable energy
3 certificates. I think we answered this before, but
4 I just want to make it clear. So in our previous
5 example, we talked about a biomass unit being
6 deferred by a hydro unit -- the 2029 period of a
7 biomass unit -- so under that circumstance, if the
8 QF is paid based on the deferred cost of a renewable
9 biomass project, then it is paid those fixed costs
10 and gives up its renewable energy certificates,
11 correct?

12 A Yes.

13 Q Conversely, if they're paid based on the
14 cost of a thermal resource, then they keep their
15 renewable energy certificates?

16 A That's correct.

17 Q And I assume it would be the case if the
18 resource in the preferred portfolio was a biomass
19 unit that did not qualify under the RPS, then the QF
20 would keep its renewable energy certificates?

21 A The intent is that there's an alignment
22 between the retention and -- customers are
23 indifferent between the renewable energy credits
24 they would have received from the resource being
25 deferred and what they receive from the QF, so, yes.

1 Q So the key distinction in terms of REC
2 ownership is whether the resource in the preferred
3 portfolio qualifies under the RPS?

4 A Whether it provides renewable energy
5 credits, there's no RPS in Utah, so --

6 Q Under a RPS?

7 A I mean, it doesn't even have to be an RPS.
8 The renewable energy credits could be used for lots
9 of things. There's voluntary sales, we're in
10 compliance with -- future environmental federal law
11 potentially could look at renewable energy credits.

12 Q So it's the creation of renewable energy
13 certificates that makes the difference?

14 A Yes.

15 Q Thanks. So I wanted to, again, move on to
16 another subject. Do other states have renewable
17 avoided cost rates?

18 A Yes.

19 Q And I'd like to refer to your rebuttal
20 testimony on page 10, lines 201 to 212. There, you
21 state that renewable avoided cost rates are paid
22 based on the incremental value of RECs transferred
23 to a QF to the utility based on the value of those
24 RECs for RPS compliance.

25 A I said that generally that would be a way

1 to set avoided costs.

2 Q Well, so you're asked the question how are
3 they typically implemented and -- yes, so you say --
4 thank you. What other states use a renewable
5 avoided cost rate?

6 A I'm familiar with Oregon and I know that
7 California has some, but just based on case law that
8 I have seen cited. I don't have particular details
9 on that.

10 Q So when you're talking about how they're
11 typically implemented, you're talking about Oregon?

12 A No.

13 Q Okay. You're talking about Oregon and
14 California?

15 A It's my understanding of how one would
16 calculate the incremental value.

17 Q Right. I was trying to understand what
18 was your sample size, what areas were you basing
19 that opinion on. I heard Oregon and California.

20 A I guess it -- I don't have a larger sample
21 that I have verified is calculated this way.

22 Q Okay. Oregon was one of the states in
23 your sample. I wanted to go over how Oregon's
24 renewable avoided cost methodology works. Are you
25 familiar with that?

1 A I am.

2 Q So -- and I understand the Company is not
3 supportive of that methodology; is that correct?

4 A That is correct.

5 Q But I'd like to just get some of the facts
6 of that right now. So is the Oregon renewable
7 avoided cost rate based on the incremental value of
8 the RECs transferred from the QF to the utility?

9 A No.

10 Q Maybe you could explain how the Oregon
11 renewable avoided cost rate is calculated?

12 A So in Oregon for standard avoided costs,
13 which is basically a spreadsheet calculation similar
14 to our Schedule 37, they have a proxy resource,
15 renewable resource, from the IRP. It may not have
16 been selected in the IRP preferred portfolio and,
17 in fact, current rates are not based on an IRP
18 resource that was selected in the preferred
19 portfolio. And in the deficiency period, when
20 Oregon is assumed to be -- to have run out of
21 renewable energy credits for compliance with its
22 RPS, the cost of that renewable resource is used to
23 set the avoided cost price. So the all-in cost of,
24 currently, a wind resource, is used to set the
25 avoided cost price. And there are some adjustments

1 in that calculation to account for other renewable
2 resources. And so there's adjustments to
3 integration costs and capacity contribution that --
4 the concept being, the other resources may provide
5 more capacity value than the wind resource and that
6 they should be compensated to account for that
7 additional value.

8 Q And in Oregon right now, the date of
9 deficiency is 2028, correct?

10 A Under the standard tariff, the date of
11 deficiency is 2028, yes.

12 Q And under the renewable tariff, as well?

13 A They both happen to be 2028.

14 Q That's just a coincidence?

15 A Yes.

16 Q So starting in 2028, the fixed and
17 variable costs of the deferrable wind resource are
18 what's paid to the QF under the renewable rate?

19 A I believe so, yes.

20 Q Okay. And as you testified a minute ago
21 to the Commissioners, the Oregon renewable avoided
22 cost rate is not limited by like-for-like?

23 A It does allow for any resource to be paid
24 and it's calculated based on wind resource.

25 Q So going back to your statement on page 10

1 when you were talking about how they're typically
2 implemented and how they're generally implemented,
3 in at least half of your sample size, that's not how
4 they're implemented, that the rates are not based on
5 the value of the REC that's transferred for RPS
6 purposes.

7 A Okay.

8 Q I wanted to move on to the issue of
9 Wyoming transmission and whether that's -- Wyoming
10 wind and transmission and whether that's a
11 deferrable resource.

12 COMMISSIONER LEVAR: Mr. Sanger, this
13 might be an appropriate time to take a break,
14 assuming we're really close to the end, to give our
15 court reporter a break.

16 (A short break was taken.)

17 COMMISSIONER LEVAR: We're back on
18 the record, and before we continue with Mr. Sanger's
19 cross-examination, the court reporter has asked me
20 to give everyone a reminder to please be deliberate
21 in your speaking. Getting an accurate record of
22 this proceeding is important for a lot of reasons,
23 so please remember that as you're speaking. With
24 that, we'll go back to Mr. Sanger.

25 BY MR. SANGER:

1 Q Mr. MacNeil, I'd like to ask you about the
2 Wyoming wind and transmission now.

3 A Okay.

4 Q So as I understand it, Rocky Mountain
5 Power's position is that Utah QFs do not displace or
6 defer the Company's Wyoming wind resources because
7 they do not interconnect with or use the Company's
8 Wyoming transmission system; is that correct?

9 A That's our position.

10 Q So does this mean that a Wyoming QF that
11 interconnects with or uses the Company's Wyoming
12 transmission system could partially displace or
13 defer the Wyoming wind?

14 A Potentially, yes.

15 Q Now, does the Company's Wyoming wind RFP
16 allow non-Wyoming wind generation to bid into it?

17 A Yes.

18 Q So is it possible that the RFP could
19 select a non-Wyoming wind resource, or is PacifiCorp
20 only going to select Wyoming wind generation in its
21 RFP?

22 A The RFP explicitly includes wind across
23 our system, so to the extent that wind at any
24 location is cost-effective, either inside or outside
25 of Wyoming, then we would expect to include it in

1 our selection of RFP results.

2 **Q So if the Company's RFP selected a**
3 **non-Wyoming wind resource located where there is**
4 **sufficient transmission to Utah, could a Utah wind**
5 **resource defer that non-Wyoming wind resource?**

6 A So our QF PDDRR methodology looks at the
7 preferred portfolio from our IRP, and the current
8 preferred portfolio in the IRP includes the wind
9 resources which we discussed previously, a 2021 wind
10 resource, also 2031 in Wyoming, and 2036 in Goshen
11 in Idaho. So those are the resources that are
12 available to be deferred by a QF. At this time, to
13 the extent that an additional opportunity comes up
14 to procure wind in some other location, once we
15 execute that contract, that contract will go into
16 our analysis and be accounted for, but those
17 potential contracts are not available to be deferred
18 by QF's.

19 **Q So you're basing what is deferrable based**
20 **on the IRP rather than the RFP that this Commission**
21 **ordered you to revise to include non-Wyoming wind?**

22 A Yes. The deferrable resources -- for the
23 purposes of calculating avoided costs -- are
24 resources in the IRP preferred portfolio.

25 **Q So let's go to the real world now. Could**

1 **a Wyoming wind resource take the place of or defer a**
2 **resource acquisition in your Wyoming wind RFP?**

3 A At the moment, we have a signed contract
4 with a Wyoming qualifying facility and to the extent
5 that contract remains valid and so on, that would
6 reduce our ability to procure any additional
7 resources in the RFP.

8 Q **So what about a Utah wind resource?**
9 **Assume for the sake of argument -- you said this is**
10 **possible -- that your wind RFP might select a**
11 **non-Wyoming wind resource, so that could be the**
12 **resource that PacifiCorp would acquire, correct?**

13 A Yes.

14 Q **So that could be the actual resource that**
15 **PacifiCorp could acquire?**

16 A Yes.

17 Q **And could, in actuality, a Wyoming wind QF**
18 **that's of the same size defer that non-Wyoming wind**
19 **resource?**

20 A I guess I don't quite understand what you
21 mean by defer. By the time we finish the RFP and
22 pick a resource, that resource will no longer be
23 deferrable. If, before the RFP finishes, we sign a
24 QF in Wyoming, sorry, we sign a QF in Utah and
25 before we've completed our RFP analysis, it may be

1 the result that because of this new QF in Utah, it's
2 no longer economic to acquire this non-Wyoming wind
3 resource from the RFP. Maybe, had that QF not been
4 there, it would have been economic, but since that
5 QF was added, perhaps you could say that's
6 deferrable. But I don't know all the details of the
7 models and so on that would pick those portfolios.
8 And for QF avoided costs, we use the IRP preferred
9 portfolio even though, you know, there is new
10 information that we're collecting all the time. But
11 the only changes to the preferred portfolio we make
12 are signed contracts, and it would have to be pretty
13 explicit resources which are acquired, basically.

14 **Q So as I understand it, the methodology**
15 **that the Company is proposing here to use, the PDDRR**
16 **methodology, does not account for that potential**
17 **actual circumstance?**

18 **A** Like I've mentioned previously, those
19 potential actual circumstances are well beyond our
20 ability to predict what the outcomes are going to
21 be. PDDRR is a simple mechanism to take the IRP,
22 which is heavily vetted, public, and so on, and use
23 that to develop a wind cost that we believe are just
24 and reasonable.

25 **Q The answer was yes?**

1 THE WITNESS: Can you please repeat
2 the question?

3 MR. SANGER: Can the reporter repeat
4 the question?

5 (The question was repeated.)

6 A The current PDDRR methodology does not
7 account for potential supplied resources that could
8 be acquired between now and the next IRP preferred
9 portfolio coming out.

10 Q And the Company has also issued a solar
11 RFP, correct?

12 A That's correct.

13 Q And is it possible that this solar RFP
14 could select PPAs that have prices and benefits that
15 are better than the all-in economic benefits
16 associated with the Wyoming wind and transmission?

17 A It is possible that there will be
18 opportunities to acquire solar that provide economic
19 benefits. Those economic benefits could be bigger
20 than those benefits from the wind and transmission.
21 Just because they're bigger doesn't mean that you
22 can't necessarily have both, and it is also
23 possible, though, that as in the prior example, the
24 procurement of these solar resources could cause the
25 Wyoming wind and transmission no longer to be

1 economic.

2 Q Thank you. As I understand it, you are
3 basing your recommendation on using the last IRP,
4 that list of resources, rather than an RFP that may
5 be issued right now. So if it's in the IRP, then it
6 flows into the PDDRR methodology, correct?

7 A If it's in the RFP, or we have signed a
8 contract, acquired a resource, that's what's
9 accounted for in the PDDRR methodology, not the
10 potential outcomes of ongoing RFPs or negotiations
11 and so on.

12 Q Are you familiar with the IRP process?

13 A Generally.

14 Q So is it correct that, usually, the IRP
15 identifies the least-cost, least-risk resource for
16 planning purposes?

17 A It identifies a least-cost, least-risk
18 portfolio, yes.

19 Q And then, usually, as I understand it,
20 what happens is the IRP is acknowledged or approved
21 or accepted, whatever the individual state does, and
22 then after that, the Company issues its RFP. Is
23 that usually the planning steps, how it happens?

24 A That is one way to do it, yes.

25 Q Is that kind of the idea, that the IRP

1 figures out what you need and then after your need
2 is identified, then you go out and issue the RFP?

3 A That certainly is a good way to do it
4 because everybody's on the same page and it allows
5 you to -- no one is surprised by the result in that
6 instance.

7 Q So in this circumstance, we're not doing
8 that, correct?

9 A In this circumstance, we issued a wind RFP
10 to procure resources that were identified in the
11 IRP, and we're also issuing a solar RFP to gain
12 additional information about the potential supply of
13 solar resources and the potential costs and benefits
14 that could occur.

15 Q Just so I'm clear and understanding, this
16 particular time you are issuing RFPs prior to the
17 IRP being ruled upon in any particular state?

18 A I'm not familiar with the timeline of
19 acknowledgment, acceptance, et cetera, that's
20 necessary for the IRP before an RFP might be issued.

21 Q So do you know whether or not the IRP has
22 been approved or acknowledged in the state of the
23 Utah?

24 A I don't know.

25 Q And in Oregon?

1 A I don't know.

2 Q Would you accept, subject to check, that
3 at least in Oregon, the IRP has not yet been
4 acknowledged?

5 A Yes.

6 Q So let's assume, for the sake of argument,
7 that this RFP is being issued prior to IRP or IRP
8 acknowledgment. In that circumstance, would it be
9 reasonable to use something other than what is in
10 the IRP, the preferred portfolio in the IRP, but to
11 use what the Company is actually doing on the ground
12 in terms of acquiring resources?

