

**BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH**

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**In the Matter of the Application of Rocky Mountain Power for Authority To Increase Its Retail Electric Utility Service Rates in Utah and for Approval of Its Proposed Electric Service Schedules and Electric Service Regulations** )  
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**Docket No. 13-035-184**  
**DPU Exhibit 2.0 SUR-COS**

Artie Powell, PhD

Pre-Filed Surrebuttal Testimony

Cost of Service

Division of Public Utilities

July 17, 2014

1 **Q: WOULD YOU STATE YOUR NAME, BUSINESS ADDRESS, AND POSITION FOR THE RECORD?**

2 A: My name is Artie Powell; I am the manager of the energy section within the  
3 Division of Public Utilities; my business address is 160 East 300 South, Salt Lake  
4 City, Utah.

5 **Q: HAVE YOU PREVIOUSLY FILED TESTIMONY ON BEHALF OF THE DIVISION IN THIS CASE?**

6 A: Yes, I filed direct cost of service testimony on May 1, 2014, and rebuttal  
7 testimony on June 26, 2014. I also filed direct revenue requirement testimony  
8 on May 22, 2014.

9 **Q: WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?**

10 A: I will summarize the Division's position on the net metering issue. The  
11 Company's proposed net metering surcharge is the only issue not covered by the  
12 settlement agreement filed with the Commission on June 25, 2014. I will also  
13 comment on some of the rebuttal testimony of the intervening parties. Silence  
14 on any issue does not necessarily signal agreement.

15 **Q: WHAT IS THE DIVISION'S POSITION ON THE NET METERING SURCHARGE PROPOSED BY THE**  
16 **COMPANY?**

17 A: It is the Division's position that the net metering charge is a cost causation issue  
18 or, in other words, a rate design issue. A certain level or amount of costs are  
19 allocated to the residential class based on the current system of dynamic class  
20 allocation factors. Given those allocated costs, the Commission must adopt an  
21 equitable rate design—a rate design that is just and reasonable—that collects  
22 the costs from all customers. If, as the Division holds, an identifiable subclass of  
23 customers, such as the net metering customers, are allowed to shift a portion of

24 their share of the costs to other customers, the resulting rate design will violate  
25 the principle of cost causation and, therefore, will not be just and reasonable.

26 Additionally, since the increased volumetric rates are designed solely to recover  
27 the shifted costs, and not set to approximate marginal costs, it is unlikely the  
28 higher rates will tend toward more efficient outcomes.

29 **Q: DO YOU HAVE ANY GENERAL REMARKS ON THE REQUIREMENTS OF SB 208?**

30 A: Yes. The Division notes that SB 208 in part states,

31 The governing authority shall:

32 (1) determine, after appropriate notice and opportunity for  
33 public comment, whether costs that the electrical  
34 corporation or other customers will incur from a net  
35 metering program will exceed the benefits of the net  
36 metering program, or whether the benefits of the net  
37 metering program will exceed the costs; and

38 (2) determine a just and reasonable charge, credit, or  
39 ratemaking structure, including new or **existing tariffs**, in  
40 light of the costs and benefits. (Emphasis added)

41 Several intervening parties argue that the Commission cannot move forward—  
42 cannot adopt the net metering charge—without an extensive cost benefit  
43 analysis as envisioned by SB 208. For example, UCE witness Ms. Sarah Wright  
44 states in rebuttal testimony, "It is Utah Clean Energy's position that, according to  
45 Utah law, no net metering fee or **credit** may be implemented until there has

46 been a cost benefit analysis of the net metering program.” (Ms. Wright, Rebuttal  
47 Testimony, lines 107-109; emphasis added)

48 Given the fact that we have a net metering program in place with an **existing**  
49 **tariff** that credits net metering customers at a full retail rate, if the Commission  
50 were to follow the intervenor's argument to its logical conclusion, the  
51 Commission would be forced to immediately suspend the net metering tariff.

52 This is not the Division's recommendation or position.

53 As I explained in my rebuttal testimony, a cost benefit analysis will address three  
54 important questions. First, whether a net metering program is in the public  
55 interest. Second, how a net metering program could be structured as to be in  
56 the public interest. Three, at what rate net metering customers should be  
57 compensated.

