Re: Rocky Mountain Power's 2019 Avoided Cost Input Changes Quarterly Compliance

Docket No. 19-035-18 and Docket No. 20-035-T04

HEARING

July 01, 2020

ADVANCED REPORTING SOLUTIONS

801-746-5080 | office@advancedrep.com | advancedrep.com SALT LAKE | 159 West Broadway, Broadway Lofts, Suite 100 | Salt Lake City, Utah 84101 PROVO | 3507 North University Avenue, Suite 350-D | Provo, Utah 84604 ST. GEORGE | 20 North Main Street, Suite 301 | St. George, Utah 84770



Hearing July 01, 2020

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1	BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH
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3	In Re: Rocky Mountain) Power's 2019 Avoided Cost)Docket No. 19-035-18 and
4	Input Changes Quarterly)Docket No. 20-035-T04
5	Compliance Filing; and) Rocky Mountain Power's)Presiding Officer:
6	Proposed Tariff Revisions to)Michael Hammer Electric Service Schedule)
7	No. 37, Avoided Cost) Purchases from Qualifying)
8	Facilities.)
9	
10	VIDEO CONFERENCED HEARING
11	VIDEO CONFERENCED REARING
12	Taken on Wednesday, July 1, 2020
13	at 9:00 A.M.
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16	Public Service Commission of Utah
17	160 East 300 South
18	4th Floor
19	Salt Lake City, Utah 84111
20	Sait Dake City, Otali 04111
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22	
23	
24	Reported by: Kellie Peterson, RPR, CSR
25	Reported by. Retite Peterson, RPR, CSR

1	A I	PPEARANCES
2	FOR THE UTAH DIVISION OF PUBLIC UTILITIES:	Justin Jetter, Esq. UTAH ATTORNEY GENERAL'S OFFICE
3	OF PUBLIC UITLIITES.	DIVISION OF PUBLIC UTILITIES 160 East 300 South
4		Fifth Floor Salt Lake City, UT 84114
5		Telephone: (801)366-0380 jjetter@agutah.gov
6		JJeeeer eagaearr.gev
7	FOR ROCKY MOUNTAIN POWER:	Jacob A. McDermott, Esq. Jana Saba, Esq.
8		Joelle Steward, Esq. ROCKY MOUNTAIN POWER 1407 West North Temple
10		Suite 320 Salt Lake City, Utah 84116
11		Telephone: (801)220-4050 Jacob.mcdermott@pacificorp.com jana.saba@pacificorp.com
12		joelle.steward@pacificorp.com
13	FOR OFFICE OF CONSUMER SERVICES:	Robert J. Moore, Esq. UTAH ATTORNEY GENERAL'S OFFICE
14		OFFICE OF CONSUMER SERVICES 160 East 300 South
15		Fifth Floor Salt Lake City, UT 84114
16		Telephone: (801)366-0380 moore@agutah.gov
17		Hunter Holman, Esq.
18	AND SALT LAKE CITY CORPORATION:	UTAH CLEAN ENERGY 1014 Second Avenue
19		Salt Lake City, UT 84103 Telephone: (801)363-4046
20		hunter@utahcleanenergy.org
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1 July 1, 2020 9:00 A.M. PROCEEDINGS 2 3 PRESIDING OFFICER HAMMER: Good morning, This is the time noticed for the hearing in 4 everyone. 5 the matter of Rocky Mountain Power 2019 avoided cost input changes quarterly compliance filing as Commission 6 7 Docket 19-035-18. My name is Mike Hammer. I am the Commission 8 designated presiding officer for this docket. Let's go 9 10 ahead and take appearances, please, beginning with Rocky 11 Mountain Power. 12 MR. MCDERMOTT: Yes. This is Jacob 13 McDermott, counsel for Rocky Mountain Power. With me on the phone today is Daniel MacNeil, our witness, and also 14 15 Jana Saba and Joelle Steward. 16 PRESIDING OFFICER HAMMER: Thank you, Mr. McDermott. 17 Who do we have on the line for the Division 18 of Public Utilities? 19 This is 20 MR. JETTER: Hi, good morning. 21 Justin Jetter, with Utah Attorney General's Office 22 representing the Division of Utah Public Utilities, and 23 Abbinasir Abdulle is on the phone, and I will introduce him later as the Division's witness. I'm not aware of 2.4 25 any other Division employees that are on the phone but

1	there maybe.
2	MR. POWELL: Good morning, this is Artie
3	Powell with the Division also.
4	PRESIDING OFFICER HAMMER: Anyone else from
5	the Division?
6	Okay. The Office of Consumer Services?
7	MR. MOORE: Yes, this is Robert Moore with
8	the AG's Office, representing the Office of Consumer
9	Services. On the phone with me is Baila Vastay [sic], a
10	utility analyst from the Office.
11	PRESIDING OFFICER HAMMER: Is there anyone
12	else from the Office on the line?
13	Okay. And for Salt Lake City Corporation?
14	MR. HOLMAN: Hi, Mr. Hammer. My name is
15	Hunter Holman. I'm with Utah Clean Energy, but for
16	today, I will also be representing Christopher Thomas of
17	Salt Lake City for purposes of introducing him as a
18	witness. His attorney was unable to join today.
19	PRESIDING OFFICER HAMMER: All right. Any
20	objection to that?
21	MR. MCDERMOTT: No objection from the
22	company.
23	PRESIDING OFFICER HAMMER: Okay. I believe
24	we have more individuals now on the line. I will go
25	ahead and assume those will be interested parties here to

1	listen.
2	Is there anybody on the line who I haven't
3	spoken with yet, that is a party or has some intention of
4	needing to speak today? And if so, will you please
5	introduce yourself?
6	MR. HUNTER: Yes, this is Hunter Holman with
7	Utah Clean Energy. We filed testimony comments in the
8	docket and Kate Bowman from Utah Clean Energy is also
9	here on the line with us. And she is going to provide a
10	summary of our comments and is available for questions,
11	Neil Townsend with Energy Strategies should also be on
12	the phone. Mr. Townsend contributed to UCE's comments
13	and we may call him as a witness today as well.
14	PRESIDING OFFICER HAMMER: Okay. Anyone
15	else?
16	All right. Are there any preliminary matters
17	before we ask Rocky Mountain Power to call its first
18	witness?
19	Hearing none, Mr. McDermott, please go ahead
20	and call your first witness.
21	MR. MCDERMOTT: Rocky Mountain Power would
22	like to call Daniel MacNeil to the stand or
23	PRESIDING OFFICER HAMMER: To the telephonic
24	stand, understood.