13 A So the intent through all this --

14 Q So, I guess, maybe you can answer it yes
15 or no and then provide your explanation.

16 A Would it be appropriate to use something
17 different, that's the question?

18 Q Yes.

19 A And the answer is yes. And the first
20 question in my summary was, what methodology should
21 be used to produce avoided cost pricing for QFs
22 consistent with the customer indifference standard.
23 That's ultimately what we're doing here, and we
24 believe the PDDRR methodology using the IRP
25 preferred portfolio accomplishes that. And there

1 may be instances where other information comes along
2 and it would be appropriate to change what we're
3 doing. To the extent we get solar RFP results which
4 are well below what current avoided costs are, we
5 should probably bring those to you and say, look,
6 our process is broken, we need to change this
7 because we have very strong evidence that avoided
8 costs are less than what's currently being
9 calculated under the PDDRR methodology. I'm not
10 proposing that here, but if there's a difference
11 between avoided costs being calculated and avoided
12 costs in reality that's not consistent with the
13 customer indifference standard, then it's
14 appropriate to amend those.

15 Q So in certain circumstances, it may be
16 appropriate to not use the preferred portfolio
17 that's identified into IRP in the PDDRR methodology?

18 A Certainly.

19 Q Thank you. I'd like to move on to the
20 QFQ. Can you provide a brief explanation -- I think
21 you did in the beginning of your testimony -- but
22 another brief explanation of what the QFQ actually
23 is and make sure we're on the same page?

24 A The idea of the QFQ is that customers
25 should not be obligated to pay QFs for the same

1 increment of capacity -- for avoiding the same
2 increment of capacity in the Company's portfolio.
3 So if two QFs come along and receive prices that are
4 based on the same increment of capacity, as we
5 noted, the aggregate effect is the highest cost
6 resources are avoided first and there's a declining
7 avoided cost as we add additional resources to our
8 system. So the idea of the QFQ is to ensure that
9 QFs can receive prices, prices that they can lock in
10 for a certain length of time, subject to the rules
11 in Schedule 38, but also to ensure that customers
12 are maintaining indifference and are protected from
13 overpaying.

14 **Q I apologize. It was not a very good**
15 **question. Can you tell us what it actually is, not**
16 **it's purpose, but what is this thing, QFQ?**

17 **A The QFQ is the list of all of the QFs that**
18 **are currently negotiating for contracts with the**
19 **Company.**

20 **Q Thanks. And the Company's basic principle**
21 **regarding incorporating QFs in the QFQ is that you**
22 **should not pay any more than the avoided cost,**
23 **correct?**

24 **A Correct.**

25 **Q Should it also be a basic principle, with**

1 regard to incorporating the QFQ, to ensure that
2 avoided costs are not set below the Company's actual
3 avoided costs?

4 A Certainly, it's appropriate to set avoided
5 costs at avoided costs.

6 Q Thank you. I'm going to refer to your
7 direct testimony at page 35, and there's a table
8 there. Now, I read this table as showing the
9 difference for various resource types between the
10 avoided cost prices and Schedule 37 based on the
11 current GRID proxy method and either the proxy PDDRR
12 method using the May queue, or using the proxy PDDRR
13 method using the August queue; is that correct?

14 A Correct.

15 Q And switching to the PDDRR methodology for
16 the May queue resulted in a price reduction for all
17 resource types, and switching to the August queue
18 resulted in a rate decrease for all types except for
19 wind, correct?

20 A That's correct.

21 Q And the difference between the May and the
22 August queue was around \$2 to \$3; is that correct?
23 Looking at the May and August queue?

24 A Yes.

25 Q And that's over a three-month period,

1 **correct? About three to four months?**

2 A Yes.

3 **Q So over a three- to four-month period of**
4 **time, the prices changed \$2 to \$3?**

5 A I guess I would like to clarify that it's
6 not related to the passing of time that these prices
7 changed. We took the queue in May -- and we agree
8 that using the entire QFQ is inappropriate for
9 setting Schedule 37 rates -- and so as an
10 alternative, based on Parties' indication that the
11 entire QFQ was too much -- we put in a QFQ that
12 removed a bunch of those resources which were in the
13 queue in May. So we assumed that -- we had evidence
14 that those resources were not signed, and we don't
15 know what might be signed that is later queued, but
16 we believe that was a reasonable midpoint on which
17 to base the Schedule 37 avoided costs. And I would
18 point to Figure 1R in my rebuttal testimony which
19 provides a clear illustration of these numbers.
20 It's on line 482, page 23.

21 **Q I guess the definition of "clear" is in**
22 **the eye of the beholder.**

23 A I guess the point is, we have demonstrated
24 the effect of the QFQ. We have the entire queue in
25 May -- that's on the right -- we have the Company's

1 proposal which is the August position -- that's in
2 the middle -- and we have the signed queue with no
3 QFQ, assuming no QF additions occur during the
4 pendency of the Schedule 37 tariff. So there's the
5 trend. Those are the impacts of the QFQ on avoided
6 costs. We believe the August proposal is reasonable
7 and, you know, that's what we support.

8 Q So getting the QFQ correct is very
9 important because it can have a pretty significant
10 change in the avoided cost prices?

11 A Certainly.

12 Q Thanks. I'd like to move on to your
13 testimony, your surrebuttal testimony, and I can
14 refer you to the page number, but I just wanted to
15 paraphrase your testimony in that, it's your position
16 that it is impossible to evaluate the reasonableness
17 of Coalition witnesses John Lowe and Neal Townsend,
18 as well as Utah Clean Energy witness Ken Dragoon's
19 recommendations, because they have not provided
20 supporting calculations?

21 A That is my position, yes.

22 Q Are you familiar with how the Oregon and
23 Washington Commissions have made or are making
24 methodological changes in avoided cost rates?

25 A I am generally familiar.

1 Q I would like to provide a REC
2 cross-examination exhibit. May I approach the
3 witness?

4 COMMISSIONER LEVAR: Yes.

5 (REC Cross-Examination Exhibit No. 1 marked.)

6 BY MR. SANGER:

7 Q Are you familiar with this document?

8 A I believe I've seen it. I believe I
9 attended some of the stakeholder meetings associated
10 with this process.

11 Q Can you summarize what you think it is?

12 A Washington is reconsidering how to prepare
13 an avoided cost methodology that is applicable to
14 qualifying facilities.

15 Q And is one of those issues, what is the
16 appropriate avoided cost methodology for calculating
17 QF energy and capacity rates?

18 A It is.

19 Q And as you mentioned, you participated in
20 some of those workshops. Did you help prepare
21 PacifiCorp's comments in that proceeding?

22 A It probably went through my email box, so,
23 likely.

24 Q And did PacifiCorp provide any supporting
25 calculations or work papers with those comments?

1 A I don't believe so.

2 Q And do you know how long those comments
3 were?

4 A No.

5 Q Would you accept that they were only six
6 pages?

7 A Okay.

8 Q So do you think it's reasonable for the
9 Washington Commission to set an appropriate avoided
10 cost methodology for calculating QF energy and
11 capacity rates based on six pages of comments
12 without supporting calculations?

13 MS. HOGLE: Objection. The reason
14 why I'm objecting is because I don't think it's
15 relevant to avoided cost rates and our calculations
16 here in Utah.

17 THE WITNESS: Can I respond?

18 COMMISSIONER LEVAR: Is the objection
19 withdrawn or do we need to deal with the objection?

20 MS. HOGLE: The objection is
21 withdrawn.

22 A I believe the stakeholder process here is
23 intended to find information to inform that process.
24 So I believe the fact that there's only comments in
25 this is appropriate at that stage of that

1 proceeding.

2 BY MR. SANGER:

3 Q Thank you. Are you familiar with how
4 Oregon adopted its current renewable avoided cost
5 rates?

6 A I am, generally.

7 Q And did you participate in that process?

8 A No.

9 MR. SANGER: I'd like to hand out
10 both of them at the same time, REC Cross-Examination
11 Exhibit Nos. 3 and 4. May I do so at this time?

12 COMMISSIONER LEVAR: Yes.

13 (REC Cross-Examination Exhibit Nos. 3 and 4 marked.)

14 BY MR. SANGER:

15 Q REC Cross-Examination Exhibit No. 3 was a
16 ruling in Docket UM1396. Was this the docket that
17 the Oregon Commission adopted renewable avoided cost
18 rates?

19 A I believe so, but I was not involved in
20 that docket, or particularly in avoided costs at the
21 time.

22 Q So I'd like to refer you to page 3 of REC
23 Exhibit No. 3, and this is a ruling reopening a case
24 to accept comments. And on page 3, it discusses the
25 two various approaches for calculating rates during

1 the resource deficiency period. And it discusses
2 that, if a peaking resource precedes another major
3 resource, the avoided cost will be based on the
4 market plus a premium for capacity, and the market
5 rate will be in effect until the start of the next
6 major resource.

7 For the renewable QF, which the developer
8 will cede the RECs over to the utility, the proposed
9 QF may choose an avoided cost stream based on the
10 avoided cost of the major renewable acquisition.

11 When the major avoidable resource is a gas
12 plant, Gas CCCT, all QFs may choose an avoided cost
13 stream based on the cost of the Gas CCCT.

14 In your brief, limited review of this,
15 does that kind of encapsulate what the Oregon
16 process is for renewable avoided costs?

17 MS. HOGLE: Objection, Your Honor. I
18 believe that Mr. MacNeil has testified that he was
19 not part of this proceeding and he did not even
20 participate, and so I don't think Mr. Sanger has
21 provided sufficient foundation to even question
22 Mr. MacNeil about this. So I object to even the
23 question.

24 COMMISSIONER LEVAR: Mr. Sanger, do
25 you want to respond to the objection?

1 MR. SANGER: Yes. So I think we have
2 established that Oregon has a renewable avoided cost
3 rate methodology. Mr. MacNeil is familiar with
4 that, explained what it means. My question is, on
5 this exhibit, the Oregon Commission has made a
6 proposal to adopt a renewable avoided cost rate
7 methodology. That is on page 3 of the exhibit. And
8 what I would like Mr. MacNeil to answer is not
9 whether he participated in the case but to read this
10 page and tell me if that is generally consistent, on
11 a high level, with the current methodology. This
12 could be a page from any document, and I'd like him
13 to take a look at it and tell me whether or not it's
14 consistent with his understanding of the current
15 Oregon renewable avoided cost methodology.

16 COMMISSIONER LEVAR: Whether any of
17 these three options that are on this page are
18 consistent?

19 MR. SANGER: Yes.

20 COMMISSIONER LEVAR: Ms. Hogle, do
21 you have anything else to say on your objection with
22 that clarification?

23 MS. HOGLE: I do. Thank you. And I
24 guess my reaction to that is that this is the first
25 time that we've taken a look at these documents. It

1 could be taken out of context. I'd like to see the
2 full record of the proceeding to see how these three
3 questions relate to that. I think it's insufficient
4 material for him to be asking the question, given
5 Mr. MacNeil did not participate in that proceeding.

6 COMMISSIONER LEVAR: Does any other
7 party in this docket have anything they want to add
8 to this objection? As I'm considering the relevance
9 of this, I'm recalling that as the line of
10 questioning began, this was based on Mr. MacNeil's
11 criticism of other parties' proposals for lacking
12 sufficient calculations and background. I think
13 there's some relevance. I think our relevance on
14 this is -- does have its limits, but at this point,
15 I think I'm not prepared to cut off this particular
16 question.

17 THE WITNESS: Please repeat the
18 question.

19 BY MR. SANGER:

20 Q What I would prefer is if you look at
21 page 3, where it says, "For resource deficiency
22 periods, avoided costs will be based on one of the
23 following." And my question to you is whether that
24 summary is, at least on a high level, generally
25 consistent with what the current Oregon renewable

1 **avoided cost methodology is?**

2 A I understand that the standard renewable
3 costs in Oregon continue to use this methodology,
4 and when the Commission considered changing the
5 methodology for nonstandard QFs, it adopted a
6 different approach and neglected to establish a
7 renewable avoided cost methodology at that time,
8 and it is continuing to consider the appropriate
9 renewable methodology for nonstandard QFs. And
10 pertinent to this, I was not involved in this, but
11 what I identified in a case in Oregon is the REC
12 price, the implied REC price that Oregon customers
13 pay to QFs who choose to have -- to defer renewable
14 resources is in the ballpark of \$20 to \$30 per
15 megawatt hour for just the REC. So if you have
16 nonstandard rates, you're a wind resource, if you
17 opt to also cede your REC -- that's electronic and
18 has no impact on the system other than RPS
19 compliance -- those resources are paid an extra \$20
20 to \$30 per megawatt hour.

21 Pertinent to this -- this is what the
22 Commission ordered -- I don't know that they truly
23 appreciated what they were ordering at the time, and
24 I certainly expect that this may be changed in the
25 near future because I do not believe a \$20 to \$30

1 REC price is an appropriate price for the Company to
2 acquire renewable energy credits (inaudible)RPS. So
3 it's an example of, these are the rules, but if we
4 don't fully understand how those are going to be
5 applied and the results, you can see things that are
6 just foolish in the outcomes that are not apparent
7 in very reasonable statements of principle and
8 methodology.

