Rocky Mountain Power Docket No. 20-035-04 Witness: Kyle T. Moore

### BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF UTAH

### ROCKY MOUNTAIN POWER

Rebuttal Testimony of Kyle T. Moore

October 2020

Q. Please state your name, business address, and present position with PacifiCorp
 d/b/a Rocky Mountain Power ("Rocky Mountain Power" or the "Company").

A. My name is Kyle T. Moore and my business address is 1407 West North Temple,
Suite 330, Salt Lake City, Utah 84116. I am a power market originator and have
maintained this position with the Company since the year 2015.

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#### I. QUALIFICATIONS AND PURPOSE

7 Q. Please describe your education and business experience.

8 I have a B.A. in Finance and an M.B.A. from the University of Utah. In my current A. 9 role as power market originator, I am responsible for negotiating qualifying facility 10 contracts, negotiating interruptible retail special contracts, managing wholesale or 11 market-based energy and capacity contracts with other utilities and power marketers, 12 and negotiating contracts for and facilitating renewable energy procurement on behalf 13 of customers seeking service under the Company's renewable energy tariffs. Prior to 14 my current role I worked at the Company from 2007 through 2015 in various finance, 15 planning, and structure and pricing roles. I also worked in the regulatory department 16 at Kern River Gas Transmission Company for approximately three years and as an 17 energy consultant at Energy Strategies in Salt Lake City for approximately five years.

18 **Q.** 

#### Q. Please state the purpose of your testimony.

A. First, I adopt the direct testimony of Mr. William J. Comeau. Second, I offer rebuttal
testimony responsive to the Division of Public Utilities ("Division") witness
Mr. Robert A. Davis, Office of Consumer Services ("OCS") witnesses Ms. Alyson
Anderson and Ms. Donna Ramas, and Utah Clean Energy witness Ms. Sarah Wright
(collectively, the "Intervenor Witnesses").

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#### **Q.** Please state your qualifications to adopt Mr. Comeau's testimony.

A. I am very familiar with the Company's current Subscriber Solar Program under Electric Service Schedule No. 73 ("Schedule 73"), previously approved in Docket No. 15-035-61. I have this familiarity because I was involved in designing Schedule 73, administered the Request for Proposals ("RFP") through which the resource was procured, and my work has been integral to the continuation of the program. I was also involved in the design revisions to Schedule 73, as set forth in Mr. Comeau's testimony.

**II. SUMMARY** 

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**Q**.

### Please summarize the Intervenor Witnesses' testimony.

A. Division witness Mr. Davis testified that the proposed Subscriber Solar Program is reasonable and generally supports it.<sup>1</sup> Mr. Davis nonetheless expresses concerns regarding interaction between the legacy and proposed Subscription Solar Program, customer migration and mitigation of that migration, energy balancing account ("EBA") impacts, and subscription ramp rate.<sup>2</sup> Mr. Davis further suggests various reporting requirements, and, after the review of information provided, the Division reserved the right to make further recommendations.<sup>3</sup>

41 OCS witnesses Ms. Anderson and Ms. Ramas oppose the program on three 42 grounds, summarized as follows: (1) accounting concerns; (2) alleged lack of detail; 43 and (3) Subscriber Solar Program cost recovery.<sup>4</sup>

<sup>&</sup>lt;sup>1</sup> Direct Testimony of Robert A. Davis at lines 85-91.

 $<sup>^{2}</sup>$  *Id.* at lines 206-209.

<sup>&</sup>lt;sup>3</sup> *Id.* at lines 215-238.

<sup>&</sup>lt;sup>4</sup> Direct Testimony of Alyson Anderson at lines 102-115.

44		UCE witness Ms. Wright supports expansion of the Subscriber Solar Program,
45		while also raising concerns regarding Subscriber Solar Program cost recovery and
46		suggesting a carve-out for low-income customers.
47	Q.	How do you respond?
48	A.	My testimony is organized as follows:
49		• First, I provide additional support for the Company's reasoning to expand the
50		Subscriber Solar Program.
51		• Second, I respond to concerns raised by the Intervenor Witnesses regarding
52		the operational overlap between the current Schedule 73 and proposed
53		changes thereto, including blending the programs and mitigating customer
54		migration.
55		• Third, I address concerns raised by the Intervenor Witnesses regarding
56		impacts of the Subscriber Solar Program on the EBA and subscription ramp
57		rate.
58		• Finally, I respond to the request from Mr. Davis to provide detailed reporting
59		on the Subscriber Solar Program, offer a solution to Ms. Ramas' accounting
60		concerns, and address Ms. Wright's proposal on low-income customer
61		involvement.
62		III. SUBSCRIBER SOLAR PROGRAM EXPANSION
63	Q.	Please provide additional detail regarding the requested updates to the
64		Subscriber Solar Program.
65	A.	As noted on page 4 of Mr. Comeau's direct testimony, the Company is responding to
66		strong customer interest for the Subscriber Solar Program.