1	THE WITNESS: Yes.
2	PRESIDING OFFICER HAMMER: Okay. Go ahead.
3	DIRECT EXAMINATION
4	BY MR. MCDERMOTT:
5	Q. Hello, Mr. MacNeil, please yes,
6	Mr. MacNeil, could you state and spell your name for the
7	record and your title and business address?
8	A. My name is Daniel MacNeil, M-A-C capital N,
9	E-I-L. I'm a resource and commercial strategy advisor
10	for PacifiCorp, and my business address is 825 Northeast
11	Multnomah Street, Portland, Oregon 97232.
12	Q. Thank you, Mr. MacNeil. Have you prepared a
13	summary of your written comments in this or the
14	company has written comments in this docket today?
15	A. Yes.
16	Q. Could you share that with us, please?
17	A. Sure. Good morning, Chairman LeVar,
18	Commissioner Clark and Commissioner Allen, my testimony
19	provides support for the avoided cost methodology
20	applicable to qualifying facilities, or QFs, under Utah
21	Schedule 37 and 38, and in particular, the company's
22	proposed nonroutine change applicable to wind QFs.
23	My pre-filed direct testimony focuses on two
24	areas. First, how the company's 2019 integrated resource
25	plan, or IRP, is reflected in the approved Proxy/Partial

Displacement Differential Revenue Requirement, or PDDRR,
methodology used to determine QF avoided costs. And the
second, the company's proposed nonroutine methodology
change related to the assumed resource deferral for Utah
wind OFs.

The PDDRR methodology includes two components. The first, avoided fixed costs are calculated based on a proxy resource that a QF is assumed to displace. And second, avoided energy costs are calculated using the Generation and Regulation Initiative Decision Tools model, or GRID, which is also used to set net power costs in rate cases.

Two scenarios were prepared. The first has existing resources, planned resources from the most recent IRP preferred portfolio, as well as signed and prior-queued potential QFs. The second run is the same as the first, with two exceptions.

The operating characteristics of the proposed QF project are added with its energy dispatched at zero cost and the capacity of the displaced IRP resource is reduced by an amount equal to the capacity contribution of the QF project. The difference in costs between the two runs is the avoided energy cost.

The 2019 IRP includes a wide variety of resources over the next ten years, including wind and

solar resources at a number of locations, simple cycle combustion turbines, and batteries. Resources become part of the IRP preferred portfolio because they support an optimized balance of cost and risk for the portfolio as a whole, relative to the other resource options evaluated in the IRP that the company could pursue instead.

Under the approved methodology, a renewable resource defers the next cost-effective resource of the same type in the preferred portfolio. The amount of the IRP resource deferred is based on equivalent capacity contributions. The capacity contribution is intended to represent how much a specific resource contributes to reliable system operation.

The 2019 IRP incorporated capacity contribution values specific to each resource type and location, rather than generic east and west values by resource type used in prior IRPs. The 2019 IRP also recognized that capacity contribution varies with wind and solar penetration, and indeed with the overall composition of the overall portfolio.

The 2019 IRP compensated for the effects of portfolio composition on reliability by assessing the resources and requirements in top portfolios over each hour of the study period. The adoption of like-for-like

resource deferral likewise recognized that a single capacity contribution number does not fully describe a resource's contribution to a reliable portfolio.

2.1

Parties have questioned whether a solar QF should be considered the same type as a combined solar and storage resource in the 2019 IRP preferred portfolio. That is one of the assumptions that we made so far. There are no stand-alone solar resources in the 2019 IRP preferred portfolio, primarily because investment tax credits for storage is part of the solar facility provide a significant cost savings relative to standalone solar -- or stand-alone storage resources.

While storage represents the majority of the capacity contribution of combined solar and storage resources in the 2019 IRP, the solar component still provides roughly one third of the total. Reducing the solar generation from the IRP preferred portfolio also increases avoided energy costs in the hours when a solar QF generates.

As a result, deferral of combined solar storage is preferable to deferral of a thermal resource without any solar characteristics. In fact, preferable is more operable and produces a more economic result and higher avoided cost.

This conclusion is consist with the PDDRR

methodology as currently approved and has been applied both ways, as solar QFs that include battery storage have previously been assumed to defer stand-alone solar resources in the IRP preferred portfolio.

2.1

Utah Clean Energy provided comments suggesting that the avoided costs of solar and storage resources would provide valuable information to developers. The cost assumptions for solar and storage resources, and indeed for all resource options evaluated, were part of 2019 IRP document, and the company also provides details on a the cost of preferred proxy -- or deferred proxy resources in its quarterly avoided costs compliance filing.

If the QF provides energy, capacity and dispatch flexibility equivalent to the deferrable solar with storage resource located in the same area from the 2019 IRP preferred portfolio, that QF's avoided cost would be equal to that resource's cost. The same concept of resource equivalent also forms the basis for the company's proposed nonroutine change to the resource deferral for wind QFs.

Like-for-like renewable resource deferral was approved because of the importance of the alignment between the operating characteristics of a QF and the resources that it is assumed to defer. Under the

company's proposal, standard wind QF rates are calculated
based on an assumed Utah QF resource with the same
generation profile as the Utah wind resource it defers
from the IRP preferred portfolio. As a result, the QF
and the deferred resource are as alike as possible.

The company's April 9, 2020 supplemental filing presented avoided cost calculations for a Utah wind resource based on three different sources: a Wyoming wind resource and transition, a Utah wind resource, and a resource mix produced by the IRP models that includes deferral of energy efficiency, a simple cycle combustion turbine, and battery.

The Wyoming wind and transmission deferral under the current methodology produced a significantly higher avoided cost result than the other two versions. Even if the Utah wind resource was expected to produce system benefits equivalent to that from the current approved methodology, which is not likely given the IRP model results, it would be prudent for the company to acquire a wind resource at cost so that customers can receive those system benefits at the lowest available cost. Paying a Utah wind QF a price that is significantly higher than the company's expected cost for equivalent energy and capacity is contrary to the PURPA statute.

1	In conclusion, I recommend that the
2	Commission approve the nonroutine methodology change
3	applicable to wind resources requesting prices under
4	Schedule 38 and approve the filed Schedule 37 tariff
5	rates for wind resources that also incorporate that
6	change.
7	The deferral of Utah wind resources has been
8	shown to reasonably approximate the results produced by
9	the IRP models, is consistent with resource options and
10	costs available for selection in the 2019 IRP, and as a
11	result is more consistent with the customer indifference
12	standard than the current implementation of the PDDRR
13	methodology for Utah wind QFs.
14	Thank you.
15	Q. Thank you, Mr. MacNeil.
16	MR. MCDERMOTT: The company has no further
17	questions for Mr. MacNeil at this time, and I would like
18	to make him available for cross-examination and/or
19	questions from the Commission.
20	PRESIDING OFFICER HAMMER: Thank you.
21	Mr. Jetter, any questions?
22	MR. JETTER: Sorry, I was on mute there. I
23	have no questions. Thank you.
24	PRESIDING OFFICER HAMMER: Mr. Moore?
25	MR. MOORE: No questions, thank you.