58 **Q: IN HER REBUTTAL TESTIMONY, UCE WITNESS Ms. WRIGHT STATES, “IN THE INTEREST OF**  
59 **PROCESS EFFICIENCY, I INDICATED THAT THE COMMISSION MAY WANT TO CONSOLIDATE ITS**  
60 **INVESTIGATION OF RATE DESIGN AND COST RECOVERY WITH THAT OF INVESTIGATING NET**  
61 **METERING (SEE BELOW). THIS MAY PROVIDE EFFICIENCY, BUT I WANT TO CAUTION THAT THE**  
62 **ISSUE OF ADDRESSING THE THROUGHPUT INCENTIVE IS DISTINCT FROM ADDRESSING NET**  
63 **METERING.” (WRIGHT, REBUTTAL TESTIMONY, LINES 52-56) DO YOU AGREE WITH Ms.**  
64 **WRIGHT THAT "ADDRESSING THE THROUGHPUT INCENTIVE IS DISTINCT FROM ADDRESSING NET**  
65 **METERING"?**

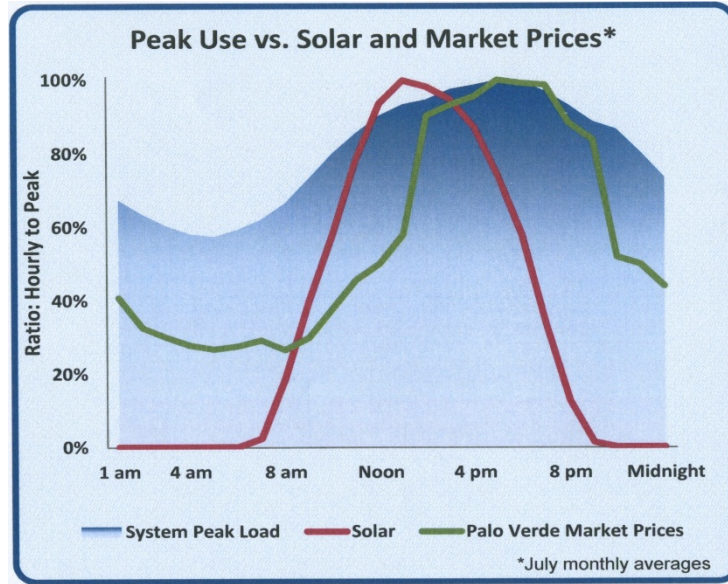
66 **A:** No. I believe Ms. Wright is confusing the problem with the cause. The net  
67 metering charge proposed by the Company is designed to address recovery of  
68 fixed costs, or in her words the "throughput incentive", which is the problem.  
69 This problem (and possibly others) could be addressed through a comprehensive  
70 investigation of residential rate design as described by Ms. Wright. However, net  
71 metering customers' failure to pay a fair share of the distribution fixed costs is an

72 underlying cause. Admittedly, there are other causes including energy efficiency  
73 and weather driven demand, and each cause may require a unique approach to  
74 address the problem of cost recovery. However, I do not see how one can  
75 address the throughput problem (cost recovery) without simultaneously  
76 addressing one or more of the underlying causes.

77 **Q: UCARE WITNESS, MR. MICHAEL ROSSETTI, REFERRING TO A GRAPH IN HIS REBUTTAL**  
78 **TESTIMONY DEPICTING PEAK USAGE VERSUS SOLAR PRODUCTION AND MARKET PRICES, STATES,**  
79 **“DURING THIS OVERLAP, EXCESS RNEM ELECTRICITY IS BEING DELIVERED TO THE CLOSEST NON-**  
80 **RNEM NEIGHBOR AT NO COST TO THE UTILITY—AT A TIME WHEN KWH COSTS ARE QUITE**  
81 **EXPENSIVE—AND THE RNEM CUSTOMER RECEIVES CREDITS. LATER IN THE DAY, THE RNEM**  
82 **CUSTOMER EXCHANGES THOSE NEIGHBORLY KWHs CREDITS FOR CHEAPER-TO-PRODUCE**  
83 **ELECTRICITY.” (ROSSETTI, LINES 71-75) WOULD YOU PLEASE COMMENT ON MR. ROSSETTI’S**  
84 **CLAIMS?**

85 **A:** One cannot draw the conclusion from the graph, which for convenience I have  
86 copied herein, that during the system peak, net-metering customers are  
87 producing more than they consume. As the graph demonstrates, at the time of  
88 the system peak solar production is approximately 60% of its rated capacity.  
89 Thus, the more likely conclusion, which is supported by evidence presented in  
90 rebuttal testimony by the Company's witness, Mr. Marx, is that at the time of the

91 system peak, net-metering customers are taking energy from the Company and  
92 thus necessarily using the distribution system.