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#### 67 Q. Please expand on Mr. Comeau's testimony.

68 Two examples are worth noting regarding the strong interest the Company has A. 69 witnessed for the Subscriber Solar Program. First, when the Company opened up the 70 availability for the Full Coverage Option in July 2020, it had 307 subscribers request 71 to change over to the Full Coverage Option almost immediately. And these requests 72 were not generated through any marketing, other than advising subscribers that the 73 Full Coverage Option was available. In fact, 169 of those 307 subscribers requested 74 the change before the Full Coverage Option was available. Second, the Company currently has 5,134,557 annual kilowatt-hours ("kWh") on its waiting list from large 75 76 customers for a new resource.

77 Q. Why is this data important?

A. Because it underscores the existing demand for expansion of the Subscriber Solar
Program before any steps are taken to procure a new solar resource, including the
marketing of that new resource. In other words, assuming the Subscriber Solar
Program expansion is approved as proposed, the Company already has over
10 percent of the contemplated next resource subscribed by large customers. I will
address concerns regarding the ramp rate for the remaining 90 percent in my
testimony below.

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#### IV. SUBSCRIBER SOLAR PROGRAM OVERLAP

#### 86 Q. Have solar costs declined since inception of the Subscriber Solar Program?

A. Yes, which Mr. Davis notes in his testimony, but this shouldn't result in significant
customer program migration as Mr. Davis implies.<sup>5</sup> This is true, as Mr. Davis later

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<sup>&</sup>lt;sup>5</sup> Direct Testimony of Robert A. Davis at lines 114-116.

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notes, because the new billing methodology is nearly identical in results.<sup>6</sup>

# 90 Q. Does the Company have a plan for mitigating the impacts of migration, should 91 migration become an issue?

92 A. Yes. The Company has set up the rate design for the Subscriber Solar Program 93 expansion such that there should be relative cost parity across the two programs. As 94 shown in the Exhibit RMP (KTM-1R), Subscriber Solar Expansion – Cost Model, 95 both the cost of the proposed expansion resource and the current program resource, 96 Pavant III Solar, result in substantially similar rates under the proposed rate structure, 97 approximately 1.2 cents per kWh. This rate is also substantially similar to the cost of 98 the current program, as pointed out by Mr. Davis. Should the Company acquire a 99 resource with an anticipated renewable adder substantially lower than the currently 100 expected value, the Company will seek, through a Commission filing, to average the 101 rates across to the two pricing methodologies to maintain pricing parity between the 102 programs and thus mitigate the impacts of migration.

103 Additionally, to help manage program migration, the Company proposes to 104 update the proposed tariff language to note the rates/changes to the Solar Delivery 105 Charge should remain in effect for a period of time beyond January 1, 2021, to 106 account for departures and new customers before the new resource is online. The 107 Company also plans to implement additional measures to further manage program 108 migration. For example, six months before the expansion resource goes into 109 operation, the Company proposes to stop accepting new entrants to the original 110 program and transition to the new pricing. Also, assuming the Subscriber Solar 111 expansion is approved, if, prior to the expansion project going into operation, a

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<sup>&</sup>lt;sup>6</sup> *Id.* at line 166-167.

112 customer wants to sign up for subscription amounts that exceed the amount then 113 available, then the Company would inform the customer that it may sign up for future 114 subscriptions under the anticipated expansion project.

#### 115 V. SUBSCRIBER SOLAR PROGRAM COST RECOVERY

116 Q. Has the Company been successful in its efforts to ensure the Subscriber Solar

- 117 **Program did not burden non-participants with the costs of the program?**
- 118 A. Yes. As conceded by OCS witness Alyson Anderson, the costs associated with the

119 Subscriber Solar Program that flow through the EBA to non-participants and included

120 in the test year are "negligible."<sup>7</sup> Table 1 below details the historical Subscriber Solar

- 121 EBA costs as a percentage of overall EBA costs and underscores this point.
- 122

#### Table 1: Subscriber Solar EBA Costs

	Subscriber Solar Generation	Subscriber Solar Sold**	Subscriber Solar Un- Sold	EBA Impact, \$ millions	% of EBA
2017*	48,146,997	43,417,636	4,729,361	\$257,691	0.036%
2018	50,511,859	47,704,730	2,807,129	\$148,216	0.021%
2019	48,133,302	47,749,442	383,860	\$20,268	0.003%