1	PRESIDING OFFICER HAMMER: Mr. Holman?
2	MR. HOLMAN: I have a few questions for
3	Mr. MacNeil, if I could.
4	PRESIDING OFFICER HAMMER: Of course.
5	MR. HOLMAN: Great. Thank you, Mr. Hammer.
6	CROSS-EXAMINATION
7	BY MR. HOLMAN:
8	Q. Good morning, Mr. MacNeil. I have a few
9	questions for you related to benefits associated with
10	transmission projects that you referenced in your
11	testimony from April 9th.
12	So I guess I will start out by asking, kind
13	of, a groundwork question. In the 2017 avoided cost
14	order, the Commission agreed with Rocky Mountain Power
15	that there were certain benefits associated with
16	transmission projects that should be consider when
17	calculated avoided costs.
18	And those they specifically listed three:
19	incremental transfer, capability reduced line losses, and
20	reduced transmission system derates?
21	Mr. MacNeil, are you generally familiar with
22	these transmission-related benefits?
23	A. Yes.
24	Q. Okay. And would you say that the Gateway
25	South Transmission project, if it were to be built, would

generate these three benefits for PacifiCorp's
transmission system?

A. I'm aware of what was represented in the 2019 IRP, and in the 2019 IRP, there was transfer capability, but there was not model -- any change to line losses or transmission system derates.

So I do not know specifically what those values would be, but I do know this: That they were not modeled in the IRP.

- Q. In your experience, understanding that we don't have specific values for those other two, would you anticipate that those other two benefits would be present if you were to -- that?
- A. I do not have that much electrical engineering experience to answer that question.
- Q. Okay. If the -- I guess I'll just maybe, if I could, move to a hypothetical. I mean, if they were present, should you have considered them in the avoided cost analysis that you provided for this case?
- A. So generally, we travel to aline with the 2019 IRP, and had the IRP included those benefits, then we would have represented them in the avoided costs.
- Q. Okay. So in your April 9th testimony, you mentioned that you discussed a scenario that you refer to as the wind defer Wyoming scenario, which as I understand

it is the scenario where Utah wind OFs are allowed to 1 defer the 2024 Wyoming wind and the Gateway South Transmission project; is that correct? 3 4 Α. Yes. And in your discussion of that wind 5 0. Okav. 6 deferred Wyoming project, you say that the cost of the deferred wind resource is net of production tax credits 7 of the first ten years, and you also net Gateway South 8 9 Transmission past with a grid model; is that fair to say? 10 Α. Yes. 11 So you are netting some benefits from Ο. Okay. 12 that avoided cost associated with Gateway South 13 Transmission past, and based on your testimony earlier, 14 is it fair to say that that's only considered the incremental transfer capability because that's what the 15 16 IRP showed; is that right? 17 Α. Yes. 18 Okay. Thank you, Mr. MacNeil. Ο. 19 that's all my questions. 20 MR. HOLMAN: Thank you, Mr. Hammer. 21 PRESIDING OFFICER HAMMER: Mr. McDermott, any 22 Mr. McDermott, do you have any additional or 23 redirect questions for your witness? 24 MR. MCDERMOTT: I apologize, I was on mute. 25 I don't have any additional questions on redirect for the

1 witness at this time. Thank you. 2 PRESIDING OFFICER HAMMER: Thank you. And no 3 other witnesses? 4 MR. MCDERMOTT: No other witnesses for the 5 company. Thank you. 6 PRESIDING OFFICER HAMMER: Mr. Jetter, will 7 you please call your first witness? MR. JETTER: Yes. The Division would like to 8 9 call and have sworn in Abbinasir Abdulle. 10 PRESIDING OFFICER HAMMER: Mr. Abbinasir 11 Abdulle, do you swear to tell the truth? Yes, sir, do 12 you swear to tell the truth? Thank you. 13 THE WITNESS: Yes, I do. 14 PRESIDING OFFICER HAMMER: Go ahead, 15 Mr. Jetter. 16 DIRECT EXAMINATION 17 BY MR. JETTER: Good morning. Would you please state your 18 Ο. 19 name and occupation for the record? 20 Α. My name is Abbinasir Abdulle. I'm an 2.1 employee of the Division of Public Utilities, and the 22 Division is here in the Wells building. 23 And for the reporter, let me spell my name 24 for you. My first name, A-B-B-I-N-A-S-I-R, last name, 25 A-B-D-U-L-L-E.

1 Thank you. And have you had an opportunity 0. 2 to review the filings in the two dockets that we are here 3 today --4 Α. Yes, I did. -- for? And did you read and cause to be 5 Ο. 6 filed with the Commission comments from the Division of Public Utilities dated May 28, 2020, and reply comments 7 dated June 25, 2020? 8 9 Yes, I did. Α. 10 Ο. And would you adopt both of those comments as 11 part of your testimony today? 12 Yes, I would. Α. 13 Thank you. Q. 14 MR. JETTER: I would like to make a motion at this time to enter the comments as reply comments of the 15 16 Division that were previously identified in both dockets. PRESIDING OFFICER HAMMER: 17 They are admitted. MR. JETTER: 18 Thank you. 19 BY MR. JETTER: 20 Ο. Mr. Abdulle, do you have a brief summary of 21 the Division's position? 22 Yes, I do. Α. 23 Please, go ahead. 0. 24 Α. Good morning, Commissioners, in compliance 25 with previous Commission orders, Rocky Mountain Power

filed its avoided cost quarterly report for the third quarter of 2019. This filing identified four routine and one nonroutine updates. The Division reviewed these updates and determined that the routine updates were appropriate. The nonroutine update involved Utah wind OF deferring the Utah wind proxy, which is a customer preference wind resource, instead of the Wyoming wind, which the next deferrable wind resource in the preferred portfolio.

2.1

The reason for this proposal is because of the high avoided cost associated with the deferral of Wyoming wind, which would result in ratepayers paying unnecessarily high avoided costs. The proposed nonroutine update would result in a reasonable avoided cost prices for wind resources, which is consistent with the standard of ratepayer indifference. Therefore, the Division recommends approval of the proposed nonroutine update.

The Division recognizes that this is a deviation from the current Commission approved method. However, one has to realize that a major part of the avoided cost associated with the deferral of Wyoming wind is related to the transmission resource which cannot be partially deferred or avoided. The Division believes that the inclusion of such unavoidable cost is

inconsistent with PURPA's definition of avoided cost.