9 Q So I think the answer was yes, that this
10 summary is -- on a high level, represents the
11 current Oregon Schedule 37 approach.

12 A I said that it still is correct for the
13 standard rates, yes.

14 Q Thank you. So the next question I wanted
15 to ask you is, would it surprise you that PacifiCorp
16 believed that in consideration of this proposal,
17 that the questions were primarily legal and policy
18 in nature and therefore should not require
19 evidentiary proceedings?

20 MS. HOGLE: Objection. Mr. MacNeil
21 doesn't know what PacifiCorp believed or did not
22 believe, so I think that question is objectionable.
23 BY MR. SANGER:

24 Q I'd like to refer you, then -- I'll
25 move -- I believe that she's correct that I haven't

1 laid the proper foundation so I will attempt to do
2 that. If you refer to REC Exhibit No. 4, page 9 of
3 10, at the bottom of that -- you could look at the
4 first page as well, which are PacifiCorp's opening
5 comments responding to this document -- if you look
6 at the bottom of that page it says, "Procedural
7 Issues." And the question is, "Which of these
8 issues should be the subject of evidentiary
9 proceedings?" And then PacifiCorp says, "PacifiCorp
10 believes that the issues raised in Order No. 10-448
11 are primarily legal and policy in nature and
12 therefore should not require evidentiary
13 proceedings. However, if the Commission determines
14 that the avoided cost framework should be modified
15 further, PacifiCorp may recommend that those new
16 modifications be subject to evidentiary
17 proceedings."

18 A That is what it says.

19 Q Does that surprise you?

20 A It doesn't surprise me because these rates
21 have remained in effect since this happened and it
22 took my analysis of the results to point out how
23 preposterous it was. Had we known, we would have
24 brought this up much sooner.

25 Q And under these "preposterous rates" for

1 renewable rates in Oregon, are there a large number
2 of renewable QFs entering into contracts with
3 PacifiCorp now?

4 A I'm not sure of the total number of QFs
5 which have entered into rates based on this
6 methodology. I know we did procure a couple hundred
7 of megawatts of solar resources in Oregon under the
8 standard methodology. I do know that currently Utah
9 customers, in fact, are allocated the largest share
10 of those costs. It remains to be seen because
11 renewable rates have not been paid to QFs, whether
12 Utah will continue to pay for those RECs that Oregon
13 is intending for, based on its RPS compliance.

14 Q I just have one further line of
15 questioning. So I'd like you to refer to
16 John Lowe's direct testimony. There's an exhibit to
17 that which is the current Oregon avoided cost rates.

18 A I don't believe I have the exhibit.

19 Q I can hand it to you, sir. Is that the
20 current PacifiCorp Oregon Schedule 37 or, at least
21 at the time of this filing, was it the current one?

22 A I believe it is the current one, yes.

23 Q Are you aware of whether any QFs have been
24 able to enter into contracts with PacifiCorp under
25 that schedule?

1 A I'm not sure.

2 Q **Okay.**

3 MR. SANGER: Thank you. I have no
4 further questions.

5 COMMISSIONER LEVAR: Thank you. I
6 think we'll go to redirect now from Ms. Hogle. And
7 there's a point that I was just reminded of. Just
8 for clarification on the record, we're using the
9 abbreviation "RECs." There's a party that is
10 abbreviated "REC," and then there is a term of art
11 that we're using, so it might be good to avoid the
12 abbreviation for clarify in the record. Usually,
13 context would clarify that, but to avoid potential
14 confusion, let's try to avoid using the acronym
15 "REC" as we're speaking. Ms. Hogle, with that,
16 we'll go to you for redirect.

17 REDIRECT EXAMINATION

18 MS. HOGLE: Just maybe a couple. I
19 think he answered one of them already.

20 BY MS. HOGLE:

21 Q **Mr. MacNeil, do Oregon rules include**
22 **renewable rates for Schedule 38?**

23 A Not at this time.

24 Q **During Mr. Sanger's line of questioning,**
25 **he was also asking you -- and I think he took you**

1 through a table in your testimony regarding the
2 differences in prices between the queue in May and
3 the queue in August 2017. How long will the prices
4 be in effect for Schedule 37?

5 A So from the time the Commission approves
6 the new tariff and it takes effect until it approves
7 a new tariff and that tariff takes effect. So we
8 file annually following -- within 30 days of our IRP
9 or IRP update, and if it's a smooth process it could
10 be approved within 30 days. If it's not smooth, we
11 did get a rate update this year in, I believe, June,
12 but the current proposal is still on the table so it
13 could be a while.

14 Q For the prices in the August queue, will
15 the Company be making another filing in June 2018,
16 approximately?

17 A Yes. So following the filing of the 2017
18 IRP update in March 2018, we will be filing to
19 update Schedule 37, and it will include new
20 assumptions and so on at that time. We would
21 include a reasonable portion of the QFQ at that time
22 as well.

23 MS. HOGLE: I have no further
24 questions. Thank you.

25 COMMISSIONER LEVAR: Any recross,

1 Ms. Hayes?

2 MS. HAYES: No, thank you.

3 COMMISSIONER LEVAR: Mr. Sanger?

4 MR. SANGER: No, thank you.

5 COMMISSIONER LEVAR:

6 Commissioner Clark, do you have any questions for
7 Mr. MacNeil?

8 COMMISSIONER CLARK: I don't,
9 currently, but I'm wondering if we could make
10 certain that Mr. MacNeil would be available,
11 potentially, after the other witnesses have
12 testified. I might have a question or two for him
13 then.

14 COMMISSIONER LEVAR: Any concerns,
15 Ms. Hogle, with that?

16 MS. HOGLE: The Company has no
17 concerns. He will be made available. Thank you.

18 COMMISSIONER LEVAR:

19 Commissioner White, do you have any questions?

20 COMMISSIONER WHITE: I'll reserve any
21 questions that I have to a later time.

22 BY COMMISSIONER LEVAR:

23 Q I have a couple for you. And this
24 question may not be within your job duties. If it's
25 not, just let me know. But since Rocky Mountain

1 **Power filed -- PacifiCorp filed its 2017 IRP on the**
 2 **issue of deferring like-resources during the --**
 3 **establishing the deficiency period based on**
 4 **like-resources, has PacifiCorp been calculating**
 5 **Schedule 38 pricing under that methodology since the**
 6 **filing of the 2017 IRP that contained deferrable**
 7 **resources?**

8 A Yes. So once the 2017 IRP was filed, we
 9 have been employing the like-for-like deferral,
 10 which came out of Order 12-035-100, and that
 11 includes a queue of solar resources deferring solar,
 12 wind deferring wind, other resources deferring
 13 thermal.

14 Q So that's already happening in Schedule
 15 38, correct?

16 A Yes.

17 Q Just a couple of different questions on
 18 two different issues. Are you aware of any Schedule
 19 37 projects that connect to the transmission system?

20 A I'm not familiar with what the
 21 interconnection rules are -- not rules, but
 22 specifics are for those resources.

23 Q So you don't know, yes or no, whether all
 24 Schedule 37 projects connect directly to the
 25 distribution system?

1 A I do not.

2 Q I want to ask you about something about
3 Mr. Lowe's testimony and surrebuttal. I think it's
4 pretty much the same suggestion in both, and this is
5 to queue position. I'll just read from Mr. Lowe's
6 direct testimony, and I believe his statement in
7 surrebuttal is about the same. It says, "A more
8 reasonable position would be to use the historic
9 percentage of QFs that are constructed as compared
10 to the entire queue or certain completion milestones
11 that show a proposed project is likely to be
12 constructed like competing" -- I should have given
13 you the line numbers. I'm sorry. I'm on page 24 of
14 Mr. Lowe's direct, lines 503 through 506. I don't
15 know if you have that in front of you. And my
16 question is -- it's a hypothetical one -- but
17 looking at that language, if we were to consider
18 ordering something along the lines of what is
19 suggested there, is there sufficient specificity, or
20 are there more details that -- if we were inclined
21 to order something like that, would you need
22 additional details from an order to know how to
23 implement something like that?

24 A I would definitely need additional
25 details.

1 COMMISSIONER LEVAR: That's all the
2 questions I have. Thank you, Mr. MacNeil.

3 MR. SANGER: I have a question. Is
4 now the time for me to move for the admission of my
5 cross-examination exhibits or should I do that
6 later?

7 COMMISSIONER LEVAR: Now would be an
8 appropriate time for that.

9 MR. SANGER: I'd like to move for the
10 admission of my cross-examination exhibits, REC
11 Exhibits 1, 2, 3, and 4.

12 COMMISSIONER LEVAR: If any party has
13 any objection, please indicate to me.

14 MS. HOGLE: I just have a comment. I
15 see three cross-examination exhibits; I don't see
16 four. I apologize.

17 MR. SANGER: REC Cross-Examination
18 Exhibit No. 3 was the ruling, and you have 1396.
19 And I can hand you a copy if I neglected to do so.

20 COMMISSIONER LEVAR: If this helps, I
21 have a 1, 3, and 4, but I don't have a 2.

22 MR. SANGER: You're right. I did not
23 use Cross-Examination Exhibit No. 2, so I will not
24 move for the admission of that.

25 COMMISSIONER LEVAR: So your motion

1 is for 1, 3, 4?

2 MR. SANGER: Yes.

3 COMMISSIONER LEVAR: Okay. If any
4 party objects to this motion, please indicate to me.
5 I'm not seeing any objections, so the motion is
6 granted. Ms. Hogle, do you have anything else?

7 MS. HOGLE: The Company rests its
8 case, however, Mr. MacNeil will be available for any
9 questions that the Commission may have after
10 questioning the other witnesses. Thank you.

11 COMMISSIONER LEVAR: Thank you.
12 Let's go to Mr. Jetter now.

13 MR. JETTER: Thank you. The Division
14 would like to call and have sworn in
15 Dr. Abdinasir Abdulle.

16 DR. ABDINASIR ABDULLE,
17 having been first duly sworn to tell the truth, was
18 examined and testified as follows:

19 BY MR. JETTER:

20 Q Would you please state your name and
21 occupation for the record?

22 A My name is Abdinasir Abdulle,
23 A-b-d-i-n-a-s-i-r A-b-d-u-l-l-e, and I am working
24 for the Division of Public Utilities. I'm here to
25 testify on their behalf.

1 Q Thank you. And in the course of your
2 employment with the Division of Public Utilities,
3 did you have an opportunity to review the filings in
4 this case?

5 A Yes, I did.

6 Q And did you create and cause to be filed
7 with the Commission three DPU prefiled testimonies
8 which are direct testimony, rebuttal, and
9 surrebuttal, along with any exhibits that --

10 A Yes, I did.

11 Q Do you have any corrections or edits you'd
12 like to make to this?

13 A No.

14 MR. JETTER: I'd like to move at this
15 time to enter those three prefiled testimonies into
16 the record.

17 COMMISSIONER LEVAR: If any party
18 objects, please indicate to me. I'm not seeing any
19 objections, so the motion is granted.

20 BY MR. JETTER:

21 Q Thank you. And following up on that,
22 briefly, if you were asked the same questions in
23 those testimonies that you have prefiled today,
24 would your answers remain the same?

25 A Yes.

1 Q Thank you. I have no further questions
2 for Dr. Abdulle. He's available for cross.

3 COMMISSIONER LEVAR: I think I will
4 go to Mr. Snarr first.

5 MR. SNARR: No questions.

6 COMMISSIONER LEVAR: Ms. Hogle, do
7 you have any questions?

8 MS. HOGLE: No questions.

9 COMMISSIONER LEVAR: Ms. Hayes.

10 MS. HAYES: Yes, just a few. Thank
11 you.

12 CROSS-EXAMINATION

13 BY MS. HAYES:

14 Q Good morning, Dr. Abdulle. You have
15 testified that like-for-like deferral is one way to
16 preserve customer indifference, but you have also
17 testified that it is not the only way to preserve
18 customer indifference; is that correct?

19 A Yes.

20 Q Under the traditional proxy PDDRR method,
21 a renewable resource can displace a thermal
22 resource, no problem, right?

23 A Currently, that's the case.

24 Q Do you think it's appropriate that having
25 renewable resources in the preferred portfolio

1 **should make avoided cost pricing more restrictive**
2 **for renewable QFs?**

3 A I didn't see this case as being more
4 restrictive, but if that's the case, I don't think
5 it's wise.

6 Q **Okay.**

7 COMMISSIONER CLARK: Chair LeVar, I'm
8 having difficulty hearing the witness.

9 COMMISSIONER LEVAR: If there's a way
10 to adjust the microphone closer to your mouth.

11 BY MS. HAYES:

12 Q **So under the Company's proposal when there**
13 **is a renewable resource in the preferred portfolio,**
14 **there's a limitation on the types of renewables**
15 **we're allowing to make deferrals; is that correct?**

16 A Yes. The Company is proposing
17 like-for-like.

18 Q **So having renewable resources in the**
19 **portfolio does make pricing for QFs more limiting,**
20 **doesn't it?**

21 A Yes, in a sense.

22 Q **So you've testified that the Company's**
23 **proposal leads to the calculation of a specific**
24 **avoided cost for each resource type, correct?**

25 A Yes.

1 Q But it does more than just calculate
2 pricing specific to each resource type, doesn't it?
3 I'll explain that a little bit. The pricing
4 assumptions limit resource deferrals to resources of
5 the same type, correct?