\*January 2017 was not sold due to billing implementation, generation was 1,360,547 January 2017

\*\*The program is managed to sell 48,000,000 kWh per year based on the size and annual forecast of the resource

123 Q. Is it reasonable to assess a negligible amount of costs associated with the

124 Subscriber Solar Program to non-subscribers?

125 A. Yes. The risk and cost is small as shown from the experience with the current

- 126 program and as shown later in my testimony for the proposed expansion program.
- 127 However, the Company believes that offering customers this option to support

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<sup>&</sup>lt;sup>7</sup> Direct Testimony of Alyson Anderson at line 80.

renewable energy through more cost-effective large-scale resources rather than potentially from behind the meter generation is beneficial for all customers because these participants will continue to contribute to fixed cost recovery, which helps maintain lower rates for all customers. The Company views the subscriber solar program as another viable option for customers, similar to the Company's programs for customer generators, which also have some potential risk and cost to other customers.

To address concerns regarding how well the Company is marketing the program to support full subscription in order to mitigate any potential costs to nonparticipants in the EBA, parties can evaluate through the EBA each year whether, through the Company's actions (or inactions), the cost has reached an unjustifiably large amount and should be disallowed in rates.

# Q. What is the Company's plan to address concerns regarding ramp rate for subscriptions to the proposed new solar resource?

A. A communications and marketing plan will be used, similar to what was put together
for the legacy Subscriber Solar program. The new resource will be marketed under
the Blue Sky program umbrella so that it is easily recognizable as a renewable
program option. The Company will create broad, easy-to-understand, awareness to
reach customers directly at events, through targeted communications, online
advertising, and statement communications.

148 Communications and marketing around the new resource will commence soon 149 after the Company gets approval for the new rate design and obtains a power 150 purchase agreement for a resource. The Company will create a waiting list for

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customers expressing early interest and will contact those customers directly when
the program is approved. Given the Company's success with filling subscriptions for
the existing Subscriber Solar Program, it has a high degree of confidence that this
strategy will be successful.

155 Q. If the ramp rate takes longer than the Company currently anticipates, how
156 much of an impact will that have on the EBA and non-participating customers?

A. Based on the performance of the original program it is the Company's reasonable expectation that the resource will be fully subscribed by the time the facility reaches its commercial operation date. However, if the ramp rate to full subscription takes longer than anticipated the potential dollar impact of the program can be determined by multiplying the expected renewable adder revenue by the reduction in program participation megawatt hours purchased. Below, Table 2 provides various examples of reduced subscription rates and the impact that reduction has in terms of overall

164 impact to EBA costs:

	Potential Annual Adder	EBA, 2019 Total UT NPC \$	% of
Subscription Rate	Impact	before wheeling revenue	EBA
50%	\$288,029	\$716,029,809	0.040%
75%	\$144,014	\$716,029,809	0.020%
90%	\$57,606	\$716,029,809	0.008%

**Table 2: Potential Impact of Reduced Subscriptions** 

Table 2 Assumptions

Anticipated100%Total Anticipated MWh48,000Anticipated Renewable\$12.00 \$/MWh

#### 165 VI. REPORTING REQUIREMENTS AND STAKEHOLDER ENGAGEMENT

#### 166 Q. How does the Company respond to Mr. Davis' reporting requests?

167 A. The Company will continue its reporting obligations and is willing to address any

additional stated concerns of the Division, including the naming of the two programs
so customers can easily distinguish between them.

## 170 Q. How does the Company respond to concerns raised by Ms. Ramas regarding 171 various accounting issues?

A. The Company has two responses. First, concerns from Ms. Ramas relate to the current structure of the Solar Subscriber Program, to which she is not recommending any changes.<sup>8</sup> Second, the Company commits to hold a stakeholder meeting in order to provide the Company the opportunity to present and explain amortization expense associated with the "liability account," which would allow for real-time questions and answers.

# 178 Q. How does the Company respond to Ms. Wright's request for a low-income 179 carve-out for the Subscriber Solar Program?

180 The Company does not support a low-income carve-out because the Subscriber Solar A. 181 program operates as a premium on customers' bills for an optional service. Creating a 182 low-income carve-out for this optional service would necessarily increase the 183 premium paid by program participants to subsidize the carve-out, which could further 184 implicate the migration and subscription concerns raised by other parties. 185 Furthermore, as Ms. Wright notes, the Company's recent 2019 IRP already identifies 186 solar resources to be a significant part of the Company's least-cost, least-risk 187 portfolio. The Company believes that continuing to provide customers low-cost 188 energy, which will include a growing level of renewable energy when it is cost-189 effectively feasible, will better serve low-income customers than a premium program 190 offering.

