

BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

In the Matter of the Investigation of the Costs and Benefits of PacifiCorp's Net Metering Program	Docket No. 14-035-114 Rebuttal Testimony of Dan Black for Vivint Solar, Inc.
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September 8, 2015

1 **Q. Please state your name, your position, and the party for whom you are testifying.**

2 A. My name is Dan Black and I am Associate General Counsel for Vivint Solar, Inc.
3 (“Vivint Solar”). My address is 3301 North Thanksgiving Way, Suite 500, Lehi, Utah
4 84043 and I am testifying for Vivint Solar.

5 **Q. Would you describe Vivint Solar?**

6 A. Vivint Solar is the second largest residential solar installer in the United States. It was
7 launched in 2011 and has its headquarters in Lehi, Utah. We employ over 1,200 people in
8 the state and more than 4,400 throughout the country. In Utah, Vivint Solar residential
9 customers purchase or lease solar energy systems for their home’s roofs and produce and
10 use clean solar power and sell any excess power they produce to Rocky Mountain Power
11 under the net metering program established by the state legislature in Utah Code Ann.
12 Title 54 Chapter 15. The framework this Commission establishes to analyze and
13 determine the costs and benefits of net metering is critically important to us and our
14 customers. The framework may determine how and whether Vivint Solar can continue
15 serving solar customers in Utah.

16 **Q. Have you ever testified before the Public Service Commission of Utah?**

17 A. No.

18 **Q. What is the purpose of your testimony?**

19 A. The purpose of my testimony is to express support for the approach and
20 recommendations of the Joint Parties in this docket and to briefly address some points
21 other parties make in their direct testimony, which seem to fail to account for the benefits
22 of solar power to Rocky Mountain Power’s system and its customers.

23 **Q. Why does Vivint Solar support the Joint Parties' recommendations outlined in their**
24 **direct testimony?**

25 A. The Joint Parties' recommendations set up a two-step framework that conforms to the
26 Commission's intent expressed in its November 21, 2014 order in this docket stating:

27 In the next step, we intend to establish the appropriate analytical
28 framework for making the required determinations under Utah Code
29 Ann. § 54-15-105.1. Such a framework will include the types of
30 analyses that must be performed, the components of costs and benefits
31 to be included in the analyses, and the sources and time period of data
32 inputs.

33
34 **Q. Did Vivint Solar help sponsor the Joint Parties' testimony?**

35 A. Yes. Vivint Solar made a contribution to sponsor Joint Parties' consultants.

36 **Q. Do you understand how the Joint Parties' proposal works?**

37 A. I am not an expert on the Joint Parties' proposal and will defer questions to the Joint
38 Parties' witness Tim Woolf, but they are proposing an analytical framework that
39 measures both the cost impacts of net metering on the electricity system and the resulting
40 rate impacts on customer rates over the long term. The cost impact analysis forecasts
41 utility system costs while the rate impact analysis forecasts costs, rates, and sales.
42 Performing both tests helps ensure a more accurate and fair result for the utility and net
43 metering and non-net metering customers. In addition, this approach is responsive to the
44 Commission's order requesting a cost-benefit analysis.

45 **Q. Does the Joint Parties' proposal follow guidance given by the Commission?**

46 A. Yes. Mr. Woolf shows how the method he proposes to perform the cost impact analysis is
47 consistent with the Utility Cost Test that the Commission adopted in its October 7, 2009
48 order in Docket No. 09-035-27. In addition to analyzing the value of demand-side

49 resources, the Commission stated that this test could be used analyze the effect of other
50 resources like renewable small-scale solar photovoltaic projects.

51 **Q. Are there other reasons Vivint Solar supports the Joint Parties' proposal?**

52 A. Yes. It appears that the Joint Parties' proposal most closely follows Utah Code Ann.
53 § 54-17-105.1 and the legislature's intent expressed during the 2014 legislative session.
54 In addition, the Joint Parties' cost impact analysis would account for all of the benefits
55 that distributed solar power generation and net metering create for Rocky Mountain
56 Power's system—more so than the proposals of the other parties.

57 **Q. Do you have a reference?**

58 A. On page 17 of Mr. Woolf's direct testimony, he itemizes these benefits. Ben Norris who
59 also testifies for the Joint Parties addresses these benefits in greater detail in his direct
60 testimony.

61 **Q. What are these benefits?**

62 A. The benefits of distributed solar power generation and net metering include avoided
63 energy costs, avoided capacity costs, avoided transmission costs, avoided distribution
64 costs, reduced risks, reduced transmission and distribution line losses, reduced costs of
65 complying with the EPA's proposed Clean Power Plan, and reduced revenue
66 requirement.

67 **Q. Don't the other parties recognize these benefits?**

68 A. The other parties talk about benefits of solar power, and Phil Hayet who testifies for the
69 Office of Consumer Services even states that he has taken some of them into account, but
70 it isn't clear how he or the other parties account for them in their respective proposals.