6 A Yes.

7 Q So the utility's proposed pricing
8 effectively limits what a QF can defer; is that
9 correct?

10 A Yes. When I tested the proposal limits,
11 it's like-for-like, so far.

12 Q But in reality, a QF will defer whatever
13 is next deferrable, correct?

14 A The current methodology which says defer
15 what's next, not considering the like-for-like, is
16 the next thermal that should be deferred. But
17 currently the way they're proposing is still the
18 next -- the next like resources should be deferring.

19 Q Okay. But, sort of putting aside the
20 modeling assumptions, won't what is actually
21 deferred, in reality, just be whatever is next,
22 regardless of type?

23 A Can you rephrase the question?

24 Q It just seems like, regardless of what the
25 modeling assumptions are, what will actually be

1 **deferred is just whatever comes up next.**

2 A I don't understand what you are saying.

3 Q **Okay. Forget it.**

4 A It's the model we are talking about.

5 Q **Okay. So you recommend that Schedule 37**
6 **QFs be placed in the middle of the Schedule 38**
7 **queue; is that correct?**

8 A Yes.

9 Q **Do you have reason to believe that**
10 **potential Schedule 37 QFs will come online after**
11 **half of the Schedule 37 -- half of the Schedule 38**
12 **projects?**

13 A I don't follow it.

14 Q **Well, you've recommended that the Schedule**
15 **37 projects come in in the middle of Schedule 38**
16 **queue, right? I'm just wondering if you have reason**
17 **to believe that chronologically those Schedule 37**
18 **projects will, sort of, happen after those will**
19 **actually come online?**

20 A Well, the way I understand it is, the
21 queue process, it's not when it's coming -- nobody
22 knows when they will even come. But what we're
23 saying is that it's unfair for the Company or for
24 ratepayers that we don't consider any queue at all
25 putting (inaudible) at the beginning. It's also

1 unfair to put it at the end, so we're just coming up
2 with a compromise position of the middle to be
3 reviewed later on.

4 Q How many megawatts, roughly, is the middle
5 of the queue?

6 A I don't have a number for that.

7 Q Would you accept, subject to check, that
8 based on Mr. MacNeil's surrebuttal testimony -- or
9 rebuttal testimony -- it's about 750 megawatts?

10 A I would accept that, subject to check.

11 Q I believe at the time of Mr. MacNeil's
12 rebuttal testimony, the queue was roughly
13 1,500-megawatts long. We can confer at a break if
14 that's incorrect. So do you have reason to believe
15 that it takes the same amount of time for
16 25 megawatts of Schedule 37 QFs to come online as it
17 does 750 megawatts of Schedule 38 QFs?

18 A The question is, do I believe that it will
19 take the same amount of time, 25 and 700? I don't
20 know. I don't have any way to say. If we bring the
21 25 now, it will come faster than the others and
22 whatever will bring it first.

23 Q Okay. That's all my questions.

24 COMMISSIONER LEVAR: Mr. Sanger?

25 CROSS-EXAMINATION

1 BY MR. SANGER:

2 Q Very short cross-examination, Dr. Abdulle.
 3 I'd like to refer to your testimony on page 4, your
 4 rebuttal testimony. There is a question starting on
 5 line 70 where you are being asked to comment on
 6 Mr. Townsend and Mr. Lowe for the Coalition's
 7 recommendation that for all QFs regardless of size,
 8 the 2021 Wyoming wind resource should be the
 9 appropriate proxy for calculating avoided cost. Do
 10 you remember that question?

11 A Yes.

12 Q I want to go to the bottom, the last two
 13 sentences of your answer, starting on the end of
 14 line 82 where you state that, "The Commission has
 15 neither acknowledged nor approved the projects or
 16 the IRP analysis supporting them. It may be
 17 premature to include them in avoided cost
 18 calculations." That is your testimony, correct?

19 A That's why it's in there.

20 Q If the Commission acknowledges or approves
 21 the projects for the IRP analysis, do you then
 22 believe that it may be mature or the appropriate
 23 time to include them in the avoided cost
 24 calculations?

25 A Yes, but it will all depend on the

1 calculations of avoided cost and the IRP
2 calculation. All those things will be factored in.

3 Q Okay. So I heard Mr. MacNeil here talk
4 earlier that under at least the PDDRR methodology,
5 that as soon as they file it, the preferred
6 portfolio and other inputs and assumptions are
7 calculated in the Schedule 38 rate process. Do you
8 agree with that?

9 A Yes.

10 Q So in this case, since these are not
11 included in the preferred portfolio, then you're
12 recommending that they not be accounted for in
13 Schedule 38 until after the IRP is acknowledged and
14 approved?

15 A Even though the statement is saying it's
16 not included, it's premature. I think including it
17 would be okay.

18 Q Okay. Thank you. I have no further
19 questions.

20 COMMISSIONER LEVAR: Any redirect,
21 Mr. Jetter?

22 MR. JETTER: I have no redirect.
23 Thank you.

24 COMMISSIONER LEVAR:
25 Commissioner White, do you have any questions?

1 COMMISSIONER WHITE: No questions.

2 COMMISSIONER LEVAR:

3 Commissioner Clark?

4 COMMISSIONER CLARK: No questions.

5 Thank you.

6 COMMISSIONER LEVAR: I don't have
7 any, so thank you, Dr. Abdulle. Mr. Jetter,
8 anything further?

9 MR. JETTER: Nothing further from the
10 Division.

11 COMMISSIONER LEVAR: We'll go to
12 Mr. Snarr.

13 MR. SNARR: We'd like to call
14 Cheryl Murray as a witness on behalf of the Office
15 of Consumer Services.

16 CHERYL MURRAY,
17 having been first duly sworn to tell the truth, was
18 examined and testified as follows:

19 BY MR. SNARR:

20 Q Could you please state your name, business
21 address, and by whom you're employed?

22 A My name is Cheryl Murray. My business
23 address is 160 East 300 South, and I am employed as
24 a utility analyst for the Office of Consumer
25 Services.

1 **Q Did you prefile direct and rebuttal**
2 **testimony in this docket?**

3 A Yes. On October 3, 2017, I submitted
4 seven pages of direct testimony, and on
5 October 31st, I submitted three pages of rebuttal
6 testimony.

7 **Q Do you have any corrections you would wish**
8 **to make to either your direct or rebuttal testimony?**

9 A No.

10 **Q And if you were asked those same questions**
11 **today, would your answers be the same?**

12 A Yes.

13 MR. SNARR: I'd like to move the
14 Office of Consumer Services exhibits, identified as
15 OCS 1D and OCS 1R, into evidence.

16 COMMISSIONER LEVAR: If any party
17 objects to that motion, please indicate to me. I'm
18 not seeing any objections, so the motion is granted.

19 BY MR. SNARR:

20 **Q What specific issues did you address in**
21 **your testimony?**

22 A In my direct testimony, I provided the
23 Office's position regarding the issue of renewable
24 energy certificate ownership, and the Company's
25 proposals for including Schedule 37 qualifying QFs

1 in the QFQ. In rebuttal testimony, I addressed an
2 issue raised by Mr. Neal Townsend regarding the
3 Company's proposed Wyoming wind projects.

4 **Q Do you have a summary of your prefiled**
5 **testimony?**

6 A Yes.

7 **Q Could you please provide that?**

8 A Yes. First, I want to reiterate that any
9 proposal or recommendation not addressed in my
10 direct testimony does not indicate Office support or
11 opposition to a particular issue.

12 Renewable resources identified in the
13 Company's integrated resource plan include RECs,
14 which would accrue to ratepayers upon acquisition of
15 those resources. In this docket, the Company
16 proposes that a QF -- if a QF defers a renewable
17 resource that would otherwise produce RECs,
18 renewable energy certificates, for the benefit of
19 customers, the Company should retain the
20 QF-generated renewable energy certificates for the
21 benefit of the customers.

22 The Office's third said the Company's
23 proposal is a reasonable way to allocate those
24 renewable energy certificates and that only by
25 allowing the Company to keep those QF-generated

1 renewable energy certificates, can the PURPA
2 customer indifference standards be met.

3 Regarding the Company's proposal to
4 include Schedule 37 QFs at the end of the QFQ, as
5 stated in my testimony, the Office believes that
6 including Schedule 37 QFs in the QFQ is appropriate.
7 However, placement at the end of the QFQ would
8 likely not produce the most reasonable result. The
9 Division of Public Utilities suggests including
10 Schedule 37 QFs at the midpoint of the QF pricing
11 queue and reevaluating this proposal in the future
12 as appropriate. The Office supports the Division's
13 recommendation.

14 On behalf of the Renewable Energy
15 Coalition, Mr. Townsend advocates for including the
16 Wyoming wind projects as deferrable resources for
17 avoided cost pricing purposes. He also recommends
18 that the Commission consider whether Schedule 37 and
19 38 renewable QFs should be credited with the
20 equivalent of avoided transmission costs, given the
21 linkage between the development of the 2021 Wyoming
22 wind resources and the addition of new Wyoming
23 transmission capacity. However, if and when
24 PacifiCorp declares it is not going to pursue the
25 wind projects, he recommends that the resource be

1 removed from the avoided cost calculation. The
2 office agrees that if the Commission allows the
3 Wyoming wind resources to be included as a
4 deferrable resource for avoided cost pricing but the
5 Company decides for any reason not to pursue those
6 resources, they should immediately be removed from
7 avoided cost calculations.

8 In my rebuttal testimony, I stated that
9 under the circumstances I just described, the
10 Wyoming wind resources should be removed from
11 avoided cost pricing calculations or avoided cost
12 pricing would be overvalued and the ratepayer
13 indifference standard could not be upheld. To
14 clarify this point, the concept is to calculate as
15 accurately as is reasonable, appropriate avoided
16 cost pricing. Thus, whether avoided cost pricing
17 would be higher or lower with the inclusion of
18 Wyoming wind resources, if those resources are not
19 acquired, they should not be included as deferrable
20 resources.

21 Q Does that conclude your summary?

22 A Yes.

23 MR. SNARR: We would make Ms. Murray
24 available for cross-examination.

25 COMMISSIONER LEVAR: Thank you.

1 Mr. Jetter, do you have any questions?

2 MR. JETTER: I have no questions.

3 Thank you.

4 COMMISSIONER LEVAR: Ms. Hogle?

5 MS. HOGLE: Just a couple. Thank
6 you.

7 CROSS-EXAMINATION

8 BY MS. HOGLE:

9 Q Ms. Murray, you just testified about your
10 support, or the Office's support, for the midpoint
11 of the queue. Were you in the room when Mr. MacNeil
12 testified about the Company's filing in August?

13 A Yes.

14 Q Does the 36 percent of the queue and the
15 Company's August filing, is that reasonable as
16 compared to the midpoint of the queue that the OCS
17 proposes?

18 A I haven't done an actual calculation of
19 what the difference would be in the avoided cost
20 pricing. I think that what we're looking at is the
21 idea that Schedule 37 QFs be included in the queue.
22 I'm not sure that anyone has provided a precise
23 evaluation as to where it is most appropriate. So
24 what we're looking at is what we think is a
25 reasonable way to start and to continue to look at

1 the issue.

2 Q Certainly, but I believe that one of the
3 challenges that the OCS had with respect to the
4 Company's original May position was that it was too
5 extreme in terms of the prices. Am I characterizing
6 that correctly?

7 A Our original position -- which is still
8 our position -- is that if you put it at the end of
9 the queue, we think that is very, very likely to be
10 an inappropriate placement.

11 Q And why is that?

12 A Well, because if you look at the size of
13 the QFs, if you look at the time it takes to build a
14 QF, there are, in our estimation, there are
15 generally differences in how long it takes to build
16 a larger QF as opposed to a 3-megawatt QF. So
17 calculating it based on -- and also, the larger QFs,
18 I can't give you a number or a percentage of how
19 many actually get built, but we do know that there
20 are a fair amount that fall out of the queue without
21 being built. And so if a lot of your pricing is
22 based on that number, then it is very likely that
23 your Schedule 37 pricing will not be appropriate.

24 Q So it will produce -- if you put them at
25 the end of the queue, it will produce much lower

1 **prices because it assumes --**

2 A Yes.

3 Q So isn't 36 percent less than the middle,
4 then -- wouldn't that produce avoided cost prices
5 that are higher than the midpoint that the OCS
6 proposes?

7 A Potentially. I guess I have to say I am
8 not certain -- was his 36 percent based on capacity,
9 or megawatts, or on a number of QFs in the queue.

10 MS. HOGLE: Thank you. No further
11 questions.

12 COMMISSIONER LEVAR: Ms. Hayes, any
13 questions?

14 MS. HAYES: No questions. Thank you.

15 COMMISSIONER LEVAR: Mr. Sanger?

16 MR. SANGER: No questions.

17 COMMISSIONER LEVAR: Any redirect,
18 Mr. Snarr?

19 MR. SNARR: No.

20 COMMISSIONER LEVAR:
21 Commissioner Clark, do you have any questions?

22 COMMISSIONER CLARK: No questions.

23 COMMISSIONER LEVAR:
24 Commissioner White?

25 COMMISSIONER WHITE: No questions.

1 COMMISSIONER LEVAR: I don't have
2 any. Thank you. Do you have anything further,
3 Mr. Snarr?

4 MR. SNARR: No. That concludes our
5 presentation.

6 COMMISSIONER LEVAR: Thank you. With
7 the concerns that Mr. Sanger raised this morning on
8 one of his witnesses, I think we'll go to Renewable
9 Energy Coalition first and then conclude with Utah
10 Clean Energy. So we'll go to you, Mr. Sanger.