93

94 **Q: TO WHAT EVIDENCE PRESENTED BY MR. MARX ARE YOU REFERRING?**

95 A: In reference to a solar production study conducted by the Company, Mr. Marx  
96 states, "The study found that on the day when the highest annual demand on  
97 the circuit under consideration was recorded, the best case solar generation only  
98 offset seven percent at the hour when the demand on the circuit was the  
99 highest." (Mr. Marx, Rebuttal Testimony, lines 67-70) Thus, contrary to Mr.  
100 Rossetti's claim that at the time of peak (or high valued hours) net metering  
101 customers are feeding the grid, it appears from the Company's study at the

102 critical peak hour, these customers are relying on the Company to meet their  
103 needs including use of the distribution system.

104 Additionally, comments filed by Mr. Comer with the EEI indicate a net metering  
105 customer's use of the grid is more complex than that of the non-net metering  
106 customer:

107 When most of the fixed costs of the grid are recovered  
108 based on a customer's usage, rather than through a fixed  
109 charge, a net metered distributed generator does not  
110 pay for its use of the grid. In fact, a distributed generator  
111 continues to rely upon grid services (in order to do things  
112 like start motors, air conditioners and refrigerators) even  
113 when it produces all of its energy needs. And because  
114 rooftop solar installations tend to produce more power  
115 than they need during mid-day, they use the grid in a  
116 two-way system that is more complex to control than the  
117 traditional one-way grid system. As a result, net metering  
118 as currently applied ultimately shifts the cost  
119 responsibility for the grid to all other customers. (Mr.  
120 Comer, EEI pre-filed comments, page 4)

121 **Q: DO YOU HAVE ANY OTHER COMMENTS RELATED TO MR. COMER'S PRE-FILED COMMENTS?**

122 A: Yes, there are several points from Mr. Comer's comments with which I agree.  
123 For example, on pages four through five, he states,

124 We strongly believe that the same approaches should  
125 be used for determining the value of solar as are used for  
126 determining utility rates. Any hybrid approach which  
127 applies different valuation or pricing methodologies for

128 distributed generation and utility rates will distort the  
129 pricing system to produce unfair and inefficient results.

130 For example, if the Commission analyzes rates based  
131 on traditional cost of service principles, it would be  
132 asymmetrical to analyze the benefits of distributed solar  
133 on a forward looking 25 year levelized cost analysis as  
134 contained in the analysis of Utah Clean Energy. (Mr.  
135 Comer, EEI pre-filed comments, pp. 4-5)

136 Mr. Comer Continues,

137 Any consideration of environmental and societal  
138 benefits of net metering should be made consistently  
139 with the way the commission considers such factors in  
140 integrated resource planning and similar proceedings. . .  
141 .

142 On the other hand, it would not be just and  
143 reasonable and would be unduly discriminatory for the  
144 Commission to compensate distributed generators for  
145 benefits such as avoided emissions from solar power, if it  
146 does not similarly compensate other sellers of energy  
147 that avoids emissions, including utilities such as Rocky  
148 Mountain Power with its wind and geothermal  
149 generation that dwarfs existing solar. (Mr. Comer, EEI  
150 pre-filed comments, pp. 5-6)

151 I agree. Additionally, Mr. Comer's comments are consistent with the  
152 Commission's IRP guidelines instructing the Company to seek the least cost, least  
153 risk balanced portfolio. Using stochastic techniques, the Company's IRP



154 considers various risks in evaluating and choosing an optimal portfolio. The  
155 choice of that portfolio and its incremental cost are thus already reflected in the  
156 Company's cost of service study and resulting rate spread and design. To further  
157 compensate net-metering customers for those benefits would effectively pay  
158 them twice—first indirectly from the incremental cost of the preferred portfolio  
159 and second from an environmental adder. Furthermore, current tariffed rates  
160 do not reflect any such adders—RMP is not allowed to charge a premium for  
161 these alleged benefits on its owned or contracted renewable resources.