71 **Q. Please explain what you mean.**

72 A. Mr. Hayet's testimony, for example, states that he has accounted for transmission and
73 distribution line losses, but he does not show how he calculated them or how they
74 affected outcomes in his illustrative examples. Rocky Mountain Power witness Paul
75 Clements refers to benefits without specifying them, but then recommends that net
76 metering customers be compensated for excess power they generate at his company's
77 avoided cost rate.

78 **Q. Do you disagree with that?**

79 A. Yes. First of all, it is premature in this phase in which the Commission is establishing the
80 framework to determine the costs and benefits of net metering to set the rate at avoided
81 costs. Second, given the differences between the two, net metering customers should not
82 be treated like qualifying facilities. Additionally, it is not clear that the avoided cost rate
83 reflects the benefits of solar distributed generation. For instance, how does Rocky
84 Mountain Power's avoided cost rate account for the fact there is virtually no line loss
85 with rooftop solar generation? Does the avoided cost rate reflect the value of the excess
86 power consumed by a net metering customer's neighbor when it imposes no costs on the
87 distribution or transmission grid and Rocky Mountain Power sells it for the retail price? I
88 believe the answer to both questions is no.

89 **Q. You mentioned that one of the benefits of solar net metering is that it will help Utah**
90 **comply with the EPA's proposed Clean Power Plan. How do other parties propose**
91 **to treat this benefit?**

92 A. Apart from the Joint Parties, the others say it should be ignored. In fact they maintain that
93 any "external" benefit should not be included in the analytical framework the
94 Commission adopts. However, environmental regulatory compliance costs must be paid

95 by the Company and its ratepayers, and if it's adopted, the Clean Power Plan will
96 represent actual, internalized costs, which clean solar power can help mitigate.

97 **Q. What is the basis for the other parties' position?**

98 A. They cite the Commission's July 1, 2015 order in this docket in which the Commission
99 said that "...any cost or benefit not reasonably subject to quantification and verification
100 will be of little use in conducting the Step One analysis and, therefore, unlikely to find a
101 place in the final framework to be established in this docket."

102 **Q. Do you agree with the parties' position?**

103 A. No. Utah Code Ann. § 54-15-105.1 states that the Commission is to determine whether
104 Rocky Mountain Power or its customers will incur more costs than benefits or more
105 benefits than costs from a net metering program. That includes all costs and all benefits.
106 The so-called external costs and benefits are not excluded from this statutory charge and
107 that reflects the discussion during the 2014 legislative session when the legislature passed
108 this section of the code.

109 **Q. Does anyone claim that distributed solar generation creates no external benefits?**

110 A. No one argues that distributed solar power generation does not confer environmental and
111 other external benefits. They simply say they should not be included because they claim
112 they are not quantifiable. That is not correct, they can be quantified and the Commission
113 should order that they be quantified and factored in the cost-benefit analysis.

114 **Q. What if that doesn't happen?**

115 A. Net metering customers and solar power providers will be conferring significant benefits
116 on the system without any recognition of or compensation for them.

117 **Q. Who will get the benefits if that happens?**

118 A. The state, Rocky Mountain Power, and Rocky Mountain Power's non-net metering
119 customers. That is neither just, reasonable, nor in the public interest, and in the next
120 phase of this proceeding it will be contrary to the mandate of Utah Code Ann. § 54-17-
121 105.1 (2).

122 **Q. What do you mean?**

123 A. That code section requires that the Commission establish a charge or credit to recognize
124 the costs and benefits of net metering. If the Commission follows the position of other
125 parties in this case, Rocky Mountain Power, the state, and non-net metering customers
126 will receive a significant benefit at the expense of Vivint Solar, Vivint Solar's customers,
127 and other solar providers and their customers. That is not just, reasonable, or right.

128 **Q. Is there any argument to delay inclusion of external benefits?**

129 A. No. The EPA has proposed the Clean Power Plan, and whether one agrees with the
130 proposal or not, the plan or something like it will be implemented. President Obama has
131 made it clear that he supports the plan and he is going to advocate for it as part of his
132 presidential legacy. Anything that produces CO₂, including coal and natural gas, is
133 falling out of favor. Even if the president and the EPA fail this round, it is naïve to
134 believe that the mounting pressures against CO₂ emissions will subside. The value solar
135 power offers is real and significant. Its benefits must be recognized and compensated now
136 in order for the industry to progress and continue to develop. If not, Vivint Solar will be
137 compelled to devote its resources where those benefits are recognized. That is why we
138 chose to intervene separately in this proceeding.

139 **Q. Would you summarize your recommendations?**

140 A. Yes. Vivint Solar recommends that the Commission adopt the Joint Parties' two-step
141 framework to analyze the costs and benefits of distributed solar generation and net
142 metering. Vivint Solar also recommends that the Commission recognize all the benefits
143 of distributed solar generation in its analysis of the costs and benefits of the net metering
144 program.

145 **Q. Does this conclude your rebuttal testimony?**

146 A. Yes.

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing Rebuttal Testimony of Dan Black for Vivint Solar was served by email this 8th day of September 2015 on the following:

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