11 MR. SANGER: I call Mr. John Lowe to
12 the witness stand.

13 JOHN LOWE,
14 having been first duly sworn to tell the truth, was
15 examined and testified as follows:

16 BY MR. SANGER:

17 Q Mr. Lowe, can you please provide your name
18 and position?

19 A John R. Lowe, and I'm an executive
20 director and founder of the Renewable Energy
21 Coalition.

22 Q Thank you. And under your direction, or
23 as you prepared it, did you prepare direct and
24 surrebuttal testimony including exhibits, in this
25 proceeding?

1 A Yes.

2 **Q If I asked you the same questions today,**
3 **would your answers be the same?**

4 A Yes.

5 MR. SANGER: I move for the admission
6 of the direct and surrebuttal testimony and exhibits
7 of Mr. John Lowe on behalf of Renewable Energy
8 Coalition.

9 COMMISSIONER LEVAR: If any party
10 objects to that motion, please indicate to me. I'm
11 not seeing any objections, so the motion is granted.
12 BY MR. SANGER:

13 **Q Mr. Lowe, do you have a summary of your**
14 **testimony?**

15 A Yes, I do. I'm going to not read this,
16 but summarize it. I believe Rocky Mountain Power
17 has proposed some very significant changes to the
18 methodology for Schedule 37, and the Coalition's
19 position is that we don't believe that those are
20 necessary and may be inappropriate in some ways. We
21 are concerned about the approach of like-to-like on
22 renewables, which has been discussed quite a bit in
23 the hearing so I don't know that I need to go into
24 detail on that issue. We're also concerned about
25 whether the Wyoming wind and transmission projects

1 should be considered for the purpose of avoided cost
2 development and whether they're deferrable or not
3 deferrable, or at least planned under the IRP. I'm
4 not sure that Mr. MacNeil's proposal on the separate
5 avoided cost rate -- we don't believe that it's
6 inconsistent with our understanding of the customer
7 indifference standard.

8 Also, with regard to the ownership of
9 RECs, I think the Coalition's position is as it's
10 been in Oregon, that the ownership of RECs under a
11 renewable situation -- renewable avoided cost,
12 renewable contract -- is: resource sufficiency,
13 project keeps the RECs; resource deficiency, project
14 turns over the RECs to the utility. But under a
15 standard avoided cost involving a baseload or a
16 thermal project, that the RECs would belong to the
17 project.

18 With regard to the queue, my testimony
19 indicates that we are not in support of the position
20 that Rocky Mountain has proposed on putting Schedule
21 37 at the end of the queue. We have obviously
22 proposed some other thoughts on how to approach
23 that, recognizing that there probably does need to
24 be more conversation about that. But, in general, I
25 would say that I don't understand why Schedule 37 --

1 which is involving small projects that are usually
2 pretty nimble in terms of coming online and don't
3 really involve a lot of cost compared to Schedule 38
4 projects -- why we're being quite so concerned about
5 some of these issues, frankly. So that's my
6 summary.

7 MR. SANGER: Thank you. Mr. Lowe is
8 available for cross-examination.

9 COMMISSIONER LEVAR: And I'm
10 wondering if we should break a little bit early for
11 lunch, just for continuity purposes as we move
12 through cross-examination. I'm not seeing anyone
13 objecting to that, so why don't we break for
14 approximately one hour and we'll reconvene at about
15 12:45.

16 (A recess was taken.)

17 COMMISSIONER LEVAR: We are back on
18 the record. Mr. Lowe, you're still under oath. And
19 Mr. Sanger, did you have anything else before
20 cross-examination?

21 MR. SANGER: No, thank you.

22 COMMISSIONER LEVAR: Okay. I think
23 we'll go to Ms. Hayes next.

24 MS. HAYES: Thank you.

25 CROSS-EXAMINATION

1 BY MS. HAYES:

2 Q I have one question. Mr. Lowe, you have
3 recommended putting Schedule 37 QFs into the
4 Schedule 38 queue based on metrics such as the
5 percentage of projects that have been developed or
6 development milestones; is that correct?

7 A Yes.

8 Q Given that recommendation, or that
9 willingness to subject Schedule 37 QFs to that
10 queue, would you support eliminating the 25-megawatt
11 annual cap on Schedule 37 development?

12 A Absolutely. I don't recall that there's a
13 cap anywhere else in the other service states of
14 PacifiCorp, or even Idaho Power, for that matter,
15 where the Coalition operates.

16 MS. HAYES: I have no other
17 questions.

18 COMMISSIONER LEVAR: Mr. Jetter, do
19 you have any questions for Mr. Lowe?

20 MR. JETTER: I have no questions.
21 Thank you.

22 COMMISSIONER LEVAR: Mr. Snarr?

23 MR. SNARR: No questions.

24 COMMISSIONER LEVAR: Thank you.

25 Ms. Hogle?

1 MS. HOGLE: I just have a few.

2 CROSS-EXAMINATION

3 BY MS. HOGLE:

4 Q Mr. Lowe, just wanting to go back to the
5 question that you just responded to. Did you file
6 testimony in the Wyoming proceedings dealing with
7 Schedule 37?

8 A Yes.

9 Q Isn't it true that Wyoming has a cap for
10 Schedule 37 rates?

11 A I don't remember a cap in terms of total
12 megawatts.

13 Q Subject to check, will you accept --

14 A Oh, absolutely.

15 Q Okay. I just wanted to clarify that. I
16 wondered if my questioning would jog your memory.
17 Okay. Can you please turn to your direct testimony,
18 starting in line 296, please?

19 A Okay.

20 Q And I believe you respond to the question,
21 "Can a renewable rate work with RMP's current
22 Schedule 37 methodology?" Correct?

23 A Yes.

24 Q And then you -- I believe you then use
25 Oregon's non-PDDRR methodology and renewable rates,

1 correct, when you cite Exhibit A?

2 A Yes.

3 Q Can you turn to that Exhibit A, please?

4 A Okay.

5 Q And before that, you say in your testimony
6 on lines 300 -- and I'll just read it for you, "At
7 the time the rates were set, the Oregon Commission
8 determined that Rocky Mountain Power's next planned
9 renewable resource acquisition was 2028." I'd like
10 you to go to page 5 of that Exhibit A, please.

11 A Okay.

12 Q As I understand it, those are the avoided
13 cost prices for standard fixed avoided cost rates
14 for Schedule 37, correct?

15 A Yes. That's what it says, standard fixed.

16 Q So I'd like you to go down to where that
17 2028 for Rocky Mountain Power's next planned
18 renewable resource acquisition would be, and go all
19 the way to that second table to the right.

20 A Yes.

21 Q And I deal with dollars per megawatt hours
22 so I know it says 471, but that would be \$47 per
23 megawatt hour is what that would represent in terms
24 of the standard fixed avoided cost prices; is that
25 correct?

1 A Yes.

2 Q Now, I'd like you to turn to page 7 of
3 that Exhibit A.

4 A Okay.

5 Q And my understanding is that's the prices
6 for renewable fixed avoided cost prices for Schedule
7 37, correct?

8 A Yes.

9 Q Going down to that column -- the first
10 column down to 2028, again, and across to that
11 second table there. Am I correct that that would
12 be, then, \$74 per megawatt hour for renewable fixed
13 avoided cost price for --

14 A The on-peak price.

15 Q Right, for Schedule 37. So that's a
16 difference of about \$25 or so?

17 A I'd have to do the math but somewhere in
18 that neighborhood.

19 Q And so why is that so different? Why is
20 the difference so much?

21 A Well, the standard avoided cost is based
22 upon a thermal or baseload kind of resource, and the
23 renewable resource is based upon a renewable
24 resource, such as wind, in this particular example.
25 So those costs are obviously different. Presumably,

1 there may be some value associated with RECs in
2 there, but I don't know what that is. I don't know
3 if it's 5 cents or 1 dollar, I have no idea. But,
4 generally, I think it's a difference between the
5 resource type that is considered in the stat. I
6 think there's fixed -- excuse me, thermal plant 2028
7 under this particular schedule and renewable as well
8 for that same date by coincidence. I think that was
9 discussed earlier by Mr. MacNeil.

10 **Q Isn't the only difference, really, who**
11 **retains the RECs? Is that the difference, who**
12 **retains the RECs?**

13 A Well, certainly starting in 2028 under the
14 renewable price, the RECs would be retained by the
15 utility. And not retained -- excuse me -- retained
16 by the utility under the renewable rate beginning
17 2028 under the prices we were looking at on page 5,
18 the standard rates. The presumption is the RECs are
19 retained by the project for that entire timeframe
20 because it's not renewable.

21 **Q Okay. So are you comparing something,**
22 **like, given that you quoted it in your testimony in**
23 **Utah, is that what you're proposing in Utah? Is**
24 **that your proposal here, those numbers?**

25 A I don't know that we proposed any numbers.

1 I think we were proposing a process or a methodology
2 similar to Oregon. Presumably, the numbers should
3 be something similar, I would guess, but I don't
4 have any idea. I didn't do any analysis like that.
5 I don't do that type of thing, actually.

6 Q Do you know what the value of a REC is in
7 the market now? Just curious.

8 A I don't work with that every single day.
9 The last thing I heard was somewhere in the
10 neighborhood of a dollar.

11 MS. HOGLE: Thank you. I have no
12 further questions.

13 COMMISSIONER LEVAR: Any redirect,
14 Mr. Sanger?

15 MR. SANGER: Yes, thank you.

16 REDIRECT EXAMINATION

17 BY MR. SANGER:

18 Q So referring to the exhibit that Ms. Hogle
19 just referred you to, I'd like to go back to page 7,
20 where Ms. Hogle pointed out that the rate in 2028
21 for a wind QF, the on-peak rate was \$7.46. Now, is
22 it your understanding that that rate is based on the
23 cost that PacifiCorp had in its last IRP for wind
24 resources?

25 A That, I can't tell you for sure because

1 there was a lot of controversy, so to speak, when
 2 rates were set. I can't tell you for sure, if
 3 that's the case. Typically, it would be the case,
 4 okay? But we had some abnormal things going on in
 5 the last year or so with some of these filings that
 6 disrupted that normal process, so I can't confirm it
 7 one way or the other.

8 Q If it was the case that it was based on
 9 the last IRP numbers, then wouldn't the resource
 10 cost that resulted in this \$7.46 be PacifiCorp's
 11 resource cost that it estimated in its IRP?

12 A Yes.

13 Q So this would have been the cost that
 14 PacifiCorp estimated that a wind generation resource
 15 would be in its 2015 IRP?

16 A Correct.

17 Q And then in its 2017 IRP, if the cost of
 18 wind generation is cut down, then this rate would
 19 correspondingly come down?

20 A Absolutely. And the dates might change as
 21 well, depending on when the resource was timed.

22 Q So if there's any inaccuracy in these
 23 prices, then it's because PacifiCorp's IRP is
 24 inaccurate?

25 A Or changed, yes.

1 MR. SANGER: Thank you.

2 COMMISSIONER LEVAR: Any recross?

3 Commissioner Clark, any questions for Mr. Lowe?

4 COMMISSIONER CLARK: Yes, thank you.

5 BY COMMISSIONER CLARK:

6 Q I want to just give you an opportunity to
7 help us a little more with your queue position
8 position. And for the record, I'm referring to what
9 you have said on page 16 of -- I think it's your
10 surrebuttal. We just have a couple of sentences on
11 this, but what I'm wondering is if you have applied
12 any of the alternative approaches that you describe
13 here and identified the percentage that would
14 pertain. For example, have you, on some basis,
15 calculated an historical percentage, or one based on
16 completion of milestones?

17 A Well, I think we're fairly knowledgeable
18 about some of those kinds of things. I believe that
19 the completion rate has changed over time. For
20 example, when I first started in this business in
21 '81 with PacifiCorp, we had a couple thousand
22 projects that were looking at developing, and
23 ultimately the Company entered into 70,
24 approximately, QF contracts. I believe around 50 of
25 those actually were built back in the mid '80s. Now

1 we're looking at a different generation of types of
2 projects, particularly with solar. I think we're
3 seeing, maybe, a little bit different completion
4 rate that's happening, but I believe that
5 intelligence is available. It's probably in the
6 range of, like, 70, 75 percent. Projects that are
7 actually contracted for ultimately get built.

8 But in terms of any quantification beyond
9 that in terms of what the resulting prices and so
10 forth, no, we haven't done that kind of analysis.

11 **Q The first approach you identify, I think,**
12 **is historic percentage of QFs constructed in**
13 **relation to the entire queue, right?**

14 **A** Correct.

15 **Q And so what historical period would you**
16 **think we should use and, again, I'm just**
17 **wondering --**

18 **A** Well, I think you should look at -- number
19 one, I think you should look at signed contracts,
20 probably. That's probably the best metric to look
21 at to use. And then I would look at, based upon
22 those signed contracts -- not people that have asked
23 for indicative pricing or have begun an inquiry
24 process on a power purchase agreement or those kind
25 of things but actual signed contracts -- then look

1 at, over time, how many projects out of this test
2 group of signed contracts, maybe over a three-year
3 period. Because we know that when people sign
4 contracts, they have, typically under the terms of
5 the contract, about three years to complete the
6 contracts -- or the construction -- along with
7 interconnection stuff that takes maybe as long as
8 that as well. So three years is probably a pretty
9 good time frame for looking back at determining how
10 many of those signed contracts actually developed,
11 and using that result to adjust, you know, what's
12 actually in the queue.

