

Sophie Hayes (12546)
Utah Clean Energy
1014 2nd Ave.
Salt Lake City, UT 84103
801-363-4046
Attorney for Utah Clean Energy

BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

In the Matter of the Application of
Rocky Mountain Power for Authority to
Increase its Retail Electric Service Rates in
Utah and for Approval of its Proposed
Electric Service Schedules and Electric
Service Regulations

Docket No. 13-035-184

Utah Clean Energy Exhibit 6.0 (RT)

REBUTTAL TESTIMONY OF RICK GILLIAM

ON BEHALF OF

UTAH CLEAN ENERGY

[NET METERING]

June 26, 2014

1 **INTRODUCTION**

2 **Q: Please state your name and business address.**

3 A: My name is Rick Gilliam. My business address is 590 Redstone Drive, Suite 100,
4 Broomfield, CO 80020.

5 **Q: Have you previously submitted testimony in this proceeding?**

6 A: Yes. I submitted Direct Testimony on May 22, 2014 in this proceeding on behalf of
7 Utah Clean Energy.

8 **Q: What is the purpose of your answer testimony?**

9 A: The purpose of this testimony is to respond to the direct testimony of Division of
10 Public Utilities (“DPU” or “Division”) witness Dr. Artie Powell and Office of Consumer
11 Services (“OCS”) witness Dan Gimble on the subject of the RMP-proposed net metering
12 facilities charge.

13 **Q: Please provide a brief outline of your answer testimony.**

14 A: Both DPU witness Powell and OCS witness Gimble support the RMP-proposed net
15 metering facilities charge without providing any evidence or analysis beyond that in the
16 Company’s filing. I find that Dr. Powell’s testimony is incomplete as he did not carry the
17 cost-causation principle through to cost allocation and cost responsibility. I find that OCS
18 witness Gimble bases his support on speculation that net metering benefits, when they are
19 determined, will be insufficient to offset costs. New charges cannot be based on
20 speculation as to the cost/benefit balance in the absence of a study. In sum, no evidence is
21 provided and thus no basis exists for the imposition of a net metering facilities charge.

22 **RESPONSE TO THE DIRECT TESTIMONY OF DPU**

23 **Q: Please summarize your understanding of the position of DPU with respect to**
24 **the proposed net metering facilities charge.**

25 A: The DPU, through its witness Dr. Artie Powell, supports the proposed charge for two
26 reasons: (1) cost causation and (2) cost shifting. I will address these issues in order.

27 ***Cost causation***

28 **Q: What did DPU Witness Dr. Powell say about cost causation?**

29 A: Dr. Powell summarizes the DPU's view of cost causation as follows:

30 "The Division views the net metering charge as a cost causation issue. The
31 principle of cost causation indicates that those customers causing the costs,
32 in this case all customers using the infrastructure, should pay for those costs.
33 Net metering customers, while decreasing their energy consumption taken
34 from the Company, still utilize the infrastructure put in place to deliver
35 energy when needed." (Powell, lines 182-187)

36 **Q: What is your response?**

37 A: We agree of course with the principle of cost causation; however Dr. Powell has not
38 carried his evaluation far enough. Dr. Powell's "cost causation" rationale for supporting the
39 RMP net metering facilities charge proposal is incomplete and cannot be relied upon as it
40 does not follow cost causation (in the form of reduced load on the system¹) through to
41 capture the corresponding effects on cost allocation and reduced cost responsibility for
42 customer classes that have deployed distributed solar generation.

¹ RMP's proposed net metering facilities charge is based on reduced consumption only, as explained in Gilliam Direct Testimony, lines 210-223.

43 **Q: Please explain.**

44 A: Rates are set in rate cases based on fully allocated cost of service studies, which
45 assign cost responsibility to the different customer classes based on their load
46 characteristics. Reduced consumption alone is insufficient to support a rate change on cost
47 of service grounds without accounting for cost allocation. The DPU cost causation rationale
48 “justifying” the Company’s proposed NEM fee assumes all customers continue to use the
49 infrastructure in the same unchanged proportions. However, deployment of DSG within a
50 rate class reduces the load of that class throughout the day and, in turn, the allocation bases
51 and cost responsibility. In other words, a class with reduced loads causes the utility to
52 incur fewer costs.

53 For example, fewer costs that are assigned on the basis of energy will be assigned to a class
54 with net metered distributed solar generation. Similarly, because solar generation has a
55 capacity value, the demand allocation factors for the class are also reduced, resulting in a
56 reduction in demand-related costs assigned to the class. Indeed, Dr. Powell notes on lines
57 211-212 that “[a]llocating costs and designing rates to reflect a net metering charge is an
58 equitable way of resolving these issues.” Dr. Powell does not look at cost allocation, only at
59 the cost recovery reduction calculation by the Company. I do not dispute that sales
60 reductions due to net metering (or anything else) result in reduced revenue to RMP, but
61 disagree with Dr. Powell’s conclusion that a net metering charge is an equitable way of
62 resolving these issues in this case. It is unknown how much the *cost responsibility* of the
63 residential class is reduced by these same net metering sales reductions. Dr. Powell has not
64 evaluated changes in cost allocation or rate design to reach his conclusion to support the

65 RMP proposal, and effectively assumes that there is no change in cost responsibility. This is
66 inconsistent and improper.