The Division recognizes that the partial placement calculation is a reasonable method if the next generation resource needed is sufficiently distant in time that multiple QFs might reasonably be expected to displace the IRP selected resource before acquisition. Also, it assumes that system planning will account for the QF generation before the next resource is required.

In the recent case, in this current case, the QFs cannot be reasonably expected to fully avoid the next resource because of the large fixed cost associated with the transmission line and because of that, there is no sufficient time to adjust planning assumptions prior to making long-term commitments.

Finally, the Commission has questioned the prudency and necessity of the transmission resource under consideration in its IRP review. The Division believes that it would not be reasonable to base avoided cost calculations on a resource -- prudence has been questioned by the Commission and -- by the Commission on projected.

Rocky Mountain Power's proposal to use the most comparable deferrable resource that is similar in size and location is reasonable to set avoided cost pricing given the skepticism regarding the Gateway South

1	proposal. Therefore, the Division recommends the
2	Commission to approve Rocky Mountain Power's proposed
3	nonroutine update.
4	Another discussion item is Utah Clean
5	Energy's proposed published prices for a solar QF paired
6	with storage. The Division reviewed this proposal and
7	believes that UCE did not provide enough evidence for the
8	Division to judge the merits of this proposal.
9	Therefore, the Division recommends the
L O	Commission not to adopt this proposal in this docket. If
L1	the Commission intends to create an additional category
L2	of QF pricing to include battery or any other energy
L3	storage, the Division recommends that the Commission open
L 4	a docket where a proper analysis can be performed.
L5	Finally, the Division recommends that its
L6	recommendation on the yes, the Division recommended
L7	about the nonroutine updates be extended to 2019 Q4 and
L8	Schedule 37 wind prices.
L9	And that conclude my summary.
20	Q. Thank you. I would like to ask you briefly a
21	couple of clarifying questions.
22	With respect to the Gateway South
23	Transmission project and the action plan resulting from
24	the 2019 IRP, is it a correct statement that the
25	Commission has questioned the necessity of or the

1	choice of the Gateway South Transmission project, but
2	that it the Commission hasn't made a determination
3	either way on that project versus alternatives?
4	A. That's true.
5	Q. Okay. Thank you.
6	MR. JETTER: That concludes my questions.
7	Thank you. Mr. Abbinasir Abdulle is available for
8	Commission questions or cross-examination.
9	PRESIDING OFFICER HAMMER: Mr. McDermott?
10	MR. MCDERMOTT: The company has no questions.
11	Thank you.
12	PRESIDING OFFICER HAMMER: Mr. Moore?
13	MR. MOORE: The OCS has no questions. Thank
14	you.
15	PRESIDING OFFICER HAMMER: Mr. Holman?
16	MR. HOLMAN: I have no questions. Thank you.
17	PRESIDING OFFICER HAMMER: All right. Thank
18	you, Mr. Abdulle.
19	Mr. Jetter, do you have any other witnesses?
20	MR. JETTER: The Division has no further
21	witnesses or nothing further to present at the hearing
22	today. Thank you.
23	PRESIDING OFFICER HAMMER: Thank you.
24	Mr. Moore?
25	MR. MOORE: Yes. The Office has only filed

reply comments in this docket, and these comments are 1 2 legal in nature. Accordingly, we will not be calling a 3 witness to adopt these comments as testimony. We do ask 4 the Commission as is necessary to enter the comments into 5 the record as legal argument. Mr. Baila Vastay, a utility analyst with the OCS, is available to answer 6 questions regarding policy from the Commission and other 7 parties related to the OCS reply comments. 8 9 That's all we have at the present moment. 10 PRESIDING OFFICER HAMMER: Mr. McDermott, do 11 you have any objection to that approach? 12 MR. MCDERMOTT: No objection at all. Mr. Moore reached out to me before the hearing and I 13 think I indicated to him that we had no objection, and we 14 15 would have no questions for Mr. Vastay. 16 PRESIDING OFFICER HAMMER: Mr. Jetter? 17 MR. JETTER: I have -- I would have no 18 questions. 19 PRESIDING OFFICER HAMMER: Mr. Holman? I have no objections, and I have 20 MR. HOLMAN: 21 no questions for Mr. Vastay. 22 PRESIDING OFFICER HAMMER: All right. Thank 23 you. 24 I suppose then we will turn to you, 25 Mr. Holman, and ask for you to call your first witness.

1 Mr. Hammer, do you have MR. HOLMAN: Sure. 2 any preference with whether I go with Salt Lake City or 3 Utah Clean Energy first? PRESIDING OFFICER HAMMER: No, but it would 4 5 be helpful for the record if you specify on whose behalf 6 the party is testifying. MR. HOLMAN: Okay. And I will call the 7 witnesses on behalf of Utah Clean Energy first. So I'll 8 9 call Kate Bowman as a witness. 10 MS. BOWMAN: Good morning. PRESIDING OFFICER HAMMER: Ms. Bowman -- Ms. 11 12 Bowman, do you swear to tell the truth? 13 THE WITNESS: T do. 14 PRESIDING OFFICER HAMMER: Go ahead, 15 Mr. Holman. 16 MR. HOLMAN: Thank you, Mr. Hammer. 17 DIRECT EXAMINATION 18 BY MR. HOLMAN: 19 Ms. Bowman, please state your name, employer Ο. 20 and title for the record. 2.1 My name is Kate Bowman. My employer is Utah Α. 22 Clean Energy, and I'm a renewable energy program manager. 23 Did you draft and submit comments on behalf Ο. 24 of Utah Clean Energy on May 28, 2020, on this docket? 25 Α. Yes, I did.

Would you like to make any changes or 1 0. 2 corrections to these comments at this time? 3 Α. No, I would not. 4 Do you adopt these pre-filed comments as your 0. testimony here today? 5 6 Α. Yes, I do. Mr. Hammer, I move to admit 7 MR. HOLMAN: Ms. Bowman's May 28, 2020 comments into the record. 8 9 PRESIDING OFFICER HAMMER: They are admitted. 10 BY MR. HOLMAN: 11 O. All right. Ms. Bowman, have you prepared a 12 statement for us today? 13 Α. Yes, I have. 14 Please present that statement. Ο. Thank you. Good morning, and thank you for 15 Α. 16 the opportunity to provide comments related to the 17 company's third quarter 2019 proposed changes to avoided 18 cost methodology. 19 The purpose of our comments is to support the 20 development of fair avoided cost rates for qualifying 21 facility projects. In order for ratepayers to be 22 indifferent, the avoided cost prices should not be higher 23 than the incremental costs of energy or capacity that the 24 utility would otherwise generate or purchase to satisfy a

25

load.