13 **Q So you'd recommend that method as opposed**
14 **to the historic percentage of constructed projects**
15 **in relation to the queue, in relation to the queue**
16 **rather than in relation to signed contracts?**

17 **A** Well, I would look at what I just
18 described.

19 **Q Because we've got three different methods**
20 **that are mentioned here in your testimony and I'm**
21 **trying to understand.**

22 **A** Well, those were suggestions on the kinds
23 of metrics that might be considered rather than
24 picking the very end, or picking the very beginning,
25 or picking some midpoint. This at least has a

1 little more logic and a little more analytical basis
 2 to it, and the history, I think, demonstrates that
 3 it's a valid way of looking at it. There may be
 4 different ways of taking that particular metric and
 5 that particular timeframe and applying it to
 6 something. I don't know that we're married on one
 7 approach or the other, we're just trying to suggest
 8 some general approaches that should be considered,
 9 frankly.

10 COMMISSIONER CLARK: Thanks very
 11 much.

12 COMMISSIONER LEVAR:
 13 Commissioner White?

14 COMMISSIONER WHITE: Just a quick
 15 follow-up question on Commissioner Clark's
 16 questions.

17 BY COMMISSIONER WHITE:

18 Q Would that process occur on a yearly
 19 basis? What would that look like in terms of that
 20 process if the Commission were to administer and, I
 21 guess, vet those averages?

22 A Well, once again, Commissioner Jordan, I
 23 don't know that we have thought to the next level of
 24 that process, but we're rather suggesting a more
 25 general metric or approach. But it may be, for

1 example, something that would be looked at on an
2 annual basis and may be adjusted. Once you got your
3 three-year picture every year, adjust it based upon
4 what's happened in the additional year. In other
5 words, kind of a rolling situation. But once again,
6 that's just one out of -- probably everybody in this
7 room will have a slightly different twist to it.

8 But the point I'm trying to get to is that
9 there has to be some reasonable and fair way of
10 analyzing this queue business or the projects that
11 actually get built for determining their impact on
12 the avoided cost prices in some manner. And there's
13 been all kinds of suggestions. We're just
14 suggesting some metrics based upon my experience
15 with the amount of time it takes for projects to get
16 built and the amount of time it takes for the
17 interconnection process, and the amount of projects
18 that typically or historically we've seen drop out
19 of the process. We've got something there that we
20 think is a reasonable way to consider.

21 COMMISSIONER WHITE: I have no
22 further questions.

23 COMMISSIONER LEVAR: Just for
24 clarification, the current process for Schedule 37
25 in Utah is that the Schedule 37 projects do not

1 receive any pricing adjustments based on the 38
2 queue?

3 THE WITNESS: That's my understanding
4 just based upon the proxy method which doesn't get
5 into that queue business at all.

6 COMMISSIONER LEVAR: That's the only
7 question I have. Thank you, Mr. Lowe. Mr. Sanger?

8 MR. SANGER: I have no further
9 questions for Mr. Lowe, but if there are no other
10 questions, I'd like to ask that he be excused from
11 the hearing for the rest of day.

12 COMMISSIONER CLARK: No objection.

13 COMMISSIONER LEVAR: From any other
14 parties? You're excused. Thank you, Mr. Lowe.

15 MS. HAYES: Mr. Chair, I don't
16 foresee this being an issue given the time, but I
17 did want to raise it. If we could have Mr. Dragoon
18 testify today, that would be our preference, given
19 his travel needs. But it does look like we may be
20 finishing the hearing today, but I did want to raise
21 that issue.

22 COMMISSIONER LEVAR: If there's no
23 objection from Mr. Sanger, just in the interest of
24 being safe, should we go to Mr. Dragoon next?

25 MR. SANGER: We're happy to have the

1 hearing proceed however everybody else wants it to
2 proceed.

3 COMMISSIONER LEVAR: Okay. Let's go
4 to Utah Clean Energy next.

5 MS. HAYES: Utah Clean Energy will
6 call Mr. Ken Dragoon.

7 KEN DRAGOON,
8 having been first duly sworn to tell the truth, was
9 examined and testified as follows:

10 BY MS. HAYES:

11 Q Mr. Dragoon, will you please state your
12 name and position for the record?

13 A Ken Dragoon. I'm the proprietor of Flink
14 Energy Consulting.

15 Q Did you file direct, rebuttal, and
16 surrebuttal testimony on October 3rd, October 31st,
17 and November 21st, 2017, respectively, in this
18 docket?

19 A Yes.

20 Q And do you have any corrections or
21 modifications to any of that testimony to make
22 today?

23 A No, I don't.

24 Q So if I asked you the same questions
25 today, your answers would be the same?

1 A Yes.

2 Q Do you have a summary of that testimony
3 you would like to provide today?

4 A Yes, I do.

5 Q Please proceed.

6 A Mr. Chairman, Commissioners, thank you for
7 this opportunity to speak with you.

8 The Company's proposal will result in
9 avoided cost pricing that is discriminatory against
10 QFs. It's not just and reasonable and it would
11 change the historical meaning of avoided cost.

12 By limiting renewable QFs to deferring
13 resources of similar types, they may be denied
14 access to prices reflecting the Company's true
15 avoided costs. Why, for example, should a renewable
16 QF be denied the avoided costs from deferring an
17 expensive thermal unit added early in the study
18 horizon just because a low-cost similar renewable
19 resource appears later in the portfolio? That is
20 the Company's proposal as I understand it, and it
21 seems utterly contrary to both past practice and the
22 purpose of PURPA to allow QF resources access to
23 true avoided cost prices.

24 I appreciate the Commission's intent to
25 allow renewable QFs to defer other renewables in the

1 portfolio, but QFs should not be denied access to
2 true avoided cost pricing in the process. PURPA
3 calls for compensating QFs for a utility's actual
4 incremental avoided energy and capacity costs, not
5 just those not associated with a subset of
6 comparable resources that happen to show up in an
7 IRP portfolio.

8 The Company's direct testimony claims that
9 we cannot accurately compare the cost and value of
10 one renewable resource based on the cost of a
11 renewable resource with different characteristics.
12 They say that renewable resource characteristics are
13 so different from one technology type to another
14 that they can't be compared. They liken it to
15 comparing apples to doughnuts, concluding it can't
16 be done. And, yet, the Company and standard
17 practice throughout the country in the nearly
18 40-year history of PURPA has allowed renewable QFs
19 of all stripes to defer thermal units. It was a
20 founding concept. The Company's conclusion is a
21 striking departure from precedent and calls for a
22 brief review of how they came to that very
23 surprising conclusion.

24 The Company illustrates their point with
25 an example in which a solar resource defers a wind

1 resource. In the example, the solar plant brings
2 nearly four times as much effective capacity value
3 than the wind resource. So in their example, each
4 megawatt of solar would defer almost 4 megawatts of
5 wind and get a capacity payment based on 4 megawatts
6 of wind. That sounds like a lot of money, and it
7 would be. Of course, 1-megawatt solar produces a
8 lot less energy than 4 megawatts of wind, so they
9 reduce the huge capacity payment by the deferred
10 energy -- the wind -- and end up with big negative
11 energy payments. In short, they calculate a
12 capacity payment that is very high and then claw it
13 back with negative energy payments. Though the math
14 seems to work out, this is pretty extreme, and the
15 Company's conclusion is that it simply can't be
16 done.

17 I agree that this is, to say the least, an
18 unsatisfactory way to compare resources and set
19 avoided costs, but I disagree that it can't be done
20 fairly, simply, and accurately. My testimony took a
21 lot of heat for being short on details. This was on
22 purpose because some significantly new ground is
23 being broken, and it deserves more thoughtful,
24 preferably cooperative, problem solving than is
25 typically available in adversarial proceedings such

1 as this.

2 Nevertheless, I was struck that their
3 example would have been completely different and
4 make much more sense by changing a single word in
5 their direct testimony. If, instead of deferring
6 resources based on the relative effective capacity
7 value, they deferred resources based on energy
8 value, the results would have made a lot more sense.
9 So just to illustrate using the Company's example:
10 In very round numbers, 1 megawatt of solar would
11 produce a little less than 3,000-megawatt hours of
12 energy per year. 1 megawatt of the wind project
13 would produce a bit less than 4,000-megawatt hours
14 per year. If solar defers wind based on energy
15 instead of capacity, each megawatt of solar would
16 defer about three quarters of a megawatt of wind.
17 That would be -- doing that means that each megawatt
18 hour of solar is deferring 1-megawatt hour of wind
19 energy. So already we're much closer than what we
20 expect, 1 megawatt of solar deferring 3/4 of a
21 megawatt of wind.

22 Now, there are other differences between
23 the resources to take into account, the main one
24 being capacity. One megawatt of solar brings about
25 6/10 of a megawatt of effective capacity, and

1 .75 megawatts of wind brings about a tenth of a
2 megawatt of capacity. So you've got about half a
3 megawatt more effective capacity from the solar
4 plant than the deferred wind, and that should be
5 credited back to the solar plant. The value of the
6 energy is a little different, too, because of the
7 timing, so another adjustment should be made for
8 that, etc. But there are other things like
9 integration costs.

10 That this approach seems to work in this
11 example doesn't, of course, mean that it works in
12 all cases or that it's the best approach. But my
13 point is, that just because the Company came up with
14 a bad way of doing it doesn't mean there isn't a
15 good way.

16 I urge the Commission to approve an
17 avoided cost pricing method that fairly compensates
18 QFs for energy and capacity that the utility will
19 actually avoid, consistent with the objectives of
20 the PURPA statute. The Company's proposal does not
21 do this.

22 Having reviewed the testimony in this
23 docket, here are my recommendations: The Commission
24 should not approve the Company's proposed
25 implementation of Schedule 38 avoided cost pricing.

1 Instead, I recommend the Commission adopt either or
2 both of the following: Either use IRP portfolio
3 resource costs to establish an avoided cost floor,
4 or approve the recommendations of the Renewable
5 Energy Coalition and allow renewable QFs to choose
6 either renewable or a non-renewable avoided cost
7 rate, a concept which I supported in my rebuttal
8 testimony as a potentially more durable solution
9 than setting an avoided cost floor.

10 Second, require further, more thorough
11 evaluation of methods for setting renewable avoided
12 cost prices based on the deferral of renewable
13 resources of all types.

14 My recommendations seek to further the
15 Commission's intention of allowing renewable QF
16 avoided costs be based on IRP preferred renewable
17 resource costs while ensuring just and reasonable
18 avoided cost rates. The Company's proposal's
19 restrictions would result in undue changes in the
20 definition of avoided costs, resource deferral, and
21 the historical application of resource sufficiency
22 and deficiency. Thank you very much. That
23 concludes my testimony.

24 MS. HAYES: Mr. Dragoon is available
25 for cross-examination.

1 COMMISSIONER LEVAR: Thank you.

2 Mr. Sanger, do you have any questions for this
3 witness?

4 MR. SANGER: I do not. Thank you.

5 COMMISSIONER LEVAR: Thank you.

6 Mr. Jetter?

7 MR. JETTER: I have no questions.

8 Thank you.

9 COMMISSIONER LEVAR: Mr. Snarr?

10 MR. SNARR: I have no questions.

11 Thank you.

12 COMMISSIONER LEVAR: Ms. Hogle?

13 MS. HOGLE: No questions. Thank you.

14 COMMISSIONER LEVAR:

15 Commissioner White?

16 BY COMMISSIONER WHITE:

17 Q I just want to follow up on a point you
18 made in your summary regarding discrimination. In
19 the context of PURPA, can you help me understand
20 what the specific discrimination is that would be
21 imposed by Rocky Mountain Power's current proposal?

22 A Well, I'm not a lawyer so I would be over
23 my skis a bit to give you a legal definition, but
24 what I meant simply is that their proposal is
25 discriminating against renewable QFs by subjecting

1 them to having to take avoided costs that are
2 actually below the actual avoided costs that the
3 Company would receive.

4 **Q So is it fair to say that -- it sounds**
5 **what you're describing is that your criticism is**
6 **inaccurate, I guess. It does not capture the true**
7 **avoided cost, it's not necessarily discriminatory,**
8 **it's an accuracy issue?**

9 **A Well, because not all QFs are renewable.**
10 That's what I had in mind.

11 COMMISSIONER WHITE: That's all I
12 have. Thank you.

13 COMMISSIONER LEVAR:
14 Commissioner Clark?

15 COMMISSIONER CLARK: I have no
16 questions. Thank you.

17 COMMISSIONER LEVAR: I don't have
18 any, either. Thank you, Mr. Dragoon.

19 MS. HAYES: Thank you. At this time,
20 I would like to move the admission of Mr. Dragoon's
21 direct, rebuttal, and surrebuttal testimonies.

22 COMMISSIONER LEVAR: If any party
23 objects to that, please indicate to me. I'm not
24 seeing any objections, so the motion is granted.