67 Individual customers should not be charged more simply because of reduced consumption
68 any more than customers with increased consumption should receive a credit for the
69 increased contribution to demand-related costs, without consideration of changes in class
70 cost responsibility. Dr. Powell's "cost causation" rationale for supporting the RMP net
71 metering facilities charge proposal, which is based on reduced load, is incomplete and
72 cannot be relied upon as it does not follow the cost causation principle through to reduced
73 cost responsibility and cost allocation for customer classes that deploy distributed solar
74 generation.

75 ***Cost shifting***

76 **Q: What did DPU Witness Dr. Powell say about cost shifting?**

77 A: Dr. Powell suggests that net metering shifts costs, on lines 206-210, as follows:

78 "Increased penetration of net metering customers will also shift costs to other
79 customers. Since these are fixed costs, this shift is not only unfair to those other
80 customers but also it possibly could create a downward incentive spiral of
81 increasing volumetric rates, and difficulty collecting fixed costs and attracting
82 capital."

83 As a preliminary matter, because Dr. Powell's testimony is addressing the net metering
84 facilities charge proposed by RMP for residential customers, this reference is presumably
85 limited to the residential class of customers and inapplicable to other classes.

86 Next, it should be noted that the Division offered no evidence to support its claim that net
87 metering shifts costs from one group of customers to another.

88 Last but most important, the degree and the direction of cost shifting, if any, is dependent
89 on the complete picture of cost allocation, rate design, and the benefits provided by
90 distributed solar resources in the future. This was recognized in Senate Bill 208 and the
91 Commission's Public Notice issued April 16 of this year, which require cost and benefit
92 evaluation of distributed solar generation prior to the implementation of charges or
93 credits. The *only* two such evaluations in this proceeding have been submitted by Utah
94 Clean Energy and the Sierra Club.

95 **Q. Please describe the two cost and benefit evaluations in this proceeding.**

96 A. The Sierra Club's study found that the costs avoided by net metered installations
97 outweigh RMP's costs. The study submitted by UCE was described in detail in the Direct
98 Testimonies of Sarah Wright and myself and found benefits and costs to be approximately
99 equal for the residential class, and benefits far outweighing costs for two commercial
100 classes. In total, the study supplied by UCE found benefits outweigh costs.

101 **Q. How does Dr. Powell address the benefits provided by net metered facilities?**

102 A. Dr. Powell segregates the costs and benefits of net metering, noting that "if there are
103 uncaptured benefits from the net metering program or its customers, then, in the Division's
104 view, the Commission should review and adjust the compensation side of the equation."
105 While it is somewhat unclear what is meant by the "compensation side of the equation" Dr.
106 Powell next states that "net metering customers are compensated at the retail rate for their
107 production either as a reduction through reduced consumption on their current bill or

108 incrementally as a credit on future bills.” As a result, it appears the Division’s view of
109 *compensation* is the reduction in the customer’s grid-supplied bill.

110 **Q. Do you agree that a reduction in a customer’s bill is compensation?**

111 A. A bill reduction compensates the customer for his or her investment in solar
112 generation, similar to an investment in a more efficient refrigerator or light bulb reducing
113 one’s bill. However, the benefits provided by distributed solar generation being discussed
114 in net metering debates around the country refer to the energy and non-energy benefits of
115 net metering that benefit the utility and other customers. Therefore it is not clear how or
116 whether RMP’s proposed net metering facilities charge addresses the alleged cost shift
117 without a comprehensive cost benefit analysis.

118 **Q. Do you agree that uncaptured benefits of DSG should be incorporated into the**
119 **“compensation side of the equation?”**

120 A. Perhaps, but it is not clear how Dr. Powell would propose to do so, other than
121 increasing the rate “paid” for energy exports. An illustrative example may help to clear the
122 matter.

123 In a net metering cost and benefit review, the costs are primarily comprised of the
124 reduction in revenue experienced by the utility, whereas the benefits include costs that are
125 avoided as a result of deployment of DSG. In my direct testimony, I found the costs and the
126 benefits for net metering residential customers were very close – for this example, let’s
127 assume they are equal. To the extent demand-related costs (distribution and retail costs)
128 would be recovered through a net metering facilities charge, the revenue reduction (“net

129 metering costs”) is reduced, while the benefit remains the same. As a result, the cost-
130 benefit equation will become a net benefit (in the same amount as the “net metering costs”
131 were reduced). If I understand Dr. Powell’s suggestion, he would then support an increase
132 in the compensation to the net metered customer. This seems administratively complex
133 and unnecessary. It does not make sense to impose and collect a charge on net metering
134 customers to recover certain demand-related costs and concurrently increase
135 compensation (by the same amount) for the energy exported to the grid as a result.