Avoided cost prices that are less than the incremental cost of energy or capacity that the utility generate or purchase are discriminatory against QFs, but could be harmful to ratepayers. Qualifying facilities add diversity the energy mix and mitigate risk for customers.

For example, customers are not responsible when qualifying facilities projects go over budget, and customers incur lower costs and risks when they pay for real levelized pricing that covers only the first 15 years of a project's life.

To the extent that low avoided cost prices deter qualifying facilities from building projects, customers are missing out on benefits that QFs would provide.

Our comments address the need to determine a fair avoided cost price for QF cost projects, specifically Utah wind projects and the need to continue providing transparent, illustrative pricing for like QF resources under Schedule 37 to avoid burdening smaller QF projects with unreasonable the business costs.

Rocky Mountain Power's 2019 third quarter

Schedule 38 compliance filing proposes a nonroutine

update to the Proxy and Partial Differential Revenue

Requirement method for determining avoided cost pricing

1 | for wind QFs.

Instead of assuming the displacement of the next wind resource identified in the 2019 IRP least-cost, least-risk portfolio, Rocky Mountain Power has proposed to determine the avoided cost pricing for Utah wind QFs using a 2023 customer preference wind resource.

Utah Clean Energy opposes this nonroutine change. First and most importantly, Rocky Mountain Power asserts that the cost of the next wind resource in the 2019 IRP, the 2024 Wyoming wind and associated transmission, do not accurately represent its avoided cost.

Yet these resources were collected as part of the least-cost, least-risk portfolio based on Rocky Mountain Power's own cost projections and reflect the cost that Rocky Mountain Power will seek to recover for ratepayers if and when the 2024 Wyoming resources are dealt.

Rocky Mountain Power also argues against use of the transmission cost associated with the 2024 Wyoming wind resources to determine avoided cost pricing for the same reasons Rocky Mountain Power presented in Docket 17-035-37.

In that docket, the Commission reaffirmed that "when PacifiCorp seeks approval of a renewable

1 resource under the approved RFP process that appears as 2 part of the IRP preferred portfolio, we find that 3 renewable QF with similar operational characteristics is 4 capable of partially deferring or displacing that resource until a final Public Service Commission 5 6 determination is made concerning the resource." Although there is no guarantee that any of 7 the resources from the IRP will ultimately be built, the 8 9 IRP is the most robust and accurate planning tool 10 available to identify deferrable resources for the purposes of determining avoided cost. 11 12 I recognize the that Commission did not 13 acknowledge the 2019 IRP action plan, which includes the 14 2024 Wyoming wind and transmission. However, Rocky 15 Mountain Power has not announced that it intends to 16 cancel plans to pursue these resources or announce an 17 alternative plan to satisfy its transmission requirement, 18 and the Commission has not made a final determination 19 that 2024 Wyoming wind and transmission will not be 20 built. 21 Until Rocky Mountain Power identifies an 22 alternative plan or the Commission make a final 23 determination regarding this resource, the costs of the 24 2024 Wyoming wind and transmission represent the actual 25 costs ratepayers can be expected to incur and, therefore, should be the basis for determining avoided costs for like resources.

In a previous order on this issue, the Commission also find that the potential benefits associated with transmission upgrades should be considered in avoided cost pricing. Utah Clean Energy's proposal is that the Commission uphold its previous ruling on this matter and find that the avoided cost price for wind be based on the 2024 Wyoming wind and transmission, discounted to account for loss benefit.

If, for any reason, the 2024 wind and transmission projects are not use to calculate the avoided cost of wind in Utah, then the Utah customer preference resource is a more accurate proxy compared to the next available wind resource in the IRP, which is the 2030 wind resource.

If the Wyoming and wind transmission resource were removed from 2019 IRP, modeling would likely identify an alternative wind resource during the action plan period, well before the next planned wind resource in 2030. Simply moving to the next wind resource in the IRP without rerunning the models to find the next best preferred portfolio would be the equivalent of using an IRP portfolio that leaves almost 2,000 megawatts of load unsatisfied.

If Rocky Mountain Power announces its intent to abandon the 2024 Wyoming wind resource, and until modeling identifies a replacement, then Rocky Mountain Power's proposal to use the customer preference Utah wind resource for avoided cost pricing is a more accurate proxy for the purposes of determine avoided cost pricing than use of the 2030 wind resource.

Our comments also address the need to update published pricing for Schedule 37 resources to comply with the Commission approved methodology of like-for-like resource deferral. Battery storage resources have become more attractive options for utilities as their costs have fallen, and the 2019 IRP identified battery storage resources as part of the least-cost, least-risk portfolio for the first time.

The flexibility benefits of battery storage paired with renewable resources are significant enough that the 2019 IRP preferred portfolio pairs all planned solar resources with storage, and so there is no specific proxy resource for standalone solar in the 2019 IRP.

In the 2019 third quarter compliance report, the company has begun to use storage and solar resources as the proxy for standalone QFs to satisfy a like-for-lie resource requirement approved by the Commission in Docket 17-035-37.

2.1

Like many utilities, Rocky Mountain Power has found that solar and storage is a value in its future energy portfolio. The company has continually asserted that avoided cost pricing for a QF should be determined based on deferral of a resource of the same type and that the resource type is intended to reflect the operational characteristics of that resource.

Given that the avoided cost pricing for QFs will be determined using a solar and storage proxy resource, there is a need to update published pricing to include a like solar and storage resource with similar corresponding operating characteristics.

Current published avoided cost pricing distinguishes between fixed and tracking solar, but the operating characteristics of solar paired with storage are different from those of standalone storage, and potentially more different than the operating characteristics of fixed solar compared to tracking solar.

In the case of a smaller project, developers will not be willing to incur the significant administrative costs associated with the requesting indicative pricing or speculating as to what a price of the solar and storage might look like based on cost details on IRP documents.

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A published price for solar and storage sends a signal to QF developers about the relative value of this type of resource and the benefits of improved flexibility to enable a reliable and flexible grid. Ιt is unreasonable to use solar and storage as a like proxy resource for solar QFs for the purpose of deferral, while simultaneously denying solar and storage projects the transparency of a published avoided cost price. I acknowledge the different configurations and dispatch profiles for solar and storage resources are possible, introducing complexity to the determination of a published avoided cost price for these resources. However, published prices are always an imprecise but illustrative estimate of the value of the OF resource. Published prices for smaller Schedule 37 resources strike a balance between precision and transparency that enables market participation for smaller projects without incurring unreasonable business

costs.

As a starting point, I recommend that the company provide avoided cost pricing for a solar and storage project whose dispatch profile reasonably correlates with the next solar and storage resource identified in the 2019 IRP preferred portfolio.