25 MS. HAYES: If we are continuing with

1 Utah Clean Energy's witnesses, then I will call
2 Ms. Kate Bowman to the witness stand.

3 KATE BOWMAN,
4 having been first duly sworn to tell the truth, was
5 examined and testified as follows:

6 BY MS. HAYES:

7 Q Ms. Bowman, will you please state your
8 name and position for the record?

9 A My name is Kate Bowman, and I'm the solar
10 project coordinator at Utah Clean Energy.

11 Q Did you file direct, rebuttal, and
12 surrebuttal testimony on October 3rd, October 31st,
13 and November 21st, 2017, respectively?

14 A Yes, I did.

15 Q And I should note that your rebuttal
16 testimony contained an exhibit.

17 A Yes.

18 Q And do you have any corrections to make to
19 any of your testimony?

20 A Yes, I'd like to make two corrections.
21 First, my surrebuttal testimony on the title page is
22 incorrectly labeled, "Rebuttal testimony," so I'd
23 like to correct that to say "surrebuttal." And the
24 second correction, in my rebuttal testimony, I'd
25 like to make a correction beginning on line 37. I'd

1 like to replace the number "18" with the number "25"
 2 and then omit the parenthetical following that. So
 3 the complete sentence would read, "In reality, only
 4 25 small QF projects have ever been completed in
 5 Utah and only 5 Schedule 37 projects were completed
 6 in 2016, with a total capacity of 12.2 megawatts."

7 **Q Thank you. With those corrections, if I**
 8 **asked you the same questions today, would your**
 9 **answers be the same?**

10 A Yes.

11 **Q Do you have a summary you've prepared?**

12 A Yes, I do.

13 **Q Please proceed.**

14 A Thank you for the opportunity to speak on
 15 this issue this morning. In my testimony, I address
 16 the Company's proposal to apply the Schedule 38
 17 pricing method and also the Schedule 38 queuing
 18 protocol to small qualifying facilities who take
 19 standard offer rates under Schedule 37. And I
 20 explain that it's inappropriate to apply this
 21 pricing method to Schedule 37 projects and that
 22 doing so would result in artificially low avoided
 23 cost prices for small QFs.

24 First, small QFs would be burdened by the
 25 complexity of participating in the Schedule 38

1 process and particularly the queuing process, which
2 isn't warranted for these relatively small projects
3 which are simple and completed relatively quickly.

4 And second, it's inappropriate to include
5 small QFs in the queue, which includes projects that
6 are unlikely to ever be built. Doing so would
7 artificially cap pricing for small QFs and would
8 prevent these lower cost resources from being built.

9 I recommend no changes to Schedule 37 at
10 this time except for an adjustment to Schedule 37
11 rates to account for avoided line losses for small
12 QFs that are not connected to the transmission
13 system. And although Utah Clean Energy's primary
14 position is that Schedule 37 projects should not be
15 included in the queue, if they are, I believe, the
16 25-megawatt cap on small QFs should be eliminated.
17 And that's my summary. Thank you.

18 MS. HAYES: Ms. Bowman is available
19 for cross-examination.

20 COMMISSIONER LEVAR: Thank you.
21 Mr. Sanger, do you have any questions?

22 MR. SANGER: Yes, I do have a
23 question.

24 CROSS-EXAMINATION

25 BY MR. SANGER:

1 Q Ms. Bowman, your primary recommendation is
2 that there be no changes to the Schedule 37 except
3 for an adjustment for line losses?

4 A Yes, that's correct.

5 Q Renewable Energy Coalition has similarly
6 recommended no changes to Schedule 37, with the
7 exception that QFs be provided a renewable avoided
8 cost in addition to a nonrenewable avoided cost.
9 Would Utah Clean Energy find that recommendation
10 acceptable?

11 A Can you rephrase the question?

12 Q So the current Schedule 37 only allows a
13 QF to sell non-renewable power. It's based on the
14 costs -- Schedule 37 rates are based on the fixed
15 and variable costs of a thermal resource. Renewable
16 Energy Coalition has recommended that that option
17 remain, but in addition, a renewable QF be provided
18 the opportunity to defer and be paid for deferring a
19 renewable resource acquisition, the Company's
20 renewable resource acquisition. Is that something
21 that Utah Clean Energy could also support?

22 A Without knowing -- getting too much into
23 the details of how the proposal would manifest
24 itself specifically, in concept, that's something
25 Utah Clean Energy would support.

1 MR. SANGER: Thank you.

2 COMMISSIONER LEVAR: Thank you.

3 Mr. Jetter, do you have any questions?

4 MR. JETTER: I do have a few brief
5 questions.

6 CROSS-EXAMINATION

7 BY MR. JETTER:

8 Q Good afternoon. The questions I have are
9 just to clarify a little bit about your
10 understanding of the 25-megawatt cap. Is it your
11 understanding of the 25-megawatt cap that that cap
12 is a cumulative cap on annual projects, or do you
13 understand it as a cumulative cap on 37 perpetually,
14 or a cap on the current pricing included in the
15 current published tariff, at which point it would be
16 recalculated?

17 A I understand it as a cap on the total
18 capacity of projects that are able to take standard
19 issue Schedule 37 pricing on an annual base.

20 Q Okay. And if it were the case that that
21 was a cap at which point it will be repriced, would
22 that change your opinion of the cap?

23 A So that -- just to clarify your question
24 that the cap would be repriced on some sort of
25 timeline based on projects that had been -- QF

1 projects which had since been completed?

2 Q So I can give you a hypothetical to better
3 explain. If Rocky Mountain Power proposed a pricing
4 which is updated annually and the pricing was --
5 let's just -- random number here -- like, \$30 per
6 megawatt was the pricing -- and you reached
7 25 megawatts of capacity under that pricing and it
8 triggered a recalculation of that same cap, so another
9 25-megawatt increment and let's say this happened,
10 hypothetically, in June. Would that be troubling to
11 you to have it repriced at a 25-megawatt increment?

12 A I think, conceptually, if I understand, I
13 don't see any issues with the idea of if small QFs
14 are not included in the queue, repricing, having
15 some sort of cap and on the amount of capacity that
16 can receive a standard offer price set at a certain
17 price and then refreshing the queue when that cap is
18 reached. So if I'm understanding your question,
19 conceptually, I don't see an issue with that. It
20 would depend on what that cap was and how often the
21 cap was refreshed.

22 MR. JETTER: Thank you. I have no
23 further questions.

24 COMMISSIONER LEVAR: Thank you.

25 Mr. Snarr?

1 MR. SNARR: I have no questions.

2 COMMISSIONER LEVAR: Ms. Hogle?

3 MS. HOGLE: Just a couple. Thank
4 you.

5 CROSS-EXAMINATION

6 BY MS. HOGLE:

7 Q Ms. Bowman, in your summary, I believe you
8 discussed Utah Clean Energy's resistance to adopting
9 the Schedule 38 methodology for Schedule 37, and I
10 believe you generally stated that it was too
11 complicated and that Schedule 37 projects should not
12 participate in the queue. Do you recall that?

13 A Yes.

14 Q Do you agree that under the Company's
15 proposal, Schedule 37 QFs would still receive
16 published rates? So the QFs would not actually be
17 involved in the calculation, because whatever the
18 calculation is, they would receive published rates.

19 A It's my understanding they would receive a
20 published rate, as you describe based on a more
21 complicated methodology.

22 Q And then you also talked about or
23 recommended that line losses be accounted for with
24 Schedule 37 avoided cost pricing. Can you provide a
25 little bit more detail on how that would be

1 calculated?

2 A I don't have a detailed calculation at
3 this time, but my recommendation was specifically
4 that if a small QF does not interconnect to the
5 transmission system and the Company is therefore
6 able to avoid line losses associated with
7 transmission line losses, that the QF is credited
8 with that avoided cost.

9 Q But you don't know --

10 A I don't have a calculation to propose.

11 MS. HOGLE: Thank you. Those are all
12 my questions.

13 COMMISSIONER LEVAR: Any redirect,
14 Ms. Hayes?

15 MS. HAYES: No, thank you.

16 COMMISSIONER LEVAR:
17 Commissioner White?

18 BY COMMISSIONER WHITE:

19 Q Just a follow-up. I think I might be
20 asking something similar to what Ms. Hogle asked,
21 but in terms of the burden, can you help elaborate a
22 little bit more on terms of the potential burden or
23 extra transactional costs, etc. that would be --
24 that the Schedule 37 QFs would be subject to under
25 that if that Schedule 38 methodology were imported

1 **to those size of projects?**

2 A Sure. Without commenting on the Schedule
3 38 proposal itself which I haven't addressed, my
4 understanding is that the Schedule 38 methodology is
5 more complicated and designed because larger QFs do
6 you have a significant impact on the Company's
7 avoided costs, whereas a smaller QF project is
8 maximum 3 megawatts, which is roughly comparable
9 even to the size of some large net metering
10 projects. They're much smaller and much simpler, so
11 the need for a more complicated Schedule 38
12 process -- there isn't a need for a more complicated
13 process because these projects are relatively small,
14 they're capped at a total of 25 megawatts per year,
15 so all of the Schedule 37 projects which come online
16 in a given year are smaller than your average,
17 individual, single Schedule 38 project. And so
18 there's no need for a more confusing and complicated
19 process to determine pricing for these projects.

20 Q So I guess the question is, is it more
21 complicated, potentially, to vet the actual
22 components of that methodology? I guess what I'm
23 getting at is, is there any additional costs
24 associated with taking that price when a Schedule 37
25 project takes that standard price?

1 A I think the most significant impact to
2 applying the Schedule 38 methodology to small QFs
3 would be the queue, which is what I've mainly
4 focused my comments on, and the impact of placing a
5 small QF either at the end of the queue or at a
6 position that is inappropriate. If the QF receives
7 pricing based on a queue of projects ahead of it
8 that ultimately are not constructed, then that QF
9 will have received avoided cost pricing that's too
10 low. And that has the largest potential effect on a
11 QF's ability to build projects at avoided cost.

12 COMMISSIONER WHITE: That's all the
13 questions I have.

14 COMMISSIONER LEVAR:
15 Commissioner Clark?

16 COMMISSIONER CLARK: No questions.
17 Thank you.

18 COMMISSIONER LEVAR: Do you know how
19 many Schedule 37 projects, if any, are connected to
20 the transmission system?

21 THE WITNESS: I don't know.

22 COMMISSIONER LEVAR: Would you assume
23 there are some, or you still don't know?

24 THE WITNESS: I still don't know.

25 COMMISSIONER LEVAR: Thank you.

1 That's all I have. Anything else, Ms. Hayes?

2 MS. HAYES: No, I think that's
3 everything.

4 COMMISSIONER LEVAR: Mr. Sanger?

5 MR. SANGER: Thank you. I'd like to
6 call Mr. Neal Townsend to the witness stand, please.

7 NEAL TOWNSEND,
8 having been first duly sworn to tell the truth, was
9 examined and testified as follows:

10 BY MR. SANGER:

11 Q Thank you, Mr. Townsend. Can you please
12 provide your name and position?

13 A My name is Neal Townsend. My position is
14 principal at Energy Strategies.

15 Q And on whose behalf are you testifying
16 today?

17 A I'm here on behalf of the Renewable Energy
18 Coalition.

19 Q And if I asked you the questions in your
20 direct and surrebuttal testimony today, would your
21 answers be the same?

22 A Yes, with two minor corrections.

23 Q Can you please point us in the direction
24 of those corrections?

25 A In my direct testimony, at line 198, page

1 9 on my copy, I have a parenthetical that says,
 2 "Excluding market floor." That should be stricken.
 3 So the sentence would begin, "Because its PDDRR
 4 calculated value declined significantly after ten
 5 years."

6 Q Thank you.

7 A And then on my surrebuttal testimony on
 8 line 129, there's apparently a typo. It says,
 9 "Fixed cost after the 15th year 00," the term. I
 10 think that's to be "to."

11 Q I'm sorry, which page and line number are
 12 you on?

13 A I'm on page 7, line 129. My version has
 14 two "Os" after the word "year."

15 Q Thank you.

16 A That's all of my corrections.

17 Q Have you prepared a summary that you're
 18 prepared to provide to the Commission this morning?

19 A I have. Good afternoon. In my direct
 20 testimony, I respond to several changes proposed by
 21 Rocky Mountain Power to the calculation of avoided
 22 cost pricing for qualifying facilities seeking
 23 pricing under either Schedule 37 or Schedule 38. I
 24 note that currently RMP uses the proxy PDDRR method
 25 to calculate avoided cost under Schedule 38. RMP is

1 proposing to implement changes to the proxy PDDRR
2 method and to adopt this method to determine avoided
3 cost pricing under Schedule 37. While I support
4 RMP's proposal to calculate renewable avoided cost
5 prices based on the deferral of renewable generation
6 resources in its integrated resource plan, or IRP, I
7 oppose RMP's proposal to limit the displacement to
8 resources of the same type, i.e., wind for wind,
9 solar for solar, etc.

10 RMP's proposed restrictions are
11 unreasonable because they prevent a renewable QF
12 from being fairly compensated for its ability to
13 defer renewable plants that the Company is planning
14 to add, solely because the QFs resource type differs
15 from the resource type that the Company determines
16 is deferrable sooner in its IRP. Implicit in RMP's
17 advocacy for these restrictions is the notion that
18 the Company is somehow unable to partially or wholly
19 defer a wind plant when a renewable QF using a
20 different technology timely comes online.