<sup>&</sup>lt;sup>8</sup> Direct Testimony of Donna Ramas at lines 1668-1673.

However, if the Commission is interested in a low-income subscriber solar carve-out, it is important to consider that the current program is not structured to account for such a carve-out so any consideration of this proposal would be better addressed in the context of potential future expansions.

- 195 Q. Does this conclude your rebuttal testimony?
- 196 A. Yes.

Rocky Mountain Power Exhibit RMP\_\_\_(KTM-1R) Docket No. 20-035-04 Witness: Kyle T. Moore

#### BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF UTAH

### ROCKY MOUNTAIN POWER

Exhibit Accompanying Rebuttal Testimony of Kyle T. Moore

Subscriber Solar Expansion – Cost Model

October 2020

Project Size & Production																		
Calendar Year	NPV	Tota	0 2021	1	2 2023	3 2024	4 2025	5 2026	6 2027	7 2028	8 2029	9 2030	10 2031	11 2032	12 2033	13 2034	14 2035	15 2036
Pavant III Solar Size (MW) Pavant III Solar Size (MWh)	20 27.4% 457,08:	3 768,028	20 48,002	20 48,002	20 48,002	20 48,002	20 48,002	20 48,002	20 48,002	20 48,002	20 48,002	20 48,002	20 48,002	20 48,002	20 48,002	20 48,002	20 48,002	20 18,002
Renewable Adder																		
<b>PPA Prices</b> Pavant III Solar		H/WW/\$	\$52.80	\$52.80	\$52.80	\$52.80	\$52.80	\$52.80	\$52.80	\$52.80	\$52.80	\$52.80	\$52.80	\$52.80	\$52.80	\$52.80	\$52.80	\$52.80
Avoided Costs/IRP Model Valuation Pavant III Solar		H/MW/\$	\$46.78	\$46.78	\$46.78	\$46.78	\$46.78	\$46.78	\$46.78	\$46.78	\$46.78	\$46.78	\$46.78	\$46.78	\$46.78	\$46.78	\$46.78	\$46.78
Renewable Adder Pavant III Solar		H/WW/\$	\$6.02	\$6.02	\$6.02	\$6.02	\$6.02	\$6.02	\$6.02	\$6.02	\$6.02	\$6.02	\$6.02	\$6.02	\$6.02	\$6.02	\$6.02	\$6.02
Expenses		(Thou	sands of Dollars)															
Calendar Year		Tota	0 2021	1 2022	2 2023	3 2024	4 2025	5 2026	6 2027	7 2028	8 2029	9 2030	10 2031	11 2032	12 2033	13 2034	14 2035	15 2036
Program Costs	On-Goin	<u>9</u> 2 074	PROPOSED RE-	ALLOCATION 185	161	164	168	171	176	180	183	188	102	107	201	204	200	213
Marketing	<u> </u>	1,552	125	125	8 0	5 8 C	8 0 8 0	80	880	<u>8</u> 6 0	<u>8</u> 8 0	<u>6</u> 97	96 96	86 O	01 101 0	102	07 107	107
Total Program Costs	\$2,84	t \$4,726	\$410	\$410	\$241	\$245	\$252	\$257	\$263	\$270	\$275	\$281	\$288	\$295	\$302	\$306	\$313	\$320
Expense Increase (Decrease)	\$2,84	_	410	410	241	245	252	257	263	270	275	281	288	295	302	306	313	320
Levelized	\$2,84	_	299	299	299	299	299	299	299	299	299	299	299	299	299	299	299	299
Total Cost Adder		Thou	sands of Dollars)															
	NP	V Tota	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Total Costs (Adder + Program Costs)	\$5,595	5 \$9,402	588	588	588	588	588	588	588	588	588	588	588	588	588	588	588	588
		\$/MWh	\$12.2	\$12.2	\$12.2	\$12.2	\$12.2	\$12.2	\$12.2	\$12.2	\$12.2	\$12.2	\$12.2	\$12.2	\$12.2	\$12.2	\$12.2	\$12.2
		¢ per kWr	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
		Inflation Forecas	1.90%	2.00%	2.50%	2.50%	2.40%	2.30%	2.30%	2.30%	2.30%	2.30%	2.20%	2.20%	2.20%	2.10%	2.10%	2.10%
	0	<b>Dumulative Inflation</b>	102.00%	104.00%	107.00%	109.00%	112.00%	114.00%	117.00%	120.00% 1	22.00% 1	25.00% 1	28.00% 1	31.00% 1	34.00%	136.00% 1	39.00% 1	12.00%