Thank you once again for the opportunity to

comment in this proceeding and your consideration of 1 2 comments and recommendations. 3 That concludes my statement. 4 Thank you, Ms. Bowman. Q. 5 MR. HOLMAN: Mr. Hammer, Ms. Bowman is 6 available for cross-examination and questions from you. 7 PRESIDING OFFICER HAMMER: Mr. McDermott? MR. MCDERMOTT: Yes, I have a few questions. 8 9 CROSS-EXAMINATION 10 BY MR. MCDERMOTT: 11 Good morning, Ms. Bowman. To start with, O. 12 let's talk a little bit about alternative -- just a 13 hypothetical to discuss some alternative options the 14 utility might explore in the future. 15 Imagine for me that a utility has a 16 20-megawatt resource need, and it has two equally 17 credible options. So all else is equal. They are in a 18 similar geographic area. Let's say Southern Utah. 19 then two 20-megawatt solar resources. One of the 20 resources, it can procure through a PPA with the 2.1 developer for \$50 a megawatt hour. The other resource, 22 it can acquire for \$100 a megawatt hour. 23 Would it be reasonable for the utility, for 24 the company, to select the \$100 megawatt hour resource? 25 Α. I think it would ultimately depend on

characteristics of the resource beyond what you've described in scope, and I also would like to -- Utah
Clean Energy also has -- I think that is a question I'd prefer to refer to Mr. Townsend.

Q. Okay. But, again, you mention that it depends on the characteristics of the resource, and this is just a basic question, general utility, for the regulatory policy.

All else is equal to resources. They are in the same geographic area. Let's even imagine they could interconnect at the exact same point of the system. One is \$50 a megawatt hour, one is \$100 a megawatt hour.

Is it more reasonable for the company to select the \$100 megawatt hour resource or the \$50 megawatt hour resource, again, all else equal?

- A. I mean, once again, I think, you know, the \$100 megawatt hour resource is obviously much more specific. You mentioned the \$50 megawatt hour resource is a PPA, and I would describe details as the kind of cost --
- Q. The \$100 megawatt hour resource is a similar PPA with a developer or solar project, same characteristics, generally, as the other project, it could be right next to each other, all else is equal.

Ms. Bowman? Did we lose Ms. Bowman?

1 PRESIDING OFFICER HAMMER: Ms. Bowman, are 2 you on the line? 3 MR. HOLMAN: This is Mr. Holman, I'll send 4 her a text message and see if she got dropped off. 5 PRESIDING OFFICER HAMMER: Okay. Let's give her one minute. 6 THE WITNESS: Hi, this is Kate. 7 I'm sorry, my phone dropped the call and I talked to myself for a 8 9 minute. 10 BY MR. MCDERMOTT: Okay. Where did we leave off? Should I 11 O. 12 repeat my question? 13 Α. I'm not sure how much you heard of my 14 response, so if you'd like to repeat your last question. 15 Ο. None of your response. Sure. 16 Α. Okay. 17 Ο. I'm happy to restate it for you. So, again, 18 the scenario and the hypothetical is, the company has a 19 resource for a 20-megawatt of capacity and associated 20 There are two, equal in all respects and energy. 21 characteristics, solar resources located in Southern 22 Utah. 23 Imagine they're interconnecting at the same 24 point in the company's system, and, you know, from a 25 technology perspective, everything else is equal. One is

at a cost under a PPA with a developer for \$50 a megawatt 1 2 hour and the other is \$100 a megawatt hour from the other 3 developer. Would it be reasonable for the company to 4 select the \$100 megawatt hour resource considering all 5 6 else is equal as I described? Given the two resources that you described 7 Α. and assuming all else is equal, it would be more 8 9 reasonable for the company to select the 50 megawatt hour 10 resource. 11 Thank you. And you described some of Ο. Okay. 12 the benefits of a PURPA resource related to the fixed 13 price contract nature of a QF arrangement. 14 Are most of those features also available under a PPA with the developer outside of PURPA? 15 16 Those features could be available under a Α. 17 PPA. 18 Okay. Thank you. And just a question Ο. 19 on -- you talked about the modeling and the deferability 20 of Gateway South with respect to the company's wind 21 proposal. 22 Are you reasonably familiar with the 23 company's IRP process and its planning process with 24 respect to that? I'm familiar at a high level with the IRP

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Α.

planning process.

Q. Isn't it true that unlike the PDDRR methodology, if the company -- if the company ran its IRP models, including a wind resource in Utah, it would -- it would not select Gateway South, if there was a deferred -- a deferrable resource there?

Maybe I can be --

- A. Can you repeat the question? It was hard to follow.
- Q. Yes. Would the IRP models produce the same outcome as that -- for a wind resource in Utah as that produced by the PDDRR methodology, if we used our IRP tools?
- A. As I understand it, the IRP tools are designed to come up with a preferred portfolio that uses the utility overall capacity and energy leads, and so it's hard to predict, you know, in a hypothetical what the IRP might come up with, what the IRP models -- it's hard for me to predict what the IRP models would do in response to sort of a specific change.
- Q. Do you know whether the IRP models could only select all of Gateway South or none of Gateway South?
- A. As I understand it, there was -- and Mr. MacNeil's referenced in his testimony, some opportunities to evaluate whether the IRPs would have

- selected a portion of Gateway South, if that were
 available. But realistically, the company stated that it
 doesn't make sense to build a portion of Gateway South.
 - Q. So that's -- the IRP models would not realistically select or would realistically select only all of Gateway South or none of it; is that what you are saying?
 - A. I think what I'm saying is that I understand that the company, for practical reasons, doesn't plan to build all of Gateway South or other -- or some of Gateway South. I know the company has ran evaluations to determine whether it would theoretically make sense to build some portion of Gateway South.

I'm not sure if it's correct to say that that was run as part of the IRP modeling or not.

O. Okay. Thank you. Let's move on.

So you discussed UCE's recommendation for a standard QF pricing under Schedule 37 for solar plus storage and wanted that pricing to be based on the company's IRP modeling for solar plus storage and the pricing for energy and capacity that result from that; is that correct?

A. Yes.

Q. And you would agree with me, wouldn't you, that in the context of non-PURPA contracting for solar

- plus storage, the company clearly has flexibility with 1 how it can dispatch and require dispatch of a storage 2 3 resource in that context; is that -- is that correct? 4 Α. In the connection of a solar and storage 5 resource that the company procures outside of PURPA? Correct. 6 Q. Did I state that correctly? 7 Α. 8 Ο. That's correct. I understand that that would be -- affirm to 9 Α. 10 be -- you know, depending on whether the company owned 11 that resource or purchased it through a PPA arrangement, 12 that would -- either the company would have control over 13 the dispatch or it would be a negotiated term of the 14 contract. 15 Ο. And you agree with me that one of the prime 16 values of storage its dispatchability in hours where 17 there's the greatest need or the energy that it would produce has the highest value? 18 19 Α. Yes.
 - Q. And you -- would you also agree with me that under PURPA, the company has limitations on its ability to curtail QF resources?
 - A. Yes.