21 This premise is highly implausible. When
22 considering adding new resources in its IRP, the
23 Company must consider the impact of long-term QF
24 contracts on the need for Company-owned capacity
25 after taking account of the capacity characteristics

1 of the QF resources. This evaluation must be
2 performed irrespective of the QF resource type. The
3 idea, say, that new solar QF contracts would have no
4 influence on whether Company-owned wind resources
5 need to be added in the future is unreasonable and
6 objectionable.

7 Instead, I recommend that any renewable QF
8 seeking avoided cost pricing under either Schedule
9 37 or 38 should have its avoided cost pricing based
10 on the next deferrable renewable resource
11 irrespective of resource type with appropriate
12 adjustments for capacity equivalence. For Schedule
13 37, if the Commission adopts the proxy PDDRR method
14 to calculate avoided costs, I believe that removing
15 the like-for-like restriction will provide a more
16 reasonable and equitable treatment of RMP's avoided
17 costs. Similarly, for Schedule 38, removing RMP's
18 proposed like-for-like restriction will provide a
19 more reasonable and equitable treatment of avoided
20 costs for all Schedule 38 renewable QFs. In
21 addition, I recommend that the 2021 Wyoming wind
22 resource be considered the proxy resource for all
23 QFs seeking avoided cost pricing unless and until
24 RMP declares that it's not going to pursue this
25 project, regardless of whether such a declaration

1 results from a Commission decision, or for any other
2 reason. The Commission should also consider whether
3 a QF should also be credited with the equivalent of
4 avoided transmission costs, given the linkage that
5 exists between the 2021 Wyoming wind resource and
6 the related transmission capability.

7 Finally, I recommend the Commission reject
8 RMP's suggestion that federal production tax credits
9 should be removed from the real levelization payment
10 calculation. In my surrebuttal testimony, I
11 reiterate my recommendation that RMP's like-for-like
12 proposal for establishing avoided cost pricing for
13 renewable QFs be rejected by the Commission; that
14 the PSC reject any attempts by RMP to make ad hoc
15 adjustments to the avoided cost calculation method,
16 such as removing production tax credits from the
17 real levelization payment calculation and; finally,
18 that the 2021 Wyoming wind plant be considered the
19 next deferrable resource unless or until RMP
20 declares it is not going to pursue this project,
21 regardless of the rationale for such a declaration.
22 That concludes my summary.

23 Q Thank you. I wanted to ask Mr. Townsend a
24 couple of clarifying questions that I think might
25 not have been entirely clear from Mr. Lowe's earlier

1 testimony. So Renewable Energy Coalition's
2 recommendation in this case regarding Schedule 37 is
3 that the current approach to Schedule 37 should be
4 retained with an adjustment to allow renewable
5 resources to be deferred; is that correct?

6 A That's my understanding, yes.

7 Q So the Renewable Energy Coalition's
8 position is that the queue change -- which is part
9 of Rocky Mountain Power's proposed changes -- should
10 also be rejected?

11 A Correct.

12 Q However, if you're going to have a queue
13 adjustment to Schedule 37, then the Renewable Energy
14 Coalition's recommendation is that you use a
15 historic, reasonable, forecast of QFs that complete
16 their way through the queue to commercial operation?

17 A That's correct.

18 MR. SANGER: Thank you.

19 COMMISSIONER LEVAR: Do you have
20 anything else before we go to cross-examination?

21 MR. SANGER: No, thank you.

22 COMMISSIONER LEVAR: Ms. Hayes, do
23 you have any questions for this witness?

24 MS. HAYES: I do not.

25 COMMISSIONER LEVAR: Mr. Jetter?

1 MR. JETTER: No questions.

2 COMMISSIONER LEVAR: Mr. Snarr?

3 MR. SNARR: No questions.

4 COMMISSIONER LEVAR: Ms. Hogle?

5 MS. HOGLE: Just a minute.

6 CROSS-EXAMINATION

7 BY MS. HOGLE:

8 Q I have a couple. Mr. Townsend, did you
9 read Mr. MacNeil's testimony?

10 A Any of it? Yes.

11 Q His rebuttal testimony in particular?

12 A Yes, I did.

13 Q Would you mind turning to his rebuttal
14 testimony, page 25, figure 4R? Am I correct that
15 this is the Company's -- figure 4R -- is the
16 Company's demonstration of solar deferring the 2021
17 wind?

18 A Yes, that's the Company's depiction.

19 Q Okay. Do you agree that, based on this
20 figure, if you look at Utah solar deferring 2021
21 wind, that prices drop to negative, about 125 even,
22 up until 2030 or in 2030? Do you admit that that's
23 true?

24 A That's what the graph shows. I assume
25 these are nominal prices.

1 Q And so in your -- as I understand your
2 testimony, is it your testimony that Utah solar be
3 able to displace 2021 wind; is that correct? And so
4 you would then recommend that QFs receive negative
5 \$125 per megawatt hour pricing?

6 A My position is that Utah solar should
7 definitely be able to defer the 2021 wind and,
8 potentially, the associated transmission. Now,
9 these are not the prices that the QF will get paid.
10 We pay on a real levelized basis for capacity, and
11 that's what the QF would receive. And that would
12 probably take into account all the changes that need
13 to be made for solar versus wind in the calculation
14 of that. In addition, when the energy -- because we
15 have talked about it today already -- there's a
16 distinct difference in the amount of energy that
17 would be produced by solar versus wind, and that
18 gets captured in the GRID runs. And when you
19 combine those two, capacity and energy, you get a
20 fairly reasonable avoided cost. These are
21 PacifiCorp's approaches to establishing avoided cost
22 pricing. And the fact that you get an unusual
23 result is just the fact of applying this method when
24 you're substituting one resource for another. We've
25 been doing the same thing for quite some time when

1 we have allowed a renewable to defer a thermal.
2 This is just simply an extension of that to allowing
3 one renewable to displace a different renewable.
4 That's all we're doing.

5 Q Mr. Townsend, just following up on that,
6 did you have an opportunity to demonstrate how your
7 proposal could be calculated when the Company
8 requested additional information from you on this
9 very topic?

10 A No. I did not calculate a number. This
11 case is about method, not about the price itself,
12 and that's very clear in this case. Let's keep in
13 mind that my proposal is, as I just stated, simply
14 an extension of the current way we've been doing
15 things where a renewable has been deferring a
16 thermal, and we make adjustments for capacity
17 contribution in that process. I'm just extending
18 that to a renewable displacing a renewable.

19 The prices that result from doing that,
20 these are PacifiCorp's IRP prices and so they're not
21 my prices; they're PacifiCorp's prices. Therefore,
22 since it's based on the cost effectiveness of their
23 IRP, they are reasonable by definition, in my mind.

24 MS. HOGLE: I have no further
25 questions. Thank you.

1 COMMISSIONER LEVAR: Any redirect,
2 Mr. Sanger?

3 MR. SANGER: I do not have any
4 redirect. I note that I neglected to move for the
5 admission of Mr. Townsend's testimony, so I would
6 like to do that at this time, if possible.

7 COMMISSIONER LEVAR: If anyone
8 objects to that, please indicate to me. I don't
9 see any objections, so the motion is granted.

10 MS. HAYES: May I also just interject
11 here briefly, to move for the admission of
12 Kate Bowman's testimony as well, which I neglected
13 to do?

14 COMMISSIONER LEVAR: And I neglected
15 to remind you. If anyone objects to that, please
16 indicate to me. I'm not seeing any objections, so
17 the motion is granted. Anything further for this
18 witness, Mr. Sanger?

19 MR. SANGER: No, I do not.

20 COMMISSIONER LEVAR:
21 Commissioner White, do you have any questions?

22 BY COMMISSIONER WHITE:

23 Q Just in terms of -- you described how this
24 is really not much different than what's been done
25 with thermal resources in Schedule 38.

1 A Correct.

2 Q Can you elaborate on how that would look,
3 or that process would look, if you were to apply
4 that concept in the Schedule 37 context, if you were
5 going to try to adjust for location or other
6 characteristics?

7 A I think we've only adjusted for capacity
8 contributions. And it's actually done in Schedule
9 37 now because you've got different prices for
10 different type resources, that capacity equivalence
11 adjustments are already included in the current
12 method. So we're just continuing to do that in this
13 new method. And we're just really substituting in
14 the fact we're going to run this GRID run to
15 calculate the energy, and that's where we're going
16 to get some big differences because of the
17 displacement difference of the amount of energy.

18 Q Would that change if it were a different
19 renewable resource that was in the portfolio?

20 A Change in terms of what?

21 Q I guess the process in terms of how
22 that -- I'm just trying to look at how this would be
23 updated. Is that a more complex proposition or is
24 it the same?

25 A I think it's the same that we've been

1 doing because if a renewable came today and said, I
 2 want renewable pricing under Schedule 38, it's going
 3 to be based on a thermal resource and they're going
 4 to make an adjustment for capacity equivalence on
 5 the capacity side, and they're going to displace
 6 based upon a capacity equivalence adjustment the
 7 amount of energy of the thermal resource. And so
 8 we're just continuing to do that. We're just
 9 expanding the pool of deferrable-type resources
 10 beyond what it is today. It's not really that much
 11 different.

12 COMMISSIONER WHITE: Thank you.
 13 That's all the questions I have.

14 COMMISSIONER LEVAR:
 15 Commissioner Clark, do you have any questions?
 16 BY COMMISSIONER CLARK:

17 Q Yes. I think I'm going to cover, maybe,
 18 the same concept, but I wanted you to do it in
 19 connection with figure 4R again, which is page 25 of
 20 Mr. MacNeil's rebuttal. Would you restate -- I know
 21 you have answered the question when Ms. Hogle asked
 22 it -- but restate why, in your view, the 2030 price
 23 would not be negative \$130, or whatever it is, per
 24 megawatt hour, why that's not what the QF would
 25 actually realize.

1 A Well, I think these may be nominal
2 values -- you'd have to ask the Company that, I
3 didn't prepare this graph so I'm not the right
4 person to talk about this graph -- but my belief is
5 this is nominal because in a real levelized world,
6 everything is positive. You start out low and you
7 go up over time. That's the way real levelization
8 works, and you're just looking on the energy side.
9 We're going to make a big, huge adjustment on the
10 capacity side when solar is displacing wind. That
11 happens because of the capacity contributions of the
12 two types of resources, solar being much more
13 capacity credited than the wind. But then when you
14 get to the energy side, you're going to simply
15 displace a quarter of the energy that that wind
16 plant was going to produce, so you're going to
17 replace that other three quarters with probably
18 thermal generation. So you're going to get a big
19 negative number. And that makes sense when you
20 combine it with the capacity side, and then you're
21 looking at the total all-in number and you're going
22 to get a reasonable outcome, in my opinion.

23 Q **I understand better what you said the**
24 **first time.**

25 A This is one of those where you have to

1 work through the numbers and they start to make
2 sense.

3 COMMISSIONER CLARK: That concludes
4 my questions.

5 COMMISSIONER LEVAR: I just want to
6 follow up a little bit on what Commissioner White
7 was asking just to make sure I'm understanding your
8 description of the difference between Schedule 37
9 and Schedule 38. Now that we have a filed IRP that
10 has deferrable renewable resources, aren't the
11 Schedule 38 calculations now being done where the
12 capacity payments during the sufficiency period are
13 based on a like renewable -- the next like renewable
14 in the IRP? Is that how --

15 THE WITNESS: The sufficiency period?
16 That would be based upon market transactions.

17 COMMISSIONER LEVAR: I'm sorry. I
18 meant deficiency period. Yes, I meant deficiency
19 period. Isn't that being calculated under Schedule
20 38? Now that there's an IRP with renewable
21 resources, isn't that being calculated --

22 THE WITNESS: I don't know how
23 they're doing it since they published a new IRP and
24 since it hasn't been acknowledged. I would assume,
25 though, that once they have a new IRP, they're using

1 their interpretation of that. I'm just saying that
2 interpretation ought to be adjusted to just allow a
3 renewable resource to displace a renewable resource,
4 not this like-for-like, which I think is too
5 restrictive.

6 COMMISSIONER LEVAR: Thank you. I
7 understand. I don't have any further questions.
8 Thank you, Mr. Townsend. Mr. Sanger, do you have
9 anything further?

10 MR. SANGER: No, thank you.

11 COMMISSIONER LEVAR: Anything further
12 from any other party before we adjourn? Thank you.
13 We're adjourned.

14 (The hearing concluded at 1:50 p.m.)

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REPORTER'S CERTIFICATE

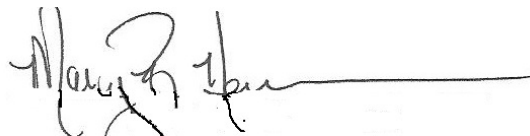
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COUNTY OF SUMMIT)

I, Mary R. Honigman, a Registered Professional
Reporter, hereby certify:

THAT the foregoing proceedings were taken before
me at the time and place set forth in the caption hereof;
that the witnesses were placed under oath to tell the truth,
the whole truth, and nothing but the truth; that the
proceedings were taken down by me in shorthand and
thereafter my notes were transcribed through computer-aided
transcription; and the foregoing transcript constitutes a
full, true, and accurate record of such testimony adduced
and oral proceedings had, and of the whole thereof.

I have subscribed my name on this 13th day of
December, 2017.



Mary R. Honigman
Registered Professional Reporter #972887

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