Rocky Mountain Power Exhibit RMP\_\_\_(KTM-1R) Page 1 of 2 Docket No. 20-035-04 Witness: Kyle T. Moore

Project Size & Production																				
Calendar Year		Total	1 2021	2 2022	3 2023	4 2024	5 2025	6 2026	7 2027	8 2028	9 2029	10 2030	11 2031	12 2032	13 2033	14 2034	15 2035	16 2036	17 2037	18 2038
Project 2 Size (MW) Project 2 Size (MWh)	20 27.4% 449,351				20 48,002	20 48,002	20 48,002	20 48,002	20 48,002	20 48,002	20 48,002	20 48,002 4	20 48,002 4	20 48,002 4	20 48,002	20 48,002	20 48,002	20 48,002	20 18,002 4	20 48,002
Renewable Adder																				
PPA Prices Project 2	\$/WV	T F	\$30.00	\$30.00	\$30.00	\$30.00	\$30.00	\$30.00	\$30.00	\$30.00	\$30.00	\$30.00	\$30.00	\$30.00	\$30.00	\$30.00	\$30.00	\$30.00	\$30.00	\$30.00
Avoided Costs/IRP Model Valuation Project 2 - (Placeholder Sciar Avoided Cost)	NW\$	н	\$23.00	\$23.00	\$23.00	\$23.00	\$23.00	\$23.00	\$23.00	\$23.00	\$23.00	\$23.00	\$23.00	\$23.00	\$23.00	\$23.00	\$23.00	\$23.00	\$23.00	\$23.00
Renewable Adder Project 2	∿W/\$	ΗŅ	\$7.00	\$7.00	\$7.00	\$7.00	\$7.00	\$7.00	\$7.00	\$7.00	\$7.00	\$7.00	00.7\$	\$7.00	\$7.00	\$7.00	\$7.00	\$7.00	\$7.00	\$7.00
Expenses		(Thousan	ds of Dollars)																	
Calendar Year		Total	1 2021	2 2022	3 2023	4 2024	5 2025	6 2026	7 2027	8 2028	9 2029	10 2030	11 2031	12 2032	13 2033	14 2034	15 2035	16 2036	17 2037	18 2038
Program Costs Administration	On-Going 75	2,098	ROPOSED EXPA	NSION COSTS	80	82	84	86	88	06	92	94	96	86	101	102	104	107	109	109
Marketing Billing	75 -	2,555 250	300 250	300	80	82 0	84 0	86 0	88 0	06 0	92 0	94 0	96 0	86 0	101 0	102 0	40 40	107 0	109 0	109 0
Total Program Costs	\$2,666	\$4,902	\$615	\$378	\$161	\$164	\$168	\$171	\$176	\$180	\$183	\$188	\$192	\$197	\$201	\$204	\$209	\$213	\$218	\$218
Expense Increase (Decrease)	\$2,666		615	378	161	164	168	171	176	180	183	188	192	197	201	204	209	213	218	218
Levelized	\$2,334		0	0	249	249	249	249	249	249	249	249	249	249	249	249	249	249	249	249
Total Cost Adder		(Thousan	ds of Dollars)																	
	NPV	Total	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
Total Costs (Adder + Program Costs)	\$5,479	\$11,706	0	0	585	585	585	585	585	585	585	585	585	585	585	585	585	585	585	585
		\$/MWh ¢ per kWh	0.00	\$0.0 0.00	\$12.2 1.22	\$12.2 1.22	\$12.2 1.22	\$12.2 1.22	\$12.2 1.22	\$12.2 1.22	\$12.2 1.22	\$12.2 1.22	\$12.2 1.22	\$12.2 1.22	\$12.2 1.22	\$12.2 1.22	\$12.2 1.22	\$12.2 1.22	\$12.2 1.22	\$12.2 1.22
		- L	1000	2000	1001 0	0 1001	1000 0	10000	0.000	1000 0	10000	10000	10000	1000 0	10000	1007 0	1001.0	2007 0	1007 0	1001 0
	Cumula	tive Inflation	1.90%	2.00%	2.50%	2.50% 109.00%	2.40% 112.00%	2.30% 114.00% 1	2.30%	2.30% 1	22.00% 1.	2.30% 25.00% 12	2.20% 15	2.20% 31.00% 15	2.20%	2.10%	2.10% 139.00%	2.10% 42.00% 14	2.10% 45.00% 14	2.10% 45.00%

Rocky Mountain Power Exhibit RMP\_\_\_(KTM-1R) Page 2 of 2 Docket No. 20-035-04 Witness: Kyle T. Moore