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Q. Okay. And just one last question for you,
Ms. Bowman. So you agree with me that under PURPA, the

1 company is not obligated to pay for a QF any more than it 2 would otherwise pay for a similar amount of energy and 3 capacity from a similarly situated resource, wouldn't 4 you? 5 Α. Yes. No further questions. Thank you. 6 Q. PRESIDING OFFICER HAMMER: 7 Mr. Jetter? 8 MR. JETTER: I have no questions. Thank you. 9 PRESIDING OFFICER HAMMER: Mr. Moore? 10 No questions, thank you. MR. MOORE: 11 PRESIDING OFFICER HAMMER: Mr. Holman, do you 12 have any redirect? 13 MR. HOLMAN: I do have one question for 14 redirect. 15 REDIRECT EXAMINATION 16 BY MR. HOLMAN: 17 Ο. Ms. Bowman, Mr. McDermott just asked you right there at the end a question about whether QF 18 19 had -- the company's ability to dispatch OF is limited 20 because of their QF nature. 21 Is that a term that could be negotiated in 22 the actual QF contract between the QF developer and the 23 company that's stated somewhat malleable or is it, in 24 your experience, defined by statute? 25 Α. As I as I understand it, in the case of, for

1 example, a -- a storage resource is different from a solar resource, in that a storage solar resource does 3 have, you know, a defined generation profile that, you 4 know, would not need to be -- has a defined generation 5 profile. But a storage resource, I would think that by 6 the nature of it being dispatchable, is something that would be clearly defined in a contract term. 7 8 Thank you, Ms. Bowman. That's all my 0. 9 questions. 10 PRESIDING OFFICER HAMMER: All right. 11 Mr. Holman, do you have another witness you'd like to 12 call? 13 And thank you, Ms. Bowman. 14 THE WITNESS: Thank you. 15 MR. HOLMAN: Thank you, Mr. Hammer. I do not 16 have another witness for Utah Clean Energy. 17 If it's okay with you, at this time I'll move 18 on to Salt Lake City. 19 PRESIDING OFFICER HAMMER: That's fine. 20 MR. HOLMAN: All right. Then I call 21 Christopher Thomas with Salt Lake City. 22 MR. THOMAS: Good morning. 23 PRESIDING OFFICER HAMMER: Mr. Thomas, do you 24 swear to tell the truth? 25 THE WITNESS: Yes, I do.

1	PRESIDING OFFICER HAMMER: Go ahead.		
2	MR. HOLMAN: All right.		
3	DIRECT EXAMINATION		
4	BY MR. HOLMAN:		
5	Q. Good morning, Mr. Thomas. Please state your		
6	name, employer and title for the record.		
7	A. Yes. My name is Christopher Thomas, I work		
8	for Salt Lake City Corporation, and my title is senior		
9	energy and climate program manager.		
10	Q. All right. Did you draft and submit reply		
11	comments on behalf of Salt Lake City Corporation on June		
12	25, 2020, in this docket?		
13	A. Yes, I did.		
14	Q. Would you like to make any changes or		
15	corrections to these comments at this time?		
16	A. No, I do not.		
17	Q. Do you adopt these pre-filed reply comments		
18	as your testimony here today?		
19	A. Yes, I do.		
20	Q. Okay.		
21	MR. HOLMAN: Mr. Hammer, I move to admit		
22	Mr. Thomas' June 25, 2020 reply comments into the record,		
23	please.		
24	PRESIDING OFFICER HAMMER: They're admitted.		
25	MR. HOLMAN: Great.		
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BY MR. HOLMAN:

- Q. Mr. Thomas, have you prepared a statement for us today?
 - A. Yes, I have.
 - Q. Great. Please proceed.
- A. Thank you for the opportunity to provide comments on this matter.

Salt Lake City Corporation set a target to source at least 50 percent of our energy from renewable sources. We tried to meet that target primarily through three avenues: Building on-site renewable generation, enrolling meters and Rocky Mountain Power subscriber solar program, and pursuing a large customer preference project under Schedule 34.

The avoided cost methodology under discussion in this proceeding is increasingly being used as a foundation for valuing these other types of renewable energy resources. For this reason, Salt Lake City Corporation has an interest in the avoided cost methodology under discussion today.

Hopefully, these comments provide a unique perspective to these deliberations from a city government and a large electric customer interested in procuring renewable energy. This perspective leads us to believe that it may not make sense to use a customer preference

project as a basis for calculating the Utah wind qualifying facility avoided costs, as Rocky Mountain Power and other stakeholders have suggested.

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Salt Lake City Corporation is grateful to be pursuing a large preference project in collaboration with Rocky Mountain Power and five other customers under Schedule 34, as we pursue our 50 percent renewable energy targets. Even if another similarly-sized renewable energy qualifying facility were to be built, it would not defer or displace Salt Lake City's desire to pursue this Schedule 34 resource.

As a side note, the subject renewable energy resource under negotiation by Salt Lake Corporation and other customers is not a wind resource, so the Utah wind QF avoided cost price under discussion today does not impact Salt Lake City's Schedule 34 procurement.

Regarding the issue of publishing a solar plus storage avoided cost price under Schedule 37, Salt Lake City Corporation would be interested to see this price. Rocky Mountain Power's 2019 Integrated Resource Plan demonstrated that solar plus storage provides significant system value over and above stand alone solar.

Publishing an avoided cost price under Schedule 37 that reflect this value could motivate future

1 Schedule 34 customers to pursue storage plus storage 2 projects to bring more value to the overall electric 3 system. Given that solar plus storage can be configured 4 a myriad ways, Salt Lake City Corporation would be happy to collaborate with the Commission, Rocky Mountain Power, 5 6 and other stakeholders, to determine reasonable parameters for the purpose of calculating a storage plus 7 storage avoided cost price under Schedule 37. 8 In conclusion, Salt Lake City Corporation 9 10 recommends the Commission uphold standard practice and 11 base the Utah wind OF avoided cost price on the next cost 12 effective resource rather than the customer preference 13 Further, we support the inclusion of a solar resource. 14 plus storage QF avoided cost price in Schedule 37. 15 Thank you for the opportunity, and this 16 concludes my statement. 17 Ο. Thank you, Mr. Thomas. 18 MR. HOLMAN: Mr. Hammer, Mr. Thomas is 19 available for questions. 20 PRESIDING OFFICER HAMMER: Mr. McDermott? 21 Mr. McDermott, do you have any questions? 22 MR. MCDERMOTT: Sorry, I was on mute again. 23 Yes, I have just a few questions for Mr. Thomas. 24 CROSS-EXAMINATION BY MR. THOMAS: 25

Good morning, Mr. Thomas. 1 Ο. 2 So Salt Lake City is a large energy consumer 3 for the company; is that correct? 4 Α. Good morning, Mr. McDermott. And yes, Yes. that is correct. 5 And Salt Lake City has an interest in both 6 Ο. renewable energy and achieving and meeting its energy 7 need at the lowest reasonable cost; is that also correct? 8 Yes, that is correct, that both the renewable 9 Α. 10 content and the cost both matter. 11 Okay. And I just have a hypothetical, so Ο. 12 bear with me for a second to ask you. 13 Let's imagine that Salt Lake City is 14 procuring additional energy through its Schedule 34 contract with Rocky Mountain Power. It wants additional 15 16 10 megawatts -- 10 megawatts of a resource, and there are 17 two available resources. They are similarly situated in 18 almost every way, the exact same interconnection 19 characteristics, the same output profile. All else is 20 equal, but one is \$50 a megawatt hour and the other is 21 \$100 a megawatt hour, both PPAs with the developer. 22 Which resource would Salt Lake City select 23 during these circumstances? 24 Α. Well, assuming that the projects were

identical in every way, I would say Salt Lake City would

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likely be to opt for the cheaper source.

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Q. Okay. And almost the same hypothetical, but in this case, the company is procuring resources for all of its energy consumers, including Salt Lake City.

Would Salt Lake City, yet again, prefer that the company select a cheaper resource?

- A. As long as they are the same in every respect, I would -- I would say yes.
- Q. Okay. And you made some comments with regard to energy storage and adopted some comments with regard to energy storage plus solar in your testimony; is that accurate?
 - A. Yes, that's correct.
 - Q. And you talked about the value that storage can offer to the RMP system and its customers; is that also correct?
 - A. Yes, that is correct.
- Q. Are you familiar enough with storage to affirm for me that the value in storage comes with its dispatch flexibility?
 - A. That is my understanding, yes.
- Q. And would you agree with me that the pricing for solar plus storage should be based on the same dispatch characteristics if it were offered under Schedule 37?

- I have a clarifying question. 1 Α. I'm not sure, 2 when you say the same characteristics, the same as --3 0. I'm sorry, I didn't give you the comparative. 4 So if Schedule 37 pricing included solar plus storage based on the company's IRP, that Schedule 37 5 6 pricing should assume the same dispatch characteristics for that Schedule 37 QF; would you agree with that? 7 Α. I think that would be a reasonable course of 8 9 action, ves. 10 Ο. And are you familiar with PURPA's must 11 purchase requirement? 12 Only at a very high level. I am definitely Α. 13 not an expert on PURPA or qualifying facilities. 14 Do you know enough to agree with me that the Ο. company, or any utility purchasing from a QF, is 15 16 not -- is legally prevented from requiring the QF to 17 curtail its energy except in emergency circumstances? That is my understanding. 18 Α. 19 And in that context, do you have any concerns Ο. 20 that the company would not be able to ensure that 21 Schedule 37 resources, which take the published prices, 22 would match the dispatch characteristics of the storage 23 that the company modeled in its IRP? 24
 - A. Given the significant additional value solar plus storage over solar alone, I think it would be

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- beneficial to all customers of Rocky Mountain Power to
 negotiate an arrangement by which the battery -- the
 storage component of the system could be dispatched in a
 way that provides optimum value.
 - Q. Do you understand that Schedule 37 prices are published prices and the company has no ability to modify those prices, so that if a storage resource, under Schedule 37, approached the company, the company would have to offer those prices regardless of what its PPA negotiations were?
 - A. I am not as familiar with -- I don't think
 I'm familiar enough with Schedule 37 contracts to be able
 to say that myself.
 - Q. But you would agree that because of the much -- must purchase requirement under PURPA, the company has limited ability to force a QF to dispatch on a particular schedule?
 - A. I -- again, I'm not familiar enough with the relevant PURPA requirements to know whether -- to know how much flexibility that the utility has in that regard.
- Q. Okay. That's fair. And I have no further questions for you, Mr. Thomas. Thank you.
 - A. Thank you.

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24 PRESIDING OFFICER HAMMER: Mr. Jetter, do you 25 have any questions?

1	MR. JETTER: I do not have any questions,		
2	thank you.		
3	PRESIDING OFFICER HAMMER: Mr. Moore?		
4	MR. MOORE: Thank you, no questions.		
5	PRESIDING OFFICER HAMMER: All right.		
6	Mr. Holman, do you have any other witnesses?		
7	MR. HOLMAN: I have no other witnesses,		
8	Mr. Hammer. Thank you.		
9	PRESIDING OFFICER HAMMER: Thank you.		
10	Thank you, Mr. Thomas, for testifying.		
11	Before we adjourn, let me just go through and		
12	ask each party's counsel whether there's anything else		
13	they would like to address before we adjourn.		
14	So I will start with you Mr. McDermott, is		
15	there anything else for us today?		
16	MR. MCDERMOTT: I don't believe so. Thank		
17	you, Mr. Hammer.		
18	PRESIDING OFFICER HAMMER: Mr. Jetter?		
19	MR. JETTER: Nothing further from the		
20	Division.		
21	PRESIDING OFFICER HAMMER: Mr. Moore?		
22	MR. MOORE: Nothing further, thank you.		
23	PRESIDING OFFICER HAMMER: And Mr. Holman?		
24	MR. HOLMAN: Nothing further for UCE, and I		
25	don't believe anything further from Salt Lake City, thank		

1	you.
2	PRESIDING OFFICER HAMMER: Great. The
3	Commission thanks all the parties and their counsel for
4	their participation, as well as their witness, and have a
5	good day. We are adjourned.
6	(The hearing was concluded at 10:10 A.M.)
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1	REPORTER'S CERTIFICATE		
2			
3	State of Utah)		
4	County of Salt Lake)		
5			
6	I hereby certify that the witnesses in		
7	the foregoing hearing were duly sworn to testify to the		
8	truth, the whole truth, and nothing but the truth in the		
9	within-entitled cause;		
10	That said hearing was taken at the time		
11	and place herein named;		
12	That the testimony of said witnesses		
13	were reported by me in stenotype and thereafter		
14	transcribed into typewritten form.		
15	I further certify that I am not of kin		
16	or otherwise associated with any of the parties of said		
17	cause of action and that I am not interested in the		
18	events thereof.		
19	IN WITNESS WHEREOF, I set my hand this		
20	9th day of July, 2020.		
21			
22	Loclie Laterna		
23			
24	Kellie Peterson, RPR		
25			

Hearing July 01, 2020

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