162 **Q: WITNESS FOR SOLAR ALLIANCE, MR. MIKSYS, ARGUES THAT THE NET METERING CHARGE**  
163 **CONSTITUTES PRICE DISCRIMINATION (PP. 7-8). DO YOU AGREE?**

164 A: No. I addressed the issue of price discrimination in my direct cost of service  
165 testimony and will not repeat those arguments here. However, it is important to  
166 note that in support of his argument, Mr. Miksis makes several claims that are  
167 demonstratively incorrect.

168 First, Mr. Miksis states, "Customers who reduce their energy consumption (and  
169 consequently their use of grid infrastructure) through means other than on-site  
170 generation are not being singled out for this or any similar charge." (Mr. Miksis,  
171 rebuttal testimony, p. 7) Presumably, Mr. Miksis is referring to customers that  
172 adopt energy efficiency measures. Several witnesses (Mr. Marx, Ms. Steward,  
173 and Mr. Gimble) explain how energy efficiency customers and net-metering  
174 customers differ in their use of the grid or their load profile. Briefly, energy  
175 efficient customers reduce their overall consumption as well as their peak  
176 consumption. Despite their on-site generation, net-metering customers rely on

177 the grid at the time of peak for their energy needs. The net metering charge  
178 recognizes this fact and assigns costs accordingly.

179 Second, Mr. Miksis claims, “A NEM charge would effectively be charging a  
180 different price to similarly situated customers for the same service.” (Mr. Miksis,  
181 rebuttal testimony, p. 7) Even if we accept Mr. Miksis’ argument that “the NEM  
182 charge would effectively be charging a different price” to net metering  
183 customers, since the net metering customers, as previously demonstrated, are  
184 not similarly situated as non-net metering customers, a net metering charge  
185 does not constitute price discrimination.

186 **Q: DO YOU AGREE THAT THE NET METERING CHARGE IS CHARGING A DIFFERENT PRICE TO NET**  
187 **METERING CUSTOMERS?**

188 **A:** No. As I previously explained, the net metering charge is designed to have net  
189 metering customers on average pay the same amount of the distribution fixed  
190 costs as non-net metering customers.

191 Again, despite what Mr. Miksis claims about the costs or benefits of distributed  
192 generation, the net metering charge is about recovery of existing infrastructure  
193 costs. If additional or uncaptured benefits exist, then those benefits should be  
194 reflected in how net metering customers are compensated. A cost benefit  
195 analysis of net metering on PacifiCorp's system will inform the Commission  
196 whether a net metering program is in the public interest, how such a program  
197 should be designed and the appropriate compensation. However, no party to  
198 this docket has presented persuasive evidence that net metering customers are  
199 undercompensated or, if so, what the appropriate compensation is. Meanwhile,  
200 the Company has submitted, particularly in rebuttal testimony, significant  
201 evidence of the costs to the distribution system imposed on other customers by

202 net metering customers' diminished contribution to those costs through usage  
203 rates.

204 No cost benefit study will change the fact that net metering customers are using  
205 the distribution system at the time of the distribution peak for their own needs  
206 and therefore should pay, consistent with cost causation, an equitable share for  
207 that service. In the absence of demand charges, the net metering charge in the  
208 Division's view is an equitable way of collecting those costs from net metering  
209 customers. Given the amount of testimony filed by net metering advocates, the  
210 absence of persuasive evidence of undercompensation does not suggest  
211 inadequacy of the SB 208 cost-benefit determination. In light of the testimony  
212 filed by all parties on this issue, it is in the public interest for the Commission to  
213 approve a net metering charge.

214 **Q: ON BEHALF OF THE COMPANY, IN REBUTTAL TESTIMONY MS. STEWARD INCREASES THE**  
215 **PROPOSED NET METERING CHARGE FROM \$4.25 TO \$4.65. DO YOU AGREE WITH THE**  
216 **PROPOSED \$4.65?**

217 A: No. The Division recognized that the net metering charge would likely change  
218 given the outcome of the revenue requirement and other portions of this case.  
219 Despite this, the Division endorsed in direct testimony the \$4.25 on the principle  
220 of gradualism. The Division continues to support the initial proposal of a \$4.25  
221 net metering charge.

222 **Q: DOES THAT CONCLUDE YOUR SURREBUTTAL TESTIMONY?**

223 A: Yes it does.