136 I believe this example demonstrates that until a current, comprehensive and transparent
137 cost and benefit analysis is performed, no charges or credits should be imposed. Net
138 metering policy is the simplest mechanism for providing a reasonable approximation of fair
139 value for the benefits that DSG provides to the grid. Any other mechanism requires
140 additional charges, credits, and metering. Net metering promotes simplicity, a rate design
141 principle prioritized by the Division. Net metering is a rate mechanism that is easy to
142 understand and administer.

143

144 **RESPONSE TO THE DIRECT TESTIMONY OF OCS**

145 **Q: Please summarize your understanding of the position of OCS with respect to**
146 **the proposed net metering facilities charge.**

147 A. OCS, through its witness Dan Gimble, takes a similar stance to DPU albeit for
148 somewhat different reasons. Rather than attempting to segregate costs and benefits, the
149 OCS expects that the benefits of net metered solar would likely offset at least a portion of

150 the fixed and variable costs in the generation and transmission categories. However, the
151 Office does not believe that evidence can be produced to show that the residential NM
152 output provides enough value to offset distribution costs. (Gimble, page 24). OCS also
153 suggests the charge should be tied to the size of the DSG system and should be prospective
154 only. (Gimble, page 25-28). Finally, witness Gimble believes imposing the charge should
155 not be delayed in order to send clear price signals and reduce uncertainty.

156 **Q. Do you agree with Mr. Gimble's assessment of the costs and benefits of net**
157 **metering as subdivided into the functional categories that he suggests?**

158 A. Without a thorough and updated cost-benefit analysis, it is impossible to estimate
159 the overall costs and benefits beyond the review incorporated into my direct testimony.
160 However, I do disagree with his concept of segregating the costs and benefits into
161 functional categories. Such an exercise creates more problems than it solves. For example,
162 assuming that in some categories the benefits outweigh the costs and in others the reverse
163 is true, it would be unfair to ignore excess benefits (or costs) in one category that would
164 offset the costs (or benefits) in another category. RMP is a vertically integrated utility with
165 bundled rates operating in a regulated, not a competitive, market. It would be patently
166 unfair to attempt to unbundle one aspect of costs and benefits to the exclusion of others.

167 **Q. Do you support the size differentiation for the charge and the prospective**
168 **application?**

169 A. While we are generally supportive of differentiating charges to reflect net impacts, it
170 is premature to impose any charge at this time.

171 **Q. What is the OCS rationale for implementing a net metering facilities charge in**
172 **this proceeding?**

173 A. OCS considers it important to send a clear policy signal so that new DSG customers
174 “can make an informed economic decision when evaluating whether or not to invest in a
175 solar PV system.” It believes this will reduce uncertainty for prospective customers.

176 While we appreciate OCS’s goal of bringing clarity to the solar market, the Commission
177 should not impose a new charge on a group of customers without any facts or evidence
178 (demonstrating costs exceed benefits) on which to base a charge. None have been
179 presented in this proceeding.

180 Experience in other states has found that benefits generally exceed the costs of net
181 metering, and no additional charges are necessary or appropriate. Imposing a charge that
182 is subsequently found to be unjustified by data and transparent analysis would increase
183 uncertainty, not decrease it.

184 In this proceeding, there has been no evidence presented by any party that net metering
185 imposes additional costs on non-solar customers that are not exceeded by the benefits
186 provided by net metering. The only RMP exhibit addressing this issue is Exhibit RMP ___
187 (JRS-8) which shows mathematically that residential customers that consume less than the
188 average customer provide less revenue to the Company for demand-related costs than the
189 average customer. I have shown in my direct testimony that this mathematical result is
190 reversed when customers consume more than the average, i.e. they provide more revenue
191 to the Company for demand-related costs. Neither these results, nor any other exhibit or

192 evidence in this proceeding demonstrates that net metering imposes costs on non-solar
193 customers.

194 The only way to determine net costs or benefits is through a comprehensive and
195 transparent cost-benefit analysis of net metering on the RMP system.

196 **Q. Please summarize your recommendations.**

197 A. I continue to recommend that the net metering facilities charge be rejected. The
198 Division and the OCS have provided no new evidence to support such a charge, and SB208
199 requires a review of costs and benefits prior to implementing tariff changes related to net
200 metering.

201 **Q: Does this conclude your testimony?**

202 A